

**PHILLIPS PETROLEUM COMPANY VENEZUELA LIMITED
CONOCOPHILLIPS PETROZUATA B.V.
CLAIMANTS**

v.

**PETRÓLEOS DE VENEZUELA, S.A.
CORPOGUANIPA, S.A.
PDVSA PETRÓLEO, S.A.
RESPONDENTS**

FINAL AWARD

Arbitral Tribunal

Prof. Laurent Aynès

Prof. Andrea Giardina

Dr. Laurent Lévy (President)

Secretary to the Arbitral Tribunal

Ms. Eva Kalnina

TABLE OF CONTENTS

TABLE OF ABBREVIATIONS	8
I. INTRODUCTION	16
A. The Parties and the Tribunal	16
1. The Claimants	16
2. The Respondents	18
3. The Tribunal	20
B. Summary of the main facts	22
C. Procedural History	30
1. Initiation of the Arbitration, constitution of the Tribunal and the appointment of the Secretary	30
2. The Written phase	31
3. The Oral phase.....	33
4. The Post-Hearing phase.....	37
II. POSITIONS OF THE PARTIES AND RELIEF REQUESTED	39
A. The Claimants' position and request for relief	39
B. The Respondents' position and request for relief	47
III. ANALYSIS	50
A. Preliminary matters	50
1. Arbitration agreement	50
2. Place of Arbitration	57
3. Applicable law.....	58
4. Applicable procedural rules	58
5. Language.....	58
B. The Discriminatory Action Claim	58
1. The Claimants' position	58
2. The Respondents' position	60
3. Relevant contractual provisions.....	61
i. The Petrozuata AA	61
ii. The Hamaca AA	64
4. Analysis	67
a. First prong for a qualified measure to be deemed a DA: the alleged discriminatory nature of the Overall Expropriation	68
i. Under the Petrozuata AA.....	69
ii. Under the Hamaca AA.....	81

b.	First prong for a qualified measure to be deemed a DA: the alleged discriminatory nature of the Income Tax Increase	93
c.	Second prong for a qualified measure to be deemed a DA: the alleged unjust character of the Income Tax Increase and/or of the Expropriation	96
d.	The alleged notification requirements	98
i.	Did the AAs require the Claimants to provide notice to the Respondents?.....	100
ii.	Have the Claimants complied with the notice requirement?.....	101
iii.	What are the consequences of the Claimants' non-compliance with the notice requirement?	110
•	Under the Petrozuata AA	110
•	Under the Hamaca AA	111
e.	The alleged obligation to exhaust alternative remedies and the consequences thereof.....	116
i.	Under the Hamaca AA.....	118
ii.	Under the Petrozuata AA.....	124
f.	The Congressional Authorizations	130
g.	Conclusion	131
C.	The Willful Breach Claims	133
1.	The Claimants' position	133
2.	The Respondents' position	135
3.	Analysis	136
a.	Are the Willful Breach Claims arbitrable?	137
i.	What is the legal test for determining arbitrability of disputes arising out of public interest contracts?	141
ii.	Do the Willful Breach Claims satisfy the legal test?	143
b.	The legal test for establishing the Respondent's alleged liability as a result of the Claimants' Willful Breach Claims	146
c.	First Willful Breach Claim: the existence and breach, if any, of the Respondents' "reasonable commercial efforts" obligation (i.e., elements (i) and (ii) of the civil liability test)	147
i.	The Claimants' Position.....	147
ii.	The Respondents' Position.....	159
iii.	The Tribunal's analysis.....	165

3.1. Do the express contractual provisions relied upon by the Claimants give rise to any obligations and what is the nature of such obligations (element (i) of the civil liability test)?	166
3.2. Do the Respondents' actions breach the "reasonable commercial efforts" obligation (element (ii) of the civil liability test)?	174
d. Second Willful Breach Claim: the existence and breach, if any, of the Respondents' duty to perform the AAs (i.e., elements (i) and (ii) of the civil liability test).....	184
i. Are the Respondents obligated to perform the AAs and the Guarantees?	186
ii. Did the Respondents breach their obligation to perform the AAs and the Guarantees?.....	188
e. Is the Respondents' liability precluded on any grounds?.....	192
i. Is the 2007 Nationalization Decree not attributable and external to the Respondents, as a matter of fact?.....	195
ii. Is the 2007 Nationalization Decree the "cause in law" of the Claimants' loss?	202
4. Conclusion	208
D. Hecho Ilícito	210
E. The Counterclaim	216
1. The Respondents' position	216
2. The Claimants' position	217
3. Relevant provisions of the Hamaca AA	218
4. Analysis	221
IV. QUANTUM.....	225
A. Preliminary matters	226
1. The DA formulae	226
a. The Petrozuata AA	226
b. The Hamaca AA	230
2. <i>Ex post v. ex ante</i> quantum assessment.....	236
3. Preferred valuation model and valuation date	242
B. Production volumes	245
1. The Claimants' position	245
2. The Respondents' position	247
3. Analysis	249
a. What methodology should be adopted for determining the production volumes for the Projects?	250
i. The Claimants' position	250

ii.	The Respondents' position	261
iii.	The Tribunal's determination	272
b.	Reserves figures	281
i.	The Claimants' position	281
ii.	The Respondents' position	283
iii.	The Tribunal's determination	285
c.	Production issues specific to the Petrozuata Project	286
i.	The Respondents' position	286
ii.	The Claimants' position	292
iii.	The Tribunal's determination	293
d.	Production issues specific to the Hamaca Project	294
i.	The Respondents' position	294
ii.	The Claimants' position	301
iii.	The Tribunal's determination	305
C.	Oil prices	311
1.	The Claimants' position	311
2.	The Respondents' position	313
3.	Analysis	316
a.	The Brent price benchmark	317
b.	The Brent-Maya differential	322
c.	The Maya-Petrozuata CCO differential	324
d.	The Maya-Hamaca CCO differential	325
e.	By-products	326
D.	Project Costs	328
1.	The Claimants' position	328
2.	The Respondents' position	330
3.	Analysis	331
a.	Whether the Projects' cost projections should include post-Expropriation "additional costs"?	331
i.	The Respondents' position	332
ii.	The Claimants' position	337

iii.	The Tribunal's determination	341
b.	What is the appropriate inflation and exchange rate?	349
i.	The Claimants' position	349
ii.	The Respondents' position	351
iii.	The Tribunal's determination	357
E.	Post-Expropriation fiscal regime	361
1.	The Claimants' position	361
2.	The Respondents' position	364
3.	Analysis	365
a.	Preliminary matters	365
b.	Would the Special Contribution apply to the Projects?	368
c.	Would the Social Contribution, the Special Advantage Tax and the Anti-Drug Contribution apply to the Projects?	374
d.	Are any of the applicable taxation measures DAs?	375
F.	Interest.....	378
G.	Discount rate.....	383
1.	The Claimants' position	383
2.	The Respondents' position	389
3.	Analysis	397
a.	Preliminary matters	397
b.	The 2.0% discount for lack of marketability (DLOM).....	398
c.	The country risk premium and the overall applicable discount rate	400
H.	Others	413
1.	Fiscal maximization	413
2.	Hamaca Project debt	416
3.	Science and Technology Contribution	418
4.	Post-award interest.....	419
5.	Methodology for calculating net present value of equity	420
6.	Working Capital, depreciation and other revenues	420
7.	Tax net award	423
8.	Reimbursement to the Respondents	424
I.	Conclusion (Application of the AUVM).....	425
V.	COSTS.....	430
1.	Relevant legal provisions on costs	433

a.	The AAs and the Guarantees	433
b.	The ICC Rules	433
c.	Lex Arbitri.....	434
2.	Analysis	434
VI.	DECISION.....	439

TABLE OF ABBREVIATIONS

1943 Hydrocarbons Law	Law Partially Reforming the Hydrocarbons Law, Extraordinary Official Gazette No. 1,149, published on 15 September 1967
1975 Nationalization Law	Organic Law that Reserves to the State the Industry and the Trade of Hydrocarbons, Extraordinary Official Gazette No. 1,769, published on 29 August 1975
1991 Income Tax Law	Law Partially Reforming the Income Tax Law, Extraordinary Official Gazette No. 4,300, published on 13 August 1991
1993 Bicameral Commission PDVSA Report	Report Approved by the Bicameral Commission for the Study of the Strategic Associations of PDVSA concerning the Projects Maraven-Conoco [Petrozuata] and Maraven-Total-Itochu-Marubeni [Sincor] for the Exploitation and Upgrading of Extra-Heavy Petroleum of the Orinoco Oil Belt, dated 12 August 1993
1993 Income Tax Law	Decree-Law No. 3,113, Issuing the Law Partially Amending the Income Tax Law, Extraordinary Official Gazette No. 4,628, published on 9 September 1993
1993 Senate Committee Report	Report of the Senate Permanent Environmental and Land Use Planning Committee regarding the Association between the Companies Maraven and Conoco for the Exploitation and Upgrading of Extra-Heavy Crude from the Orinoco Oil Belt, dated April 1993
1994 Income Tax Law	Decree Reforming the Income Tax Law, Decree No. 188, Extraordinary Official Gazette No. 4,727, published on 27 May 1994
2001 Hydrocarbons Law	Organic Law of Hydrocarbons, as published in Official Gazette No. 37,323, dated 13 November 2001
2002 Expropriation Law	Law of Expropriation for Reasons of Public Utility or Social Interest, Official Gazette No. 37.475, published on July 1, 2002.
2006 Income Tax Law	Law Partially Reforming the Income Tax Law, Official Gazette No. 38,529, published on 25 September 2006
2007 Nationalization Decree or Decree	Decree Having the Rank, Value and Force of Law of Migration to Mixed Companies of the Association Agreements of the Orinoco Oil Belt, as well as the Risk and Profit Sharing Exploration Agreements, Decree No. 5,200, Official Gazette No. 38,632, published on 26 February 2007
ADCO or Anti-Drug Contribution	<i>Ley Orgánica Contra el Tráfico Ilícito y el Consumo de Sustancias Estupefacientes y Psicotrópicas</i> of 2005
Ameriven	Petrolera Ameriven S.A., the entity responsible for the day-to-day operations of the Hamaca Project on behalf of the Project participants
Ameriven Model	Petrolera Ameriven Economic Model of 2006

Answer	Respondents' Answer to the Requests for Arbitration of 5 February 2015
Apertura Petrolera	The "Oil Opening," in Venezuela
API	American Petroleum Institute
ARCO	Arco Orinoco Development Inc., a subsidiary of Atlantic Richfield Company
Art.	Article
Association Agreements or AAs	The Petrozuata Association Agreement and the Hamaca Association Agreement, collectively
AUVM	Abdala Updated Valuation Model in Annex E to C-PHB
BIT	The Netherlands-Venezuela Bilateral Investment Treaty
BPD	Barrels per day
Brent	North Sea Brent Crude
Buy-Out Provision	Article 14.4 and 14.5 of the Hamaca AA
C-	Claimants' Exhibits
CAPEX	Capital expenses
CCO	Commercial Crude Oil (or Synthetic Crude Oil), namely upgraded EHCO
Chávez	Hugo Chávez, the President of the Bolivarian Republic of Venezuela, from 1998 (elected) – 2013 (deceased)
Chávez 2007 Speech	Transcript of Aló Presidente N° 288: From the Orinoco Oil Belt, Hugo Chávez Frías, President of the Bolivarian Republic of Venezuela, 29 July 2007 (transcript available from Servicio TvPrensa)
Claimants	ConocoPhillips Petrozuata B.V. and Phillips Petroleum Company Venezuela Limited, collectively
CMC	Case Management Conference of 24 March 2016
CNPC	Chinese National Petroleum Corporation
Composite Economic Model	ConocoPhillips Composite Economic Model, as updated in 2006
Congressional Authorizations	The Petrozuata Congressional Authorization and the First Hamaca Congressional Authorization
Conoco	Conoco Inc. (merged with Phillips Petroleum Company to become ConocoPhillips)

Conoco Orinoco	Conoco Orinoco Inc. (CPZ's predecessor-in-interest)
ConocoPhillips	ConocoPhillips Company, a corporation incorporated under the laws of the State of Delaware
ConocoPhillips ICSID Decision	ConocoPhillips Petrozuata B.V. et al. v Bolivarian Republic of Venezuela, ICSID Case No. ARB/07/30, Decision on Jurisdiction and the Merits, dated 3 September 2013
ConocoPhillips OPEC Award	Phillips Petroleum Company Venezuela Limited et al. v Petróleos de Venezuela, ICC Case No. 16848/JRF/CA (C-16849/JRF/CA), Final Award, 17 September 2012
Corpoguanipa or Corpoven Sub	Corpoguanipa, S.A.
Corpoven	Corpoven, S.A.
CPH	Phillips Petroleum Company Venezuela Limited
C-PHB	Claimants' Post-Hearing Brief of 20 March 2017
CPZ	ConocoPhillips Petrozuata B.V.
CVP	Corporación Venezolana del Petróleo, the first Venezuelan State oil company established in 1960
D&M	DeGolyer and MacNaughton, international consulting firm which periodically audited ConocoPhillips's Reserves figures
DA (or DAs)	Discriminatory Action(s) as defined at Section 1.01 of the Petrozuata AA and Article 14.1(b) of the Hamaca AA
DCF	Discounted cash flow
DCO	Diluted crude oil
Del Pino	Eulogio Del Pino, successor of Rafael Ramírez Carreño as President of PDVSA as of 2014. Member of PDVSA's Board of Directors and President of CVP (2005 – 2014); director on the boards of the Petrozuata and Hamaca JVCs from early 2005 onwards.
DLOM	Discount for lack of marketability
DuPont	E. I. du Pont de Nemours and Company, formerly Conoco's parent company
E&P	Energy & Petroleum industry
EHCO	Extra Heavy Crude Oil
Enabling Law	Law that Authorizes the President of the Republic to Issue Decrees Having Rank, Value, and Force of Law on the Matters Delegated Hereby, Official Gazette No. 38,617, published on 1 February 2007

EOR	Enhanced oil recovery
ER	Expert Report
Expropriation	the Governments' act of dispossessing the Claimants of the Projects in mid-2007, pursuant to the 2007 Nationalization Decree
Extraction Tax	New oil tax introduced pursuant to the Law of Partial Reform of Decree No. 1.510 with Force of Organic Law of Hydrocarbons, Official Gazette No. 38.443, published on 24 May 2006, which had the equivalent effect of further increasing the royalty rate to 33.33%
ExxonMobil ICSID Award	Venezuela Holdings, B.V., Mobil Cerro Negro Holding, Ltd. et al. v Bolivarian Republic of Venezuela, ICSID Case No. ARB/07/27, Award, dated 9 October 2014
First Hamaca Congressional Authorization or HCA	Agreement Approving the Framework of Conditions of the Association Agreement for the Production, Transportation and Upgrading of Extra-Heavy Crude to Be Produced in the Hamaca Area of the Orinoco Oil Belt, as well as the Marketing of the Upgraded Crude and Other Products Generated During the Process of Production and Upgrading of Such Crudes, to Be Entered into between Corpoguanipa, a Subsidiary of Petróleos de Venezuela, and the Companies Atlantic Richfield Co. (ARCO), Phillips Petroleum Company and Texaco, Inc., Official Gazette No. 36,209, published on 20 May 1997
First Willful Breach Claim	The Claimants' claim concerning the Respondents' alleged failure to use "reasonable commercial efforts"
Government or Venezuela	The Government of the Bolivarian Republic of Venezuela
Guarantees	The Petrozuata Guaranty and the Hamaca Guarantee, collectively
Hamaca Association Agreement or Hamaca AA	Association Agreement between Corpoguanipa, S.A., Arco Orinoco Development Inc., Phillips Petroleum Company Venezuela Ltd., and Texaco Orinoco Resources Company, dated 9 July 1997 (as amended)
Hamaca Guarantee	Guarantee Agreement between Petróleos de Venezuela, S.A., Arco Orinoco Development Inc., Phillips Petroleum Company Venezuela Ltd., and Texaco Orinoco Resources Company, dated 9 July 1997 (as amended) (also Hamaca AA, Exhibit M)
Hamaca JVC	Petrolera Hamaca S.A., the entity responsible, through its Board of Directors, for the overall direction and supervision of the Hamaca Project
Hamaca Project	Project underlying the Hamaca AA
Hearing	The evidentiary hearing held in Washington DC from 26 November – 10 December 2016
IBA Rules	IBA Rules on the Taking of Evidence in International Arbitration (2010)
ICAPM	International Capital Asset Pricing Model

ICC Rules	Arbitration Rules of the International Chamber of Commerce in force as of 1 January 2012
ICSID Arbitration or ICSID Case	ConocoPhillips Petrozuata B.V., ConocoPhillips Hamaca B.V., ConocoPhillips Gulf of Paria B.V. v Bolivarian Republic of Venezuela, ICSID Case No. ARB/07/30
ICSID tribunal	The arbitral tribunal as re-constituted in the ICSID Arbitration, including Mr. Eduardo Zuleta (President), Mr. L. Yves Fortier, CC, QC, and Mr. Andreas Bucher
Income Tax Increase	Income tax change, effective 1 January 2007, which raised the applicable income tax rate for these EHCO projects from 34% to 50%
Law on Effects of Migration	Law on the Effects of the Process of Migration into Mixed Companies of the Association Agreements of the Orinoco Oil Belt, as well as the Exploration at Risk and Profit Sharing Agreements, Official Gazette No. 38,785, published on 8 October 2007
LPG	Liquefied petroleum gas
MAE	Material Adverse Effect pursuant to Article 14.2(a) of the Hamaca AA
Maraven	Maraven S.A. (PDVSA Petróleo is its successor-in-interest)
Maya	Crude oil sold in the Mexican Gulf
Ministry	Venezuelan Ministry of Energy and Mines or the Ministry of Energy and Petroleum or the People's Ministry of Energy and Petroleum or the People's Power Ministry of Oil and Mining
Mobil ICC Award	Mobil Cerro Negro, Ltd. v Petróleos de Venezuela, S.A. et al., ICC Case No. 15416/JRF/CA, Award, dated 23 December 2011
Mommer	Dr. Bernard Mommer, appointed by Chávez in 2005 to serve simultaneously as External Director to PDVSA's Board of Directors and Vice Minister of Hydrocarbons for Energy and Petroleum
MOU	Memorandum of Understanding proposed on 30 April 2007, which would transfer the control of all operations to PDVSA
OPEC	Organization of Petroleum Exporting Countries
OPEX	Operating expenses
Orinoco Oil Belt	An area in Venezuela that contains vast reserves of extra heavy crude oil
OSF	On-stream Factor
Overall Expropriation	The Royalty Increase, the Extraction Tax and the Expropriation, jointly
PDVSA	Petróleos de Venezuela, S.A.
PDVSA Petróleo	PDVSA Petróleo, S.A.

PDVSA Subsidiaries	PDVSA Petróleo, S.A. and Corpoguanipa, S.A., collectively
Petrozuata Association Agreement or Petrozuata AA	Association Agreement between Maraven S.A. and Conoco Orinoco Inc., originally dated 10 November 1995, and modified on 18 June 1997
Petrozuata C.A.	Petrolera Zuata, Petrozuata C.A.
Petrozuata Congressional Authorization or PCA	Congressional Authorization of the Petrozuata Association Agreement, Official Gazette No. 35.293, published 9 September 1993
Petrozuata Guaranty	Guaranty and Indemnification Agreement between Conoco Orinoco Inc. and Petróleos de Venezuela, S.A., dated 10 November 1995 (also Petrozuata AA, Exhibit P)
Petrozuata JVC	Petrozuata C.A., the incorporated joint venture through which the Petrozuata Project was structured. Owned by CPZ (50.1 percent) and PDVSA Petróleo (49.9 percent), Petrozuata C.A. directed, coordinated and supervised the activities related to the Petrozuata Project
Petrozuata Project	Project underlying the Petrozuata AA
Phillips	Phillips Petroleum Company (merged with Conoco Inc. to become ConocoPhillips)
PO 1	Procedural Order No.1 of 15 June 2015
PO 2	Procedural Order No.2 of 8 April 2016 (Tribunal's Decision on Parties' Document Requests)
PO 3	Procedural Order No.3 of 8 July 2016 (Tribunal's Decision on Respondents' Application concerning the Claimants' Document Production)
PO 4	Procedural Order No.4 of 4 October 2016 (Tribunal's Decision on pre-Hearing matters)
PO 5	Procedural Order No.5 of 14 December 2016
Project JVCs	Hamaca JVC and Petrozuata JVC, collectively
Projects	The Petrozuata Project and the Hamaca Project, collectively
R-	Respondents' Exhibits
RAM	Reliability, availability and maintainability studies
Ramirez	Rafael Ramírez Carreño, appointed in 2004 to serve simultaneously as the Venezuelan Minister of Energy and President of PDVSA
Rejoinder	Respondents' Rejoinder of 9 September 2016

Reply	Claimants' Reply and Defense to Counterclaim of 27 May 2016
Request(s) / RfA	Claimants' Requests for Arbitration of 10 October 2014
Respondents	Petróleos de Venezuela, S.A., Corpoguanipa, S.A. and PDVSA Petróleo, S.A., collectively
RIK payments	Royalty-in-kind payments
Royalty Measure	abrogation of the 1998 Royalty Agreement in October 2004, resulting in an increase in applicable royalty rates from 1% to 16.66%
Royalty Reduction Agreement or 1998 Royalty Agreement	Royalty Agreement of the Strategic Associations of the Orinoco Oil Belt between the Ministry and PDVSA Petróleo dated 29 May 1998
R-PHB	Respondents' Post-Hearing Brief of 20 March 2017
SCO or syncrude	Synthetic crude oil
Second Hamaca Congressional Authorization	Agreement of the Congress of the Venezuelan Republic Authorizing the Execution of an Association Agreement and its Annexes for the Exploration, Development, Production, Blending, Processing, Transportation, Refining and Upgrading, as well as the Marketing of Crude Oil and Other Products to be Generated During the Process of the Production and Upgrading of Such Extra-Heavy Crudes in the Area Determined by the Ministry of Energy and Mines, Among the Subsidiaries of Corpoven, S.A., a Subsidiary of Petróleos de Venezuela, S.A., Atlantic Richfield Company, Phillips Petroleum Company and Texaco Inc., on the Terms and Conditions that Have Been Presented by the National Executive Branch, Official Gazette, No. 36.235, published on 26 June 1997
Second Willful Breach Claim	The Claimants' claim concerning the Respondents' alleged non-performance of the AAs and the Guarantees
SED	Significant Economic Damage pursuant to Section 1.01 of the Petrozuata AA
SoC	the Claimants' Statement of Claim of 17 July 2015
SOCO or Social Contribution	Social Contribution of 2007
SoD	Respondents' Statement of Defense of 12 February 2016
SPAT or Special Advantage	Special Advantage Tax of 2007 (referred to as Shadow Tax by the Claimants)
SPEC or Special Contribution	The Ley de Contribución Especial sobre Precios Extraordinarios del Mercado Internacional de Hidrocarburos of 2008 (referred to as Windfall Profits Tax by the Claimants)
STC or Science and Technology	The <i>Ley Orgánica de Ciencia, Tecnología e Innovación</i> of 2005 together with the <i>Ley de Reforma de la Ley Orgánica de Ciencia,</i>

Contribution	<i>Tecnología e Innovación</i> of 2010
Texaco	Texaco Orinoco Resources Company, now a subsidiary of Chevron Corporation
ToR	The Terms of Reference dated 12 June 2015
Tr. (day) page: line	Transcript of the Hearing (day) (page: line)
US PPI	US Producer Price Index
VCC	Venezuelan Civil Code, Extraordinary Official Gazette No. 2.990 published on 26 July 1982
VCoC	Venezuelan Commercial Code, Extraordinary Official Gazette No. 475, published on 21 December 1955
Venezuelan Constitution	1999 Constitution of the Bolivarian Republic of Venezuela, Official Gazette No. 36.860, published on 30 December 1999
WACC	Weighted average cost of capital
Willful Breach Claims	The Claimants' First Willful Breach Claim and Second Willful Breach Claim, jointly

I. INTRODUCTION

A. THE PARTIES AND THE TRIBUNAL

1. The Claimants

1. Claimant 1 is:

PHILLIPS PETROLEUM COMPANY VENEZUELA LIMITED (“CPH”)
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22 Victoria Street
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Bermuda

Claimant 2 is:

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Zurich Tower (15th Floor)
Muzenstraat 89
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The Netherlands

2. Claimants 1 and 2 (collectively referred to as the “Claimants”), are all engaged in the business of exploration and production of oil and natural gas.

3. The Claimants are represented in this arbitration by:

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2. The Respondents

4. Respondent 1 is:

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Edificio Petróleos de Venezuela
Urb. La Campiña
Caracas
Venezuela

Respondent 2 is:

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Edificio Petróleos de Venezuela
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Respondent 3 is:

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5. PDVSA Petroleo and Corpoguanipa are referred to jointly as “PDVSA Subsidiaries”; PDVSA and PDVSA Subsidiaries are collectively referred to as the “Respondents”.

6. The Respondents are represented in this arbitration by:

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3. The Tribunal

7. The Arbitral Tribunal is composed of¹:

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¹ Letter from the ICC Secretariat to the Parties of 27 March 2015.

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8. A Secretary to the Tribunal has been appointed by the Arbitral Tribunal with the consent of the Parties, who have received her CV and her statement of independence. The Secretary is:

Eva Kalnina
LÉVY KAUFMANN-KOHLER
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B. SUMMARY OF THE MAIN FACTS

9. The present dispute arises from the Respondents' alleged unlawful confiscation of the Claimants' interests in two extra-heavy crude oil ("EHCO") joint ventures in Venezuela: the Petrozuata Project² and the Hamaca Project³ (together, the "Projects"), and from the Respondents' alleged breaches of their contractual undertakings and guarantees in relation to these Projects.
10. The below summary gives an overview of the present dispute. It does not include all facts which may be of relevance, particularly as they emerged from the extensive evidence gathered at the hearing. Where necessary, the relevant factual aspects will be discussed in the context of the Tribunal's analysis of the disputed issues.
11. To provide some historical context, the discovery of Venezuela's oil reserves and their extraction by foreign oil companies commenced in and around the 1920s. In light of these developments, Venezuela enacted certain measures, such as the 1943 Hydrocarbons Law, with the alleged objective of providing investors with a stable legal framework in order to incentivize investments.⁴ However, it appears that although the EHCO reserves had been discovered by this point in time, they "remained untapped, partly due to the expense and technological difficulty of extracting, transporting, and processing the EHCO into a marketable commodity".⁵
12. A policy shift from the late 1950s resulted in Venezuela gradually reverting the oil assets to its own patrimony, until finally in 1975, Venezuela enacted the 1975 Nationalization Law. Pursuant to this law all existing oil concessions in favour of foreign oil companies were cancelled and all activities related to the exploration, exploitation, manufacturing, refining and marketing of oil were "reserved to the State".⁶ The 1975 Nationalization Law also provided for the creation of *Petróleos de*

² Project underlying the Association Agreement between Maraven S.A. and Conoco Orinoco Inc., originally dated 10 November 1995, and modified 18 June 1997 ("Petrozuata AA").

³ Project underlying the Association Agreement between Corpoguanipa, Arco Orinoco Development Inc. (ARCO), CPH and Texaco Orinoco Resources Company ("Texaco"), dated 9 July 1997, as amended ("Hamaca AA").

⁴ See Law Partially Reforming the Hydrocarbons Law, Extraordinary Official Gazette No. 1,149, published on 15 September 1967 ("1943 Hydrocarbons Law"), **C-5**.

⁵ SoC, § 34.

⁶ Organic Law that Reserves to the State the Industry and the Trade of Hydrocarbons, Extraordinary Official Gazette No. 1,769, published on 29 August 1975 ("1975 Nationalization Law"), **C-7/R-278**, Article 1 ("Due to reasons of national convenience, activities related with explorations carried out in the national territory to find oil, asphalt and other hydrocarbons; with exploitations of oil fields, the manufacturing or refining, transportation by special means and storage; with the trade at local and foreign level of substances exploited and refined, and with works required in connection therewith, under the terms provided for herein, shall be reserved to the State. In consequence, based upon the provisions provided for in this Article, the concessions granted by the National

Venezuela, S.A. (“PDVSA”), a new State-owned and controlled national oil company which would be responsible for the development and management of all oil activities going forward.⁷ The only limited concession for private participation in the hydrocarbons industry was made in Article 5 of the 1975 Nationalization Law. This provision allowed for the participation of private entities in the oil industry through the route of association agreements between PDVSA and its subsidiaries on the one hand and the private entities on the other, provided the associations had received the prior authorization of the Venezuelan Congress.⁸ PDVSA was thus responsible for the exploration and development of the untapped EHCO reserves. However, it seems that the Government of the Bolivarian Republic of Venezuela (“Government” or “Venezuela”) and PDVSA were unsuccessful in fully exploiting these vast reserves, presumably because they lacked the financial and technical resources to do so on their own.

13. Thus, in the 1990s, in the face of declining oil production, Venezuela once again invited the Claimants and other foreign oil companies to enter into joint ventures for developing the EHCO reserves located in Venezuela’s Orinoco Oil Belt. Attracting foreign investment to the Orinoco Oil Belt was not without its difficulties, particularly because of the nationalization in 1975. Foreign investors had concerns about another nationalization, expropriation or capricious State conduct more broadly, as well as the magnitude of the technical and commercial risks posed by the Projects.⁹
14. In order to allay the foreign investors’ concerns, the different constituencies of the Government, including the Ministry¹⁰, provided investors with financial incentives to make their investments more attractive commercially. These incentives included a reduced income-tax rate and a reduced royalty, along with other legal protections against Government measures that might harm the investments. This became known as the “Oil Opening” (or “*Apertura Petrolera*”) in Venezuela. The legal basis of the

Executive shall expire on December 31, one thousand nine hundred seventy five”); see also, SoD, § 35; R-PHB, § 11.

⁷ 1975 Nationalization Law, **C-7/R-278**, Article 6.

⁸ 1975 Nationalization Law, **C-7/R-278**, Article 5.

⁹ SoC, §§ 41 ff.

¹⁰ Initially known as the Ministry of Energy and Mines, in 2005, it was renamed the Ministry of Energy and Petroleum. In 2007, it was renamed again as the People’s Ministry of Energy and Petroleum. In 2011, the People’s Ministry of Energy and Petroleum was renamed again as the People’s Power Ministry of Oil and Mining. For ease of reference, all references herein are to the “Ministry”.

Apertura Petrolera was Article 5 of the 1975 Nationalization Law, as mentioned above.¹¹

15. The Venezuelan Congress formed a Bicameral Commission¹² to define the structure and fiscal incentives for all foreign investment in the Orinoco Oil Belt. In 1993, the Bicameral Commission issued a report making a number of recommendations for attracting foreign investment to the Orinoco Oil Belt.¹³ In a nutshell, the 1993 Bicameral Commission PDVSA Report identified three elements necessary to induce foreign private investment for the development of the Orinoco Oil Belt: (a) lower taxes, and in particular exempting the Orinoco Oil Belt associations from the 67.7% income tax rate that applied to PDVSA and instead applying the much lower corporate income tax rate; (b) lower royalty rates for the early years of the associations' operations; and (c) foreign majority ownership of the associations.
16. Over the following years, the Venezuelan Congress implemented the recommendations of the Bicameral Commission. The key fiscal measures enacted and implemented by the Congress were as follows:
 - (i) Revision of the income tax law whereby the associations in the Orinoco Oil Belt were subjected to a 34% corporate income tax rate that was applicable generally to any other industry and commercial activity in Venezuela, as opposed to the income tax rate of 67.66% that was otherwise applied to companies engaged in the hydrocarbons industry.¹⁴
 - (ii) Revision of the royalty rates, whereby associations would now pay the Government a reduced royalty of 1% from the commencement of commercial production until the earlier of: (a) 9 years from such commencement; or (b) the time when the project had accrued sales income three times in excess of the total investment made in development of the project. Upon expiration of

¹¹ *Supra*, § 12.

¹² The full title of the Bicameral Commission was the "Bicameral Commission for the Study of the Strategic Associations of PDVSA concerning the Projects Maraven-Conoco and Maraven-Total-Itochu-Marubeni for the Exploitation and Upgrading of Extra-Heavy Petroleum of the Orinoco Oil Belt" ("Bicameral Commission").

¹³ Report Approved by the Bicameral Commission for the Study of the Strategic Associations of PDVSA concerning the Projects Maraven-Conoco and Maraven-Total-Itochu-Marubeni for the Exploitation and Upgrading of Extra-Heavy Petroleum of the Orinoco Oil Belt, 12 August 1993, **C-22** ("1993 Bicameral Commission PDVSA Report").

¹⁴ Law Partially Reforming the Income Tax Law, Extraordinary Official Gazette No. 4,300, published on 13 August 1991 ("1991 Income Tax Law"), **C-15**, Articles 7 and 30; Decree Reforming the Income Tax Law, Decree No. 188, Extraordinary Official Gazette No. 4,727, published on 27 May 1994 ("1994 Income Tax Law"), **C-29**.

the 1% royalty holiday, royalties were to be paid at the generally applicable rate of 16.66%.¹⁵

17. Moreover, in accordance with the requirements of Article 5 of the 1975 Nationalization Law, the Venezuelan Congress also authorized the Petrozuata Project¹⁶ and the Hamaca Project.¹⁷ The Congressional Authorizations stipulated the conditions based on which the Parties would negotiate the terms of the association agreements for the Petrozuata and Hamaca Projects. Pertinently, these conditions recognized that the Government would retain the power to enact measures in respect of the Projects as it thought fit, and the Government's power in this regard would not be limited in any manner. However, in order to safeguard the foreign investors' interests, these conditions provided for indemnification by the concerned PDVSA Subsidiary against such measures/actions adopted by the Government which had an unjust and discriminatory effect on the Projects' cash flows and for the submission of all disputes arising out of the association agreements to arbitration.¹⁸
18. It was against this backdrop that the Parties negotiated the association agreements for the Petrozuata and Hamaca Projects. The Claimants assert that the aforesaid fiscal incentives i.e., the income tax and royalty reductions, were instrumental in inducing their investment and in enabling them to secure financing for the Projects.
19. On 10 November 1995, the Petrozuata Association Agreement ("Petrozuata AA") was concluded between PDVSA Petróleo (a subsidiary of PDVSA) and CPZ, establishing the corporate structure for the Petrozuata Project.¹⁹ On the same date, PDVSA executed the Petrozuata Guaranty²⁰ in favor of CPZ, essentially guaranteeing observance of the obligations assumed by PDVSA Petróleo in the Petrozuata AA.
20. In the Claimants' words, the objective of the Petrozuata Project was:

¹⁵ Royalty Agreement of the Strategic Associations of the Orinoco Oil Belt between the Ministry of Energy and Mines and PDVSA Petróleo of 29 May 1998 ("Royalty Reduction Agreement"), **C-67**, Clause 5.

¹⁶ Petrozuata Congressional Authorization, **R-10/C-25**.

¹⁷ First Hamaca Congressional Authorization, **R-11/C-59**. The Petrozuata Congressional Authorization and the First Hamaca Congressional Authorization are jointly referred to as "the Congressional Authorizations".

¹⁸ Petrozuata Congressional Authorization, **C-25**, Sixteenth Condition and Twenty Third Condition; First Hamaca Congressional Authorization, **C-59**, Twenty First Condition and Twenty Second Condition.

¹⁹ The Claimants describe the Project structure as follows: "The Project was structured through an incorporated joint venture, Petrozuata C.A., formed by CPZ and PDVSA Petróleo. CPZ owned 50.1 percent of Petrozuata C.A. in the form of "Class B Shares," and PDVSA Petróleo owned the remaining 49.9 percent in the form of "Class A Privileged Shares." Each shareholder appointed two directors to the Board of Directors, PDVSA Petróleo appointed the President of Petrozuata C.A., while the General Manager was appointed by CPZ" (Request, § 44).

²⁰ Petrozuata AA, **C-1**, Exhibit P; Petrozuata Guaranty, **C-2**.

[T]o produce, transport and upgrade extra-heavy crude oil, and to market and sell the resulting syncrude as well as other by-products. Under a separate Offtake Agreement between ConocoPhillips and Petrozuata C.A., the majority of the syncrude produced and upgraded by the Petrozuata Project would be refined at ConocoPhillips's Lake Charles Refinery in Louisiana. Billions of dollars were invested into the venture in Venezuela, including construction of upgrader facilities and pipeline infrastructure beginning in 1997. In 1998, ConocoPhillips invested an additional several hundred million dollars to modify its Lake Charles Refinery to enable it to process the Petrozuata syncrude.²¹

21. It seems that the start of the Petrozuata Project was very successful and full syncrude production started in April 2001, thereby triggering the initiation of the 35-year production life of the Petrozuata AA and commencing the nine-year period during which the 1% royalty rate would apply under the Royalty Reduction Agreement.²²
22. Similar to the Petrozuata Project, the Hamaca Association Agreement was concluded on 9 July 1997 ("Hamaca AA")²³ between CPH and Corpoguanipa, in addition to two other foreign investors.²⁴ The Hamaca Guarantee was concluded on the same date.²⁵ The commercial production of syncrude from the Hamaca Project began 7 years later, in October 2004.
23. Pertinently, the final text of the Hamaca AA was also approved by the Venezuelan Congress by way of another Congressional Authorization on 11 June 1997.²⁶ Both the Petrozuata AA and the Hamaca AA incorporated provisions which obligated the concerned PDVSA Subsidiary to indemnify the concerned Claimant against any "Discriminatory Actions" by the Government, as defined in the AAs.²⁷ In a nutshell, these provisions stipulate that in the event a particular measure/action by the Government is unjust and discriminatory (as these terms have been defined in the AAs) and adversely affects the cash flows of the Project, the Claimants will be entitled to receive compensation from the Respondents for the effects of such measures/actions.

²¹ Request, § 46.

²² Petrozuata AA, **C-1**; Section 12.01(a); Royalty Agreement of the Strategic Associations of the Orinoco Oil Belt between the Ministry of Energy and Mines and PDVSA Petróleo of 29 May 1998 ("Royalty Reduction Agreement"), **C-67**, Clause 5.

²³ Hamaca AA, **C-3**.

²⁴ i.e., Arco Orinoco Development Inc. (a subsidiary of Atlantic Richfield Company) and Texaco Orinoco Resources Company (now a subsidiary of Chevron Corporation). ARCO later left the Project.

²⁵ Hamaca Guarantee, **C-4**.

²⁶ Second Hamaca Congressional Authorization, **C-62**.

²⁷ These provisions are referred to as the "Discriminatory Action provisions". The relevant provisions of both AAs concerning Discriminatory Actions or DAs are set out in full at *infra*, §§ 100-109. In this Award, the Tribunal shall refer to the concerned Governmental measures as Discriminatory Actions or DAs interchangeably.

24. In December 1998, Hugo Chávez was elected President of Venezuela. As part of his so-called “Bolivarian Revolution”, he immediately expressed his dislike for the *Apertura Petrolera*. Therefore one of Chávez’s main goals became the reform of the oil industry and the securing of this resource for the benefit of Venezuela and its people.
25. As a first step, in 2001 President Chávez enacted the 2001 Hydrocarbons Law which made certain changes to the regime that had previously existed under the 1943 Hydrocarbons Law and the 1975 Nationalization Law.²⁸ This law purportedly provided the substratum on which several measures came to be passed in later years, all of which altered the fiscal incentives that had been extended to the EHCO projects. At the same time, it appears that the Chávez Administration also started taking steps to increase their control over PDVSA.
26. Opposition to this and other proposed reforms lead to political strife, including a failed *coup d’état* against President Chávez in April 2002 and a PDVSA strike in December 2002,²⁹ which was brought to an end in February 2003 with the removal of over 18,000 PDVSA employees (about 1/3rd of PDVSA’s workforce). Subsequently, in 2004, in an unprecedented move, President Chávez appointed Mr. Ramírez as the President of PDVSA as well as the Minister of Energy and Mines.³⁰
27. The Government subsequently adopted a series of measures which culminated in the nationalization of the Claimants’ investment in May 2007, following the passing of the 2007 Nationalization Decree a few months earlier. In particular:
- (i) In October 2004, the Government abrogated the Royalty Reduction Agreement, which resulted in an increase of the royalty rate applicable to the Projects from 1% to 16.66% (“Royalty Measure”);³¹

²⁸ Organic Law of Hydrocarbons, Official Gazette No. 37,323, published on 13 November 2001 (“2001 Hydrocarbons Law”), **C-88**.

²⁹ *Venezuela’s Orinoco Syncrude Projects Back Online*, REUTERS, 28 February 2003, **C-99**; Juan Forero, *Venezuela’s Lifeblood Ebbs Even as it Flows*, NEW YORK TIMES, 26 February 2003, **C-98**.

³⁰ In order to achieve this dual appointment, the Articles of Incorporation and By-laws of PDVSA were amended by a Presidential Decree. See Partial Amendment of Decree No. 2184 of 10 December 2002, containing the By-laws of Petróleos de Venezuela, S.A., Official Gazette No. 38,081, published on 7 December 2004, **C-112**, Article 2; Reprint of Decree No. 3264 Appointing Rafael Ramírez as President of PDVSA, issued on 22 November 2004, Official Gazette No. 38,081, published on 7 December 2004, **C-113**.

³¹ 8 October 2004 Letter from Minister Ramírez to PDVSA President Rodríguez, **R-12**.

- (ii) In May 2006, the Government introduced a tax which had the effect of further increasing the royalty rate applicable to the Projects to 33.33% (“Extraction Tax”);³²
- (iii) In October 2006, the Government enacted a law, pursuant to which the income tax rate for ECHO projects was increased from 34% to 50% (“2006 Income Tax Law”);³³
- (iv) In February 2007, the Government enacted a decree, which nullified the rights of all existing associations and required their migration to *empresas mixtas* or mixed enterprises which were at least 60% owned by PDVSA or any other affiliate designated by PDVSA (“2007 Nationalization Decree”).³⁴
- (v) In May 2007, in light of the Claimants’ inability to reach a consensus with the Respondents on the migration of the Projects to mixed enterprises, the Claimants were dispossessed of their full interest in the Projects pursuant to the 2007 Nationalization Decree.

28. The Claimants consider that the aforesaid measures were a series of co-ordinated steps formulated jointly by the Respondents and the Government with the express objective of taking the Projects and burying the *Apertura Petrolera*, which was described by President Chávez in a speech given in 2007 (“Chávez’s 2007 speech”) as “nothing other than a great project for giving the country away, for giving away this gigantic resource”.³⁵ The abovementioned qualified measures were in turn described in Chávez’s 2007 speech in the following terms:

[I]n 2004, within this process of progressive recovery of oil sovereignty, on 11 October 2004, we restored the amount of the royalty for the hydrocarbons in the Belt, that is, to what they paid in other areas, 16.66%. [...] This was the first measure that we took, in the Belt [...] This measure of taking the royalty from 1% to 16.66%, [...] meant, every year, an additional collection of US\$1.9 billion, take note so that we are adding this all up here, US\$1.9 billion, which before, they were taking away, not anymore, now that the Taxman has come. Step one.

³² Law of Partial Reform of Decree No. 1.510 with Force of Organic Law of Hydrocarbons, Official Gazette No. 38.443, published on 24 May 2006 (“Extraction Tax”), **R-15**.

³³ Law Partially Reforming the Income Tax Law, Official Gazette No. 38,529, published on 25 September 2006 (“2006 Income Tax Law”), **C-145**.

³⁴ Decree Having the Rank, Value and Force of Law of Migration to Mixed Companies of the Association Agreements of the Orinoco Oil Belt, as well as the Risk and Profit Sharing Exploration Agreements, Decree No. 5,200, Official Gazette No. 38,632, published on 26 February 2007 (“2007 Nationalization Decree”), **C-166**.

³⁵ Transcript of Aló Presidente N° 288: From the Orinoco Oil Belt, Hugo Chávez Frías, President of the Bolivarian Republic of Venezuela, 29 July 2007 (transcript available from Servicio TvPrensa) (“Chávez 2007 Speech”), **C-197**.

Step two: on June 24 of the next year, 2005, we set the royalty at 30% on excess production here in the Belt, because they were producing above what had been established, so we said, well, 16.6 for the production established in the agreements, in the old agreements. But since the new petroleum Law that we passed in 2001 established an oil Royalty not of 16.6 but 30%, which is a fair royalty, so then we said, you pay me the excess at 30% according to the new Law. Well, do you know how much this is equivalent to in royalty income, income in addition to the previous income, the US\$1.9 billion? Add it to the US\$1.9 billion, an additional US\$1.6 billion, every year. [...]

Step three: in May 2006, one year later, we imposed the extraction tax to take the royalty and make it equal to thirty-three and one third percent, that is, 33.3%, to equal the royalty, level it out for all of the oil projects in the country, that they would pay so that we would do away with these differences, where one might pay 16.6, others 30, no 33.3%. The extraction tax, this increased tax collection by an additional \$400 million a year. How much is that? \$3.5 billion+ \$400 million, \$3.9 billion a year. [...]

Step four: October 2006, it was established[,] because this is something else, the Income Tax, which is another tax on profits, on income, they paid tax on non-petroleum income, although they were taking oil[,] they paid the tax that everybody pays who works with rocks, who works with paper, the normal tax[,] when we know that the Oil Income Tax is a special tax because oil yields a lot of income, even more in the last few years with the recovery of oil prices. Well, we took the oil tax to what [the] Law says, 50%, they were paying 34[,] [...] Do you know how much that represented in additional annual revenues? US\$1.1 billion more. How much are we up to [now]? Five billion dollars from only four legislative measures. [...]

Well, we're up to five [billion], and, step five, on February 26, 2007, the nationalization of these companies was established by Decree [5.200], in the Orinoco [Oil] Belt, the old companies that were in the hands of the [multinational companies], and PDVSA had an interest, but a minority interest, PDVSA, we have recovered or have gone into these four companies, Petroanzoátegui, Petromonagas, Petropiar, and Petrocedeño, the former Sincor, Ameriven [Hamaca], Petrozuata, and Cerro Negro, PDVSA held an average 40% of the stock, we received the profits in proportion to or the profits in proportion to that 40%. Now[,] we've gone from 40 to 78%, almost double, therefore, almost 80%, that represents more income for the country. Collection of revenues by this measure increased US\$800 million a year in addition in the revenue collection, in total, because of these five measures for recovering sovereignty, we've recovered public revenues of US\$5.8 billion. That's equivalent, at the current exchange rate, to 12.18 trillion bolivars.³⁶

29. According to the Claimants, these qualified measures attract, first of all, the Respondents' obligation to compensate them under the Discriminatory Action provisions of the AAs; and, second and independently, the Respondents' civil liability under Venezuelan law for willful breach of the AAs, as a result of their active participation in formulating and procuring the measures that resulted in the Claimants' ultimate dispossession.³⁷
30. It is thus these qualified measures and in particular the nationalization of the Claimants' interests in the Projects that lies at the heart of the present dispute.

³⁶ Chávez 2007 Speech, C-197, pp. 8-10, footnotes omitted.

³⁷ SoC, Section IV.

C. PROCEDURAL HISTORY

1. Initiation of the Arbitration, constitution of the Tribunal and the appointment of the Secretary

31. On 10 October 2014, the Claimants submitted the Requests for Arbitration (“Requests”) against the Respondents.
32. On 5 February 2015, the Respondents submitted their Answer (“Answer”).
33. The co-arbitrators nominated by the Parties were confirmed on 6 February 2015 by the Secretary General pursuant to Article 13(2) of the ICC Rules:
 - Laurent Aynès, as co-arbitrator upon the Claimants’ joint nomination.
 - Andrea Giardina, as co-arbitrator upon the Respondents’ joint nomination.
34. On 27 March 2015, pursuant to Article 13(2) of the ICC Rules, the Secretary General confirmed Dr. Laurent Lévy as President of the Arbitral Tribunal upon the joint nomination of the co-arbitrators.
35. On 1 April 2015, the President of the Tribunal confirmed to the Parties that the Tribunal was duly constituted and issued some initial procedural directions in this arbitration.
36. On 9 April 2015, the President of the Tribunal circulated for the Parties’ comments the draft Terms of Reference (“ToR”) and a draft Procedural Order No.1 (“PO 1”). The President further informed the Parties of the Tribunal’s intention to appoint Ms. Eva Kalnina as the Secretary of the Tribunal and also indicated the scope of her duties in this capacity.
37. In their respective communications of 14 and 17 April 2015, the Claimants and the Respondents provided their observations on the draft ToR and PO1. They also consented to the Tribunal’s proposal to appoint Ms. Eva Kalnina as the Secretary of the Tribunal.
38. On 20 April 2015, the President of the Tribunal informed the Parties of its proposal to hold an in-person first procedural meeting on 12 June 2015 in New York, subject to substitution by a telephone conference, if the outstanding issues did not justify the expenses involved for an in-person meeting. The Parties confirmed their availability to attend the meeting by their emails of 20 and 21 April 2015.

39. On 21 May 2015, the ICC Court extended the time limit for establishing the ToR until 31 July 2015 (Article 23(2)).
40. On 12 June 2015, the Tribunal and the Parties signed the ToR during the first procedural meeting which took place in person in New York.

2. The Written phase

41. In the course of this arbitration, the Parties filed several written submissions as well as exhibits, witness statements and expert reports. On its part, the Tribunal issued a number of procedural rulings. Some of these submissions and rulings are summarized below:

- On 10 October 2014, the Claimants submitted their Requests.
- On 5 February 2015, the Respondents submitted their Answer.
- On 12 June 2015, an in-person case management conference was held in New York (USA) during which the Parties and the Tribunal signed the ToR.
- On 15 June 2015, the Tribunal issued PO 1.
- On 17 July 2015, pursuant to the directions in PO 1, the Claimants filed the Statement of Claim along with accompanying exhibits, witness statements, expert reports and legal authorities (“SoC”).
- On 12 February 2016, pursuant to the directions in PO 1, the Respondents filed their Statement of Defense, along with accompanying exhibits, witness statements, expert reports and legal authorities (“SoD”).
- In their communications of 23 February 2016, pursuant to the directions of the Tribunal, the Parties set out their respective positions regarding possible bifurcation of the proceedings, prior to the case management conference (the “CMC”) scheduled for 24 March 2016.
- Between 3 and 17 March 2016, parties exchanged their submissions/observations regarding bifurcation and document production.
- On 24 March 2016, at 4 pm CET, the Tribunal and the Parties held the CMC to discuss the outstanding issues pertaining to bifurcation and document production. At the CMC, after considering the Parties’ submissions in that regard, the Tribunal

denied the Respondents' request for bifurcation. The Tribunal also heard the Parties' submissions on document production, but reserved its decision on the disputed issues.

- On 8 April 2016, the Tribunal issued Procedural Order No. 2 ("PO 2"), setting out its decision on Parties' request for production of documents.
- On 4 May 2016, the Respondents complained of purported deficiencies in the Claimants' document production and requested the Tribunal to order the Claimants to complete their production of documents. On 6 May 2016, the Tribunal granted the Claimants time until 20 May 2016 to comment on the Respondents' allegations.
- On 20 May 2016, the Claimants provided their reply to the Respondents' application of 4 May 2016, denying that their document production had been deficient in any respect and requesting that the Tribunal deny the Respondents' request.
- On 27 May 2016, the Tribunal issued certain directions regarding the Respondents' application of 4 May 2016.
- On 27 May 2016, pursuant to PO 1, the Claimants filed their Reply and Defense to Counterclaim, along with accompanying witness statements, expert reports, exhibits and legal authorities ("Reply").
- On 2 June 2016 and 8 June 2016, in furtherance to the Tribunal's directions of 27 May 2016, the Parties made additional submissions concerning document production.
- On 14 June 2016, the Parties informed the Tribunal of their agreement to hold the full merits hearing in Washington D.C. as opposed to New York. The Tribunal accepted the Parties' proposal.
- On 1 July 2016, the Tribunal issued Procedural Order No. 3 ("PO 3"), deciding the Respondents' application of 4 May 2016 concerning the Claimants' document production.
- On 9 September 2016, the Respondents submitted their Rejoinder, along with accompanying witness statements, expert reports, exhibits and legal authorities ("Rejoinder").

- On 4 October 2016, following a pre-hearing telephone conference held on 3 October 2016, the Tribunal issued Procedural Order No.4 (“PO 4”), which contained its decision and instructions on various issues relevant to the upcoming hearing in the matter.
- On 7 October 2016, pursuant to the directions in PO 4, the Claimants submitted certain additional exhibits on which they intended to rely at the hearing. On 13 October 2016, the Respondents objected to the production of two of the additional documents, i.e. two presentations regarding the Petrozuata and Hamaca Projects prepared by the Respondents, which had been previously produced in the ICSID proceedings. Accordingly, on 17 October 2016, the Claimants applied to the Tribunal for leave to introduce these contested documents into the record.
- On 1 November 2016, having gone through the Parties’ submissions on the Claimants’ application, the Tribunal decided to allow the Claimants to introduce the contested documents into the record.
- On 2 November 2016, pursuant to PO 4 and the Tribunal’s correspondence of 1 November 2016, the Parties filed their additional exhibits.
- On 23 November 2016, the Claimants sought the Tribunal’s permission to introduce three additional exhibits, which had become publicly available only after the previous deadline stipulated by the Tribunal. On 25 November 2016, the Respondents objected to the Claimants request. On the first day of the evidentiary hearing (“Hearing”) on 28 November 2016, the Tribunal allowed the Claimants to refer to the new documents during the course of their opening submissions, but otherwise reserved its decision on admitting these three documents into the record.

3. The Oral phase

42. The Hearing was held at the ICSID facilities in Washington D.C., USA from 28 November 2016 to 10 December 2016. In addition to the members of the Tribunal and the Secretary, the following persons attended the Hearing:

For the Claimants:

Mr Jan Paulsson
Mr Luke Sobota

Mr Hugh Carlson
Mr Josh Simmons
Mr Ben Jones
Ms Kelly Renehan
Ms Jacqueline Argueta
Mr Mihir Chattopadhyay

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Ms Janet Langford Carrig
Ms Laura Robertson
Mr Alberto Ravell
Mr Fernando Avila

ConocoPhillips Petrozuata B.V.

For the Respondents:

Mr George Kahale, III

Mr Bernard V. Preziosi

Mr Simon Batifort

Mr Borzu Sabahi

Ms Arianna Sanchez Galindo

Mr Enrique José Urdaneta Cordido-Freites

Mr Matthew Disler

Ms Maria Acosta

Mr Farshad Zahedinia

Ms Sofia Herrera

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43. In the course of the Hearing, the Tribunal heard evidence from the following witnesses and experts:

For the Claimants:

- **Mr. Ray Manning**, the then Director of Contracts and Negotiations for Worldwide Exploration of Claimant No.1 and their lead negotiator for the Hamaca AA.
- **Mr. Robert Heinrich**, who was part of Claimant No.2's negotiation team for the Petrozuata AA and from 2004 to 2007 served as a Board member of the Project companies i.e., Petrozuata C.A. and Hamaca JVC.
- **Mr. Henry S. van Wageningen**, who was a member of Claimant No.2's negotiating team for agreements pertaining to the Petrozuata Project and also Claimant No.2's lead drafter of the key Project documents.
- **Mr. David Brown**, presently the Technology Program Manager, Heavy Oil & Oil Sands at ConocoPhillips, who reviewed the preparation of the oil production profiles for the Petrozuata and Hamaca Projects which form the basis of the quantum report.
- **Prof. Allan Brewer-Carías**, a Venezuelan qualified lawyer whose practice areas include public, constitutional and administrative law and who has provided his legal opinion on issues that pertain to these areas of law in the present arbitration.
- **Prof. David R. Mares**, who is a political scientist with a special focus on Latin America and Energy studies.
- **Prof. Gustavo Mata Borjas**, a Venezuelan qualified lawyer, whose areas of practice are primarily civil and corporate law.
- **Dr. Richard F. Strickland** is the Claimants' expert in relation to issues concerning production volumes. In particular, he addresses the production forecasts proposed by the Respondents' expert Mr. Patino.
- **Mr. Neil K. Earnest** is the Claimants' expert for various downstream issues concerning the Hamaca and Petrozuata upgraders, relevant for the purposes of determining production volumes as well as costs.
- **Dr. Manuel A. Abdala**, the Claimants' quantum valuation expert.

For the Respondents:

- **Mr. Rubén Figuera**, who has at different points of time between 2005 and 2007 acted as the President of the operating companies of the Petrozuata and Hamaca Projects. He is also the Respondents' fact witness for oil production and project costs issues for the purposes of their quantum analysis.

- **Dr. Bernard Mommer**, who between 2005 and 2008 served as the Vice Ministry of Hydrocarbons in the Ministry and was the primary governmental official dealing with the foreign oil companies operating in Venezuela at the relevant time.
- **Prof. Luis Alberto García-Montoya**, a Venezuelan qualified lawyer whose areas of practice are primarily civil, commercial and corporate law.
- **Prof. Louis T. Wells**, a former Professor who has significant experience in advising various governments on the development of minerals policy, negotiation, renegotiation and administration of mineral related agreements.
- **Mr. Jesús Rafael Patiño Murillo**, the Respondents' expert for determining production volumes achieved by the Projects applying the but-for test.
- **Mr. Vladimir Brailovsky and Dr. Daniel Flores**, the Respondents' quantum valuation experts.

44. A verbatim transcript of the Hearing was taken and distributed to the Parties and the Tribunal at the end of each day.

45. On 10 December 2016, the Tribunal closed the proceedings in accordance with Article 27 of the ICC Rules.

4. The Post-Hearing phase

46. On 14 December 2016, the Tribunal issued Procedural Order 5 ("PO 5"), setting out further procedural steps to be taken by the Parties, as well as the timeline for filing their post-hearing briefs ("PHBs") and cost statements.

47. On 12 and 13 December 2016, the Respondents and the Claimants respectively, submitted the additional exhibits which they had referred to/introduced during the course of the Hearing.

48. On 17 December 2016, pursuant to the directions in PO 5, the Respondents sought the Tribunal's permission to introduce certain new exhibits into the record. In light of the fact that the Claimants did not raise any objections to same, the Tribunal permitted the Respondents to introduce these new exhibits on 22 December 2016.

49. On 23 December 2016, the Tribunal raised various questions in connection with the matters argued during the Hearing and invited the Parties to address them in their PHBs.

50. On 20 March 2017, the Parties filed their respective PHBs (“C-PHB” and “R-PHB” respectively).
51. On 17 April 2017, both Parties filed their respective Statements of Costs. On 27 April 2017, the Respondents submitted an updated/amended Statement of Costs and also provided their responses to certain clarification sought by the Claimants. On 16 June 2017 and 28 June 2017, the Claimants filed an updated Statement of Costs.
52. In accordance with Article 36 of the ICC Rules, on 12 March 2015, the ICC Court had fixed the advance on costs at USD 650,000. On 3 September 2015, the ICC Court readjusted and increased the advance on costs to USD 1,350,000. On 8 September 2016, the ICC Court readjusted and increased the advance on costs to USD 2,060,000. On 11 May 2017, the ICC Court once again readjusted and increased the advance on costs to USD 2,620,000. On 5 January 2018, pursuant to Prof. Giardina’s request for such payment of 29 December 2017, the ICC Secretariat requested the Parties to pay further advances of USD 290,710 (to be shared equally) towards the “Mandatory Contribution to the Lawyers Fund” (“MCLF Advance”) payable to Prof. Giardina. As discussed in more detail in Section V below, not all of the aforesaid amounts have been paid by the Parties in equal shares. Finally, on 16 February 2018, the ICC Court increased the advance on costs from USD 2,620,000 to USD 3,150,000.
53. Further, in accordance with Article 30(1) of the ICC Rules, the time limit for rendering the final award was 6 months from the date of the last signature of the ToR, namely, at 12 December 2015. Since then, and in accordance with Article 30(2) of the ICC Rules, the ICC Court extended this time limit as follows:
- At its session of 2 July 2015, to 28 February 2017 (the Secretariat’s letter of 2 July 2015);
 - At its session of 16 February 2017, to 30 June 2017 (the Secretariat’s letter of 24 February 2017);
 - At its session of 22 June 2017, to 31 January 2018 (the Secretariat’s letter of 29 June 2017);
 - At its session of 18 January 2018, to 30 March 2018 (the Secretariat’s letter of 29 January 2018);

- At its session of 15 March 2018, to 30 April 2018 (the Secretariat's letter of 16 March 2018);
- At its session of 19 April 2018, to 31 May 2018 (the Secretariat's letter of 20 April 2018).

II. POSITIONS OF THE PARTIES AND RELIEF REQUESTED

54. The Parties' arguments in so far as they are relevant and necessary to resolve the issues in dispute have been reproduced prior to the Tribunal's analysis of each disputed issue. For the sake of clarity, the Tribunal emphasizes that it has not provided a summary of each specific argument raised by the Parties in their submissions, as it would be both repetitive and unnecessary. The Tribunal has reproduced only what it views as the most important arguments for its decision. Even if not explicitly reproduced, the Tribunal has considered all of the Parties' arguments.

A. THE CLAIMANTS' POSITION AND REQUEST FOR RELIEF

55. In the ToR, the Claimants summarized their position as follows:

Under the Association Agreements, the Claimants performed their part of the bargain: their large investments of money, technology and know-how succeeded in creating highly profitable joint ventures, which in 2007 still had approximately 30 years to run. By contrast, once the Projects were constructed and online as a result of the Claimants' performance, Respondents in bad faith breached their commitments in the Association Agreements and the Guarantees. They worked with the Government systematically to dismantle the financial, contractual, and legal protections of the Projects, resulting finally in the expropriations of 2007. This arbitration is thus brought to recover the amounts due to the Claimants arising from Respondents' breaches of their obligations under the AAs (including the duty of good faith and fair dealing), the Guarantees, and Venezuelan law, and alternatively to determine the amounts due to the Claimants under the indemnification formulae in the AAs.³⁸

56. The Claimants first submit that, as part of the Government's attempt to attract foreign investment in the framework of the *Apertura Petrolera*, it sought to come up with a number of incentives and protections, all of which were documented through different instruments, including in the form of reductions to the applicable income tax and royalty rates.³⁹

³⁸ ToR, § 34.

³⁹ *Supra*, § 16.

57. They note that it was PDVSA that directly encouraged and coordinated with the Government a “suite of fiscal incentives”⁴⁰ to encourage CPZ and CPH to invest in the Petrozuata and Hamaca Projects respectively. It was PDVSA’s efforts that ultimately led to four critical elements of the Projects being adopted: (a) the income tax reduction; (b) the royalty reduction; (c) contract protections; and (d) legislative approval of the framework of conditions for the Projects.⁴¹
58. The Claimants also emphasize that, for example, the income tax reduction was guaranteed by the framework of conditions approved by the Venezuelan Congress⁴² whilst the royalty reduction was granted by a formal Royalty Reduction Agreement between the Ministry and PDVSA Petr leo.⁴³ The same incentives and protections were also embodied in the AAs executed between the Claimants and the PDVSA Subsidiaries, which were also endorsed by the Venezuelan Congress.⁴⁴
59. The Claimants further point out that both AAs establish similar rights and obligations for the contracting parties, one of the key contractual protections being the commitment by the PDVSA Subsidiaries — guaranteed by PDVSA in independent agreements accompanying each of the AAs — to indemnify the Claimants against any “Discriminatory Action” as defined in the AAs.⁴⁵ Thus, where there are adverse effects on the Projects’ cash flows as specified in the AAs (namely, “Significant Economic Damage” for the Petrozuata Project and “Material Adverse Effect” for the Hamaca Project), the Claimants are entitled to indemnification according to the formulae prescribed in each AA. The Claimants underline that such indemnification is supplemental to any other recourse available to the Claimants.⁴⁶
60. According to the Claimants, the Respondents were initially aligned with them at the time of signing of the AAs and Guarantees and the Claimants expected that they would work in good faith to promote the Claimants’ rights and interests in the Associations. All this changed upon President Ch vez’s rise to power which brought significant transformation to PDVSA and its affiliates and included a political upheaval

⁴⁰ SoC, § 52.

⁴¹ SoC, §§ 52-61.

⁴² Law Partially Reforming the Income Tax Law, Extraordinary Official Gazette No. 4,300, published on 13 August 1991 (“1991 Income Tax Law”), **C-15**.

⁴³ Royalty Reduction Agreement, **C-67**.

⁴⁴ SoC, § 59; See also, Petrozuata Congressional Authorization, **C-25**; First Hamaca Congressional Authorization, **C-59**.

⁴⁵ See *supra*, § 23.

⁴⁶ SoC, §§ 59(a), 68(a), 220-232.

as well as a termination of 18,000 managers, engineers and other essential employees of PDVSA in 2003. The Claimants explain that, as part of his Bolivarian Revolution, President Chávez promised to remake a “new PDVSA,” and in 2004, Mr. Rafael Ramírez was given the unprecedented role of simultaneously serving as both Minister of Energy and President of PDVSA.⁴⁷ The “new PDVSA” soon turned on the Claimants and – in willful breach of their contractual and legal obligations – the Respondents played an instrumental role in devising and implementing a series of measures that first reduced the value of the Claimants’ interests in the Projects and ultimately confiscated them altogether.⁴⁸

61. The Claimants argue that PDVSA and its subsidiaries are the direct beneficiaries of the expropriation and have enjoyed billions of dollars in revenues from the full (in the case of Petrozuata) and majority (in the case of Hamaca) interests in the Projects that they illicitly obtained.⁴⁹ The Claimants also emphasize that they are yet to receive any compensation for the nationalization of their property from either the Government or the Respondents.⁵⁰
62. More specifically, the Claimants note that, as stated by President Chávez in his 2007 Speech,⁵¹ the “steps” by the Government and PDVSA that led to the dismantling of the *Apertura Petrolera* and their interests in the Projects included the following measures:
 - i. First, starting in October 2004, the Government, working in coordination with the Respondents, implemented the Royalty Measure, which unilaterally abrogated the Royalty Reduction Agreement and imposed instead a 16.66 % royalty rate — a dramatic increase from the 1% royalty rate that had been promised at the outset of the Projects. Then in May 2006, the Government, again alongside the Respondents, introduced the Extraction Tax which had the equivalent effect of further increasing the royalty rate to 33.33%.
 - ii. Second, effective 1 January 2007, the Government, with the support of the Respondents, eliminated the income tax regime enacted to induce investment

⁴⁷ See Chávez 2007 Speech, **C-197**; C-PHB, §§ 4(a)-(e), 8

⁴⁸ SoC, §§ 87, 93-94; C-PHB, §§ 4, 11.

⁴⁹ C-PHB, §§ 294-299;

⁵⁰ SoC, § 144.

⁵¹ Chávez 2007 Speech, **C-197**.

in the EHCO projects, raising the applicable income tax rate from 34% to 50% (the “Income Tax Increase”).

- iii. Third and finally, in February 2007, despite having appropriated a substantial amount of the value of the Claimants’ interests in the Projects through the abovementioned qualified measures, the Government and the Respondents proceeded with implementation of the ultimate step: seizing control of the operations and assets of the Petrozuata and Hamaca Projects pursuant to the 2007 Nationalization Decree. The Claimants submit that, on 1 May 2007, Respondents, with troops standing by, assumed control over the Projects’ operations and that subsequently the Government and Respondents announced to the world that they had expropriated the Claimants’ interests in the Projects.⁵²
63. As a direct result of these qualified measures, the Claimants claim to have lost the entire value of their investment in the Projects.
64. The Claimants contend that the Respondents took these adverse actions in utter disregard of their legal and contractual obligations to the Claimants under the AAs and the Guarantees. In other words, they played a critical role in bringing about the measures that stripped the Claimants of their rights under the AAs, and effectively appropriated the Claimants’ interests in the Projects for themselves.
65. In the Claimants’ view, the Respondents’ conduct in “procuring and implementing” the qualified measures constitutes a willful breach of their obligations under the AAs, including the duty of good faith and fair dealing. In the alternative, the Claimants argue that interference by the Respondents in the performance of the AAs constitutes a *hecho ilícito* (or tortious interference) under Venezuelan law. In either case, the Respondents must compensate the Claimants for all damages suffered as a result of these breaches, based on the full value of the Claimants’ expropriated interests in the Projects.⁵³
66. Separately, and in all events, the Claimants contend that the qualified measures give rise to liability on the part of the Respondents under the Discriminatory Action provisions of the AAs which impose an obligation upon the Respondents to indemnify/compensate the Claimants for the effects of any unjust and discriminatory

⁵² C-PHB, §§ 287-290; SoC, § 15(c).

⁵³ C-PHB, §§ 2(b), 12(b), 22-25.

measures adopted by the Government.⁵⁴ The Claimants argue that the very purpose of these provisions is to guarantee that they receive contractual indemnification against losses caused by the actions of the Government in accordance with the provisions set forth in the AAs. According to the Claimants, the Respondents are effectively required to act as partial insurers of the Claimants' damages incurred as a result of the Discriminatory Actions.⁵⁵ Further, as a guarantor for the PDVSA Subsidiaries under the Guarantees, PDVSA is obliged to ensure payment of compensation by the PDVSA Subsidiaries to the Claimants under the AAs and Venezuelan law.

67. As to the amount of damages, the Claimants allege that under the contractual formulae for Discriminatory Actions, the cumulative damages exceed many billions of US Dollars. In relation to the Respondents' contractual breaches or alternatively *hecho ilícito*, the Claimants claim to have suffered damages in a significantly greater amount.
68. The Claimants also note that, in response to the measures enacted by the Government, they repeatedly communicated their complaints to the Respondents and then pursued the only other practical remedy, ICSID arbitration, against Venezuela for more than seven years. The Claimants underline that Venezuela is not a signatory to the AAs or Guarantees, nor is it a named party to these ICC proceedings, whilst it is the sole respondent in the ICSID Arbitration where its obligations arise under the Dutch-Venezuelan bilateral investment treaty and international law.⁵⁶ The Claimants emphasize that as a result of a ruling in the ICSID Arbitration, these ICC proceedings are the only practicable legal recourse for the Claimants' injuries flowing from the Royalty Measure, the Extraction Tax and the Income Tax Increase. In other words, the DA provisions of the AAs provide the Claimants with a further remedy against the actions of the Government, whereby they can seek compensation/indemnity from the Respondents for the effects of DAs adopted by the Government. Relying on these provisions, the Claimants present claims under the DA provisions on the basis of the Income Tax Increase, the Royalty Measure and the Extraction Tax as well as the Expropriation – the latter also being a discriminatory measure adopted by the Government against the Projects – alongside their other claims flowing from the Respondents' breach of their obligations under the AAs.

⁵⁴ The Discriminatory Action provisions. The relevant provisions of both AAs concerning Discriminatory Actions are set out *infra*, §§ 100-109.

⁵⁵ C-PHB, §§ 13-15.

⁵⁶ C-PHB, § 11(l)-(n).

69. Finally, the Claimants have clarified that they do not seek double recovery for the damage suffered. To the extent that they (or related entities) are awarded damages for the same injuries in the ICSID Arbitration and receive payment of such an award, the Claimants affirm that the Respondents will receive an appropriate set-off from their obligations arising from an award in these proceedings, and *vice versa*.⁵⁷ The Claimants' submissions on this issue are as follows:

Accordingly, any monetary reparation (after deduction of legal and expert costs incurred in connection therewith) that the claimants in the ICSID Arbitration may actually recover (*i.e.*, awarded and paid by Venezuela) in that case before recovery in this ICC proceeding will reduce Respondents' liability in respect of the claims asserted in this ICC proceeding (to the extent that such reparation is based on the same actions by the Government and/or PDVSA). The converse is true as well. If Claimants receive payment for damages or in connection with this ICC proceeding and are later awarded monetary reparation in connection with the ICSID Arbitration (to the extent that such damages are based on the same actions by the Government and/or PDVSA), Claimants will reimburse Respondents for the amount that Respondents have paid in this ICC Arbitration, after deduction of Claimants' legal and expert costs, to the extent necessary to prevent double recovery.⁵⁸

70. In their Reply, the Claimants sought the following relief:

568. As a consequence of the foregoing, the Claimants respectfully request that the Arbitral Tribunal render an Award:
- (a) Declaring that PDVSA Petróleo willfully breached its contractual obligations and duty of good faith owed to CPZ under the Petrozuata Association Agreement, and that PDVSA Petróleo is liable fully to compensate CPZ accordingly, for losses currently estimated to be US\$7.02 billion;
 - (b) Declaring that Corpoguanipa willfully breached its contractual obligations and duty of good faith owed to CPH under the Hamaca Association Agreement, and that Corpoguanipa is liable fully to compensate CPH accordingly, for losses currently estimated to be US\$10.87 billion;
 - (c) Declaring that PDVSA is liable to indemnify CPZ for PDVSA Petróleo's breach of its contractual obligations and duty of good faith owed to CPZ under the Petrozuata Association Agreement, and that PDVSA is liable fully to compensate CPZ accordingly;
 - (d) Declaring that PDVSA is liable to indemnify CPH for Corpoguanipa's breach of its contractual obligations and duty of good faith owed to CPH under the Hamaca Association Agreement, and that PDVSA is liable fully to compensate CPH accordingly;
 - (e) Declaring that PDVSA willfully breached its contractual obligations and duty of good faith owed to CPZ under the Petrozuata Guaranty, and that PDVSA is liable fully to compensate CPZ accordingly;

⁵⁷ ToR, § 33; SoC, §§ 250-252.

⁵⁸ SoC, § 251.

- (f) Declaring that PDVSA willfully breached its contractual obligations and duty of good faith owed to CPH under the Hamaca Guarantee, and that PDVSA is liable fully to compensate CPH accordingly;
- (g) Declaring that Respondents' integral role in destroying the Claimants' contractual rights constitutes, alternatively, an hecho ilícito under Venezuelan law, and that Respondents are liable to compensate the Claimants accordingly, for losses currently estimated to be US\$17.89 billion;
- (h) Declaring that the Income Tax Increase constitutes a Discriminatory Action under the Petrozuata and Hamaca Association Agreements;
- (i) Declaring that the Expropriation constitutes a Discriminatory Action under the Petrozuata and Hamaca Association Agreements;
- (j) Declaring that PDVSA Petróleo is liable to compensate CPZ for the Discriminatory Actions under the terms of the Petrozuata Association Agreement, in an amount currently estimated to be US\$2.13 billion;
- (k) Declaring that Corpoguanipa is liable to compensate CPH for the Discriminatory Actions under the terms of the Hamaca Association Agreement, in an amount currently estimated to be US\$5.18 billion;
- (l) Declaring that PDVSA is liable to indemnify CPZ for the Discriminatory Actions under the terms of the Petrozuata Guaranty, in an amount currently estimated to be US\$2.13 billion;
- (m) Declaring that PDVSA is liable to indemnify CPH for the Discriminatory Actions under the terms of the Hamaca Guarantee, in an amount currently estimated to be US\$5.18 billion;
- (n) Awarding the Claimants damages for willful breaches or hecho ilícito in the amount currently estimated to be US\$17.89 billion, including interest, to be updated closer to the time of the Award;
- (o) Awarding the Claimants compensation for Discriminatory Actions in the amount currently estimated to be US\$7.31 billion, including interest, to be updated closer to the time of the Award;
- (p) Awarding the Claimants post-award compound interest at a rate to be fixed by the Tribunal, to run from the date of Award until the date of full and final payment;
- (q) Dismissing Respondents' counter-claim;
- (r) Awarding the Claimants their costs and expenses of the arbitration, including those costs set out in Article 37(1) of the ICC Rules;
- (s) Declaring that the Award is net of all applicable Venezuelan taxes and any taxes applying under Venezuelan law to the payment of such net amount shall be borne by Respondents, so that the amount effectively received by the Claimants after deduction of all applicable taxes corresponds to the full amount granted by the Tribunal; and
- (t) Granting such additional or other relief as may be just under the law.

71. In the C-PHB, the Claimants modified/clarified their reliefs as follows:

1027. As a consequence of the foregoing, Claimants respectfully request that the Arbitral Tribunal render an Award:
- (a) Declaring that PDVSA Petróleo willfully breached its contractual obligations and duty of good faith owed to CPZ under the Petrozuata Association Agreement, and that PDVSA Petróleo is accordingly fully liable to compensate CPZ for losses quantified at US\$7.02 billion (as of 27 May 2016);
 - (b) Declaring that Corpoguanipa willfully breached its contractual obligations and duty of good faith owed to CPH under the Hamaca Association Agreement, and that Corpoguanipa is accordingly fully liable to compensate CPH for losses quantified at US\$10.87 billion (as of 27 May 2016);
 - (c) Declaring that PDVSA is liable to indemnify CPZ for PDVSA Petróleo's breach of its contractual obligations and duty of good faith owed to CPZ under the Petrozuata Association Agreement, and that PDVSA is fully liable to compensate CPZ accordingly;
 - (d) Declaring that PDVSA is liable to indemnify CPH for Corpoguanipa's breach of its contractual obligations and duty of good faith owed to CPH under the Hamaca Association Agreement, and that PDVSA is fully liable to compensate CPH accordingly;
 - (e) Declaring that PDVSA willfully breached its contractual obligations and duty of good faith owed to CPZ under the Petrozuata Guaranty, and that PDVSA is fully liable to compensate CPZ accordingly;
 - (f) Declaring that PDVSA willfully breached its contractual obligations and duty of good faith owed to CPH under the Hamaca Guarantee, and that PDVSA is fully liable to compensate CPH accordingly;
 - (g) Declaring that Respondents' integral role in destroying Claimants' contractual rights constitutes, alternatively, an *hecho ilícito* under Venezuelan law, and that Respondents are fully liable to compensate Claimants accordingly, for losses quantified at US\$17.89 billion (as of 27 May 2016) (*i.e.*, the sum total of the amounts identified in paragraphs (a) and (b) above);
 - (h) Declaring that the Income Tax Increase constitutes a Discriminatory Action under the Petrozuata and Hamaca Association Agreements;
 - (i) Declaring that the Expropriation, including the value-depressing fiscal measures that preceded it, constitutes a Discriminatory Action under the Petrozuata and Hamaca Association Agreements;
 - (j) Declaring that PDVSA Petróleo is liable to compensate CPZ for the Discriminatory Actions under the terms of the Petrozuata Association Agreement, in an amount quantified at US\$2.13 billion (as of 27 May 2016);
 - (k) Declaring that Corpoguanipa is liable to compensate CPH for the Discriminatory Actions under the terms of the Hamaca Association Agreement, in an amount quantified at US\$5.18 billion (as of 27 May 2016);
 - (l) Declaring that PDVSA is liable to indemnify CPZ for the Discriminatory Actions under the terms of the Petrozuata Guaranty, in an amount quantified at US\$2.13 billion (as of 27 May 2016);
 - (m) Declaring that PDVSA is liable to indemnify CPH for the Discriminatory Actions under the terms of the Hamaca Guarantee, in an amount quantified at US\$5.18 billion (as of 27 May 2016);

- (n) Awarding Claimants damages for willful breaches (or *hecho ilícito*) and indemnification for Discriminatory Actions in an amount quantified at US\$19.23 billion (as of 27 May 2016);
- (o) Awarding Claimants compensation for Discriminatory Actions, if the Tribunal finds no breach of Respondents' contractual obligations and duty of good faith under the Association Agreements and Guarantees, in an amount quantified at US\$7.31 billion, including interest (as of 27 May 2016) (*i.e.*, the sum total of the amounts identified in paragraphs (j) and (k) above);
- (p) Awarding Claimants post-award compound interest at a rate to be fixed by the Tribunal, to run from the date of Award until the date of full and final payment;
- (q) Dismissing Respondent Corpoguanipa's counter-claim;
- (r) Awarding Claimants the sums they have advanced to the ICC towards the fees and expenses of the arbitrators and the ICC's administrative expenses (as set out in Article 37(1) of the ICC Rules), in an amount to be quantified in Claimants' forthcoming 17 April 2017 submission on costs, in addition to any costs in this regard assessed by the ICC in the future;
- (s) Awarding Claimants the reasonable legal and other costs that they have incurred to date in connection with these arbitration proceedings, in an amount to be quantified in Claimants' forthcoming 17 April 2017 submission on costs;
- (t) Awarding Claimants interest on the costs identified in sections (r) and (s) above, to be applied as from the date of expenditure;
- (u) Declaring that the Award is net of all applicable Venezuelan taxes and that any taxes applying under Venezuelan law to the payment of such net amount shall be borne by Respondents, so that the amount effectively received by Claimants after deduction of all applicable taxes corresponds to the full amount granted by the Tribunal; and
- (v) Granting such additional or other relief as may be just under the law.

B. THE RESPONDENTS' POSITION AND REQUEST FOR RELIEF

72. In the ToR, the Respondents summarized the Claimants' case as follows⁵⁹:

The claims asserted by the Claimants can be divided into two categories: (i) the Claimants seek to hold Respondents responsible for the actions of the Government of the Bolivarian Republic of Venezuela (the "Government" or "Venezuela") in increasing royalties and taxes and nationalizing their interests in two oil projects in the Orinoco Oil Belt known as the "Petrozuata Project" and the "Hamaca Project"; and (ii) if they cannot get what they want in the first category, then the Claimants seek compensation for those governmental actions under the indemnity provisions of the Association Agreements relating to those projects, which were specifically designed to compensate the Claimants for governmental acts affecting their interests in the projects.

73. As to the first category of claims, the Respondents observe that it seeks to hold them liable for allegedly collaborating, participating or assisting in, or implementing, the Royalty Measure, the Extraction Tax, the Income Tax Increase, and the 2007

⁵⁹ ToR, § 35.

Nationalization Decree. They argue that these claims are not only unsustainable as a matter of law, but are also non-arbitrable and beyond the jurisdiction of this Tribunal, particularly as the Venezuelan Congress never authorized arbitration of such claims, whether against the parties to the Association Agreements or PDVSA as guarantor, and the scope of the guarantees does not cover such claims.⁶⁰

74. They further submit that what makes the first category of claims – namely, the claims pertaining to willful breach – “truly incomprehensible” is that all parties to the AAs understood very well when they entered into the Projects that the Government may take action adversely affecting the Projects, including fiscal measures and even outright seizure of assets or expropriation. The Respondents emphasize that this was the focal point of the negotiation for the Projects in the 1990s: while the investors were seeking “full compensation” for any adverse governmental action and “fiscal stability”, such requests were “flatly rejected” by the Government.⁶¹
75. As to the second category of the Claimants’ claims, the Respondents argue that no compensation is due for acts that do not fall within the definition of Discriminatory Action, as the term is narrowly defined under the AAs. The Respondents point out that according to the Claimants’ own characterization of the Royalty Measure and the Extraction Tax as non-Discriminatory Actions, any compensation claim based on those measures should be dismissed. Likewise, compensation should be excluded for the Income Tax Increase, as this too is not a Discriminatory Action.⁶²
76. Furthermore, the Respondents also argue that the Claimants have failed to meet the notice requirements of the AAs⁶³, as well as the requirement to exhaust legal and administrative remedies.⁶⁴
77. Lastly, the Respondents also raise a counterclaim and request a declaration that Corpoguanipa will have the option to purchase Phillips Venezuela’s interest in the Hamaca Project in the event of any award of compensation to Phillips Venezuela. In other words, the Respondents are seeking a declaration of the right to exercise the

⁶⁰ SoD, §§ 202-205; R-PHB, §§ 337-353.

⁶¹ SoD, §§ 11-13.

⁶² SoD, § 290.

⁶³ Rejoinder, §§ 325 ff; R-PHB, §§ 522-549.

⁶⁴ Rejoinder, §§ 349 ff; R-PHB, §§ 550-565.

buy-out option enshrined in Articles 14.4 and 14.5 of the Hamaca AA, which would render moot the claims asserted with respect to that Project.⁶⁵

78. In the Rejoinder and R-PHB, the Respondents provided the following summary of their position and requested the following relief:

VII. Conclusion

A. First Category of Claims

618. As demonstrated in the Statement of Defense and herein, the first category of claims should be dismissed for all of the following reasons: (i) any claim based upon implementation of the concededly sovereign act of nationalization in accordance with Decree-Law 5.200 is non-arbitrable under Venezuelan law and beyond the jurisdiction of this Tribunal; (ii) the “express contractual obligations” now invoked by the Claimants to support their willful breach claim provide no basis for any claim of breach; (iii) the concept of good faith under the Venezuelan Civil Code does not form the basis of any claim under the facts of this case; (iv) compliance with law does not constitute actionable conduct, and a claim for *hecho ilícito* in any event could not be asserted with a contract claim under the circumstances of this case; (v) the Claimants cannot meet the element of causation essential to any claim for damages for either willful breach of contract or *hecho ilícito*; and (vi) the Claimants’ own conduct leaves no doubt that not even they ever thought that Respondents breached any obligation to the Claimants and precludes the assertion of the claims herein. Each of the foregoing independently warrants dismissal of the first category of claims.

619. Although it should not be necessary to enter into a quantum analysis for the first category of claims, that analysis would yield the conclusion that compensation in any event would be no greater than the amount shown in the table in paragraph 614 above.⁶⁶

B. Second Category of Claims

620. The second category of claims should also be dismissed because they are based on the Compensation Provisions and the Claimants have not complied with the requirements for compensation expressly set forth in those provisions. If such requirements were to be disregarded, the compensation calculation under the Compensation Provisions for the maximum period prescribed in the Petrozuata Association Agreement would be as set forth in the tables in paragraphs 615 and 616 above⁶⁷, depending upon whether the maximum period is applied to both Projects or only to the Petrozuata Project. Finally, even if the relevant period for both Projects were to be the entire period from June 26, 2007 to the end of the original terms of the Association Agreements, compensation would not exceed [USD 470.6 million].

C. Counterclaim

⁶⁵ SoD, §§ 325-334; Rejoinder, §§ 364-371.

⁶⁶ For the referenced table, see Rejoinder, § 614, where the Respondents calculate the maximum compensation due to the Claimants with respect to both Projects in the amount of USD 489 million (without interest).

⁶⁷ For the referenced table, see Rejoinder, § 615, where the Respondents calculate the maximum compensation due to the Claimants with respect to both Projects in the amount of USD 153.1 million (without interest).

621. The Tribunal should grant the declaratory relief requested in the counterclaim, namely, that Corpoguanipa will have the option to purchase all “rights, titles and interests” of Phillips Venezuela relating to the Hamaca Project at the “Buy-Out Price” defined in the Hamaca Association Agreement, in the event of any award of compensation to Phillips Venezuela.

D. Costs

622. Given (i) the extraordinary delay of the Claimants in bringing these claims after never mentioning them for a decade, (ii) the claims’ total lack of merit, including the fact that the Claimants themselves, despite all their bluster about royalty and tax measures, assert no claims of the first category for those measures and, with respect to the second category of claims, actually concede that the first two measures do not constitute “Discriminatory Actions,” and (iii) the Claimants’ strategy of grossly exaggerating virtually all elements of quantum, while at the same time pretending to be “conservative,” all costs of this Arbitration should be assessed against the Claimants (Footnotes omitted).⁶⁸

III. ANALYSIS

79. In this section the Tribunal will assess the Parties’ positions and submissions on liability. The positions and arguments of each Party, insofar as they are necessary to resolve the relevant liability issues in dispute, have been reproduced prior to the Tribunal’s analysis of each issue. The Tribunal has not provided a summary of each and every submission, argument or objection raised by the Parties. Instead, it has reproduced only what it views as the most important arguments determinant for its decision. However, even if not expressly reproduced, the Tribunal has of course considered and carefully examined all of the Parties’ arguments.

A. PRELIMINARY MATTERS

1. Arbitration agreement

80. The jurisdiction of the Tribunal is based on the arbitration agreements contained in the Petrozuata AA, Hamaca AA, the Petrozuata Guaranty and the Hamaca Guarantee.

81. Article 13.16 of the Petrozuata AA provides as follows:

All disputes arising in connection with the present Agreement shall be finally settled by arbitration under the Rules of Conciliation and Arbitration of the International Chamber of Commerce in accordance with the said Rules. Each side will appoint one arbitrator, and the two arbitrators so appointed will appoint the third arbitrator. If the two arbitrators fail to appoint the third arbitrator within 30 days of their appointment, upon the written request by any Party, the Chairman of the Court of Arbitration of the International Chamber of Commerce will appoint such third arbitrator. The place of arbitration shall be New York,

⁶⁸ These conclusions were confirmed by the Respondents in their PHB. See R-PHB, §§ 898-902.

New York, United States of America. The arbitrators shall apply the law of Venezuela to any such controversy or claim. The language of the arbitration shall be English. Any decision or award of the arbitral tribunal (which shall be in writing and contain an explanation as to how it arrived at its decision and award) shall be final and binding on the parties to the arbitration proceeding.

82. Section 4 of the Petrozuata Guaranty provides as follows:

Section 4. Governing Law and Arbitration.

This Guaranty shall be governed by the laws of Venezuela and by generally accepted principles of international law to the extent that such principles do not contradict such laws.

All disputes arising in connection with this Guaranty, or the breach, termination, interpretation, enforceability or validity thereof, shall be finally settled by binding arbitration in New York, New York, USA, under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by three (3) arbitrators appointed in accordance with said Rules. This agreement to arbitrate and any resulting award shall be enforceable in any court with competent jurisdiction.

In accordance with the requirement of the Venezuelan Congress in its approval of the AA, this is a Guaranty in support of commercial activities (to be performed by a mercantile enterprise created pursuant to a Strategic Association between CONOCO and PDVSA'S affiliate MARAVEN) which in no way grants to CONOCO recourse to the full faith and credit of the Republic of Venezuela. Consistent with this principle, PDVSA agrees that it shall only raise or claim or cause to be pleaded defenses available to it as a government owned commercial entity under the applicable law as opposed to those as may be available to the Republic of Venezuela (and its government) as a sovereign state.

83. Article 17 of the Hamaca AA provides as follows:

ARTICLE XVII

GOVERNING LAW; ARBITRATION; SOVEREIGN RIGHTS

17.1. Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the Republic of Venezuela.

17.2. Arbitration

(a) Any dispute arising out of, or relating in any way to this Agreement shall be settled exclusively and finally by arbitration. The arbitration shall be conducted and finally settled in accordance with the ICC Rules.

i. If there are only two (2) parties to a dispute, then each party shall appoint one arbitrator within thirty (30) days of receipt of notice of the commencement of the arbitration, and the two (2) arbitrators so appointed shall appoint the third (3rd), and presiding, arbitrator within thirty (30) days after the later of the two (2) arbitrators is appointed by the parties. If the two (2) arbitrators so appointed cannot agree within thirty (30) days of their appointment on a third (3rd) arbitrator to serve as presiding arbitrator and such time is not extended, then the

presiding arbitrator shall be appointed by the ICA as quickly as practicable.

- ii. If there are more than two (2) parties to a dispute, such parties shall attempt to agree, within fifteen (15) days after delivery of notice of the commencement of the arbitration to all of them, to divide themselves into two (2) groups for purposes of appointing arbitrators. If they so agree within such fifteen (15) day period, then each group shall within a further thirty (30) days appoint one (1) arbitrator, and the two (2) arbitrators so appointed shall appoint the third (3rd), and presiding, arbitrator within thirty (30) days after the later of the two (2) arbitrators is appointed by the two (2) groups. If the two (2) arbitrators so appointed cannot agree within such thirty (30) day period on a third (3rd) arbitrator to serve as presiding arbitrator and such time is not extended, then the presiding arbitrator shall be appointed by the ICA as quickly as practicable.
- iii. If there are more than two (2) parties to a dispute and they cannot agree within the above-mentioned fifteen (15) day period as to how they should be grouped for purposes of appointing arbitrators, then the ICA shall attempt, as quickly as practicable, to group the parties into two (2) groups based on the parties' common interests and common positions. If the ICA determines such grouping, each group so determined shall attempt to appoint one (1) arbitrator within thirty (30) days after such determination. The two (2) arbitrators so appointed shall appoint the third (3rd), and presiding arbitrator, within thirty (30) days after their appointment. If either group fails to appoint an arbitrator within such thirty (30) day period, such arbitrator shall be appointed by the ICA as quickly as practicable. If the two (2) arbitrators so appointed cannot agree within thirty (30) days after the later of the two (2) arbitrators is appointed by or for the parties, on a third (3rd) arbitrator to serve as presiding arbitrator and such time is not extended, then the presiding arbitrator shall be appointed by the ICA as quickly as practicable. In the event the ICA determines that it cannot in fairness group the parties into two (2) groups based upon common interests and positions, all three (3) arbitrators shall be appointed by the ICA as quickly as practicable.
- iv. Notwithstanding the foregoing, (x) disputes submitted to arbitration pursuant to Section 7.4, 11.9 or 15.4 shall be resolved by a single (1) arbitrator agreed by the parties to the dispute; provided that if such parties are unable to agree on an arbitrator within sixty (60) days of the submission of the claim to arbitrate (or, in the case of arbitration pursuant to Section 7.4, within the period set out in Section 7.4(d)), the arbitrator shall be appointed by the ICA, and (y) disputes submitted to an expert pursuant to Section 9.3, 12.2 or 14.2(g) shall be resolved as specified in Section 17.3. In the case of an arbitration pursuant to Section 7.4, such arbitration shall be conducted on an expedited basis and otherwise in conformity with the requirements of Section 7.4 and, to the extent not inconsistent therewith, this Section 17.2.

(b) No arbitrator shall have any financial interest, direct or indirect, in the dispute or any financial dependence, direct or indirect, upon any of the parties to the dispute. All arbitrators shall be impartial and shall abide by the International Bar Association's Rules of Ethics for International Arbitrators. In an arbitration panel composed of three (3) arbitrators, the presiding arbitrator shall not be of the same nationality as the parties to the dispute. In the event of an arbitration before a single arbitrator, the sole arbitrator may be of the same nationality as a party to the dispute. All arbitrators shall be knowledgeable of

the international petroleum business. All arbitrators appointed pursuant to this Agreement shall have the power to issue orders for interim measures.

(c) Unless otherwise agreed by all parties to the arbitration, all arbitration proceedings under this Agreement shall be conducted in New York City, United States of America. The arbitration proceedings shall be conducted in the English language with appropriate arrangements for the translation of any testimony and documents, with the costs of such arrangements to be shared equally by the parties.

(d) Each Party agrees that it will provide discovery in any arbitration proceedings involving alleged environmental damage. Each Party agrees to produce documents related to any and all of its activities in the Project Area. Such documents shall include, but shall not be limited to, contracts, books, records, internal documents, notes and memoranda, of any and all kinds or types, to the extent they relate to such activities. It shall not be objectionable that documents are requested by general category. Each Party also agrees to provide oral depositions of its employees, officers and directors, and to fully, accurately and timely answer written interrogatories submitted to it. Each Party further agrees to permit environmental audits of the Project Area and audits of such Party's contracts, books, records, internal documents, notes and memoranda, and interviews of such Party's employees, for the purpose of determining compliance with applicable law and environmental damage in the Project Area and the cause thereof. The arbitral tribunal shall have the power, upon the application of any party, to make all appropriate orders for the discovery described above. The Parties further agree to use their best efforts to cause third parties that they grant the right to conduct activities in the Project Area to produce documents and make available employees for the purpose of determining environmental compliance and damage in the Project Area and the cause thereof.

(e) The award, decision or determination of the arbitral tribunal, which shall be reduced to writing with the reasons therefor set forth therein, shall be final and binding upon the Parties. Recognition and enforcement of any award, decision or determination rendered by the arbitral tribunal may be had in any court of competent jurisdiction. To the extent permitted by law, any rights to appeal from or to cause a review of any such award by any court or tribunal are hereby waived by the Parties. In any proceedings in the courts of the United States of America in respect of this agreement to arbitrate, the arbitration proceedings or the arbitral award, decision or determination shall be governed exclusively by the United States Arbitration Act to the exclusion of the law of any state. The Parties acknowledge that this Agreement and any arbitral award, decision or determination rendered under it are international in nature and that the enforcement of this Agreement or any arbitral award, decision or determination rendered pursuant hereto shall be governed by the 1958 United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards.

17.3. Expert Determinations

(a) Disputes submitted to an expert pursuant to Sections 9.3, 12.2 and 14.2(g) shall be resolved as specified in such Sections and, to the extent not inconsistent therewith, as set out in this Section. If the Parties are unable to agree upon the identity of the expert within ten (10) days after the date of a letter from one party giving notice that it seeks an expert determination, then the Parties hereby agree that the ICE shall appoint such an expert, and shall administer such expert determination on an expedited basis through the ICC's Rules for Expertise.

(b) Any expert appointed hereunder shall be a reputable individual possessing expert qualifications and knowledge and experience in the subject matter of the dispute sufficient to resolve the dispute competently. Such expert shall also be impartial and independent of the Parties. Within three (3) Business Days of receipt of notice from any Party requesting the ICE to appoint an expert, the Parties may notify the ICE of the professional qualifications and experience they believe are required of the expert to be appointed for the resolution of the particular dispute in issue, provided, they are not inconsistent with Sections 9.3, 12.2 or 14.2(g), as applicable.

(c) All Parties agree to cooperate fully in the expeditious conduct of such expert determination and, subject to the provisions of Section 9.3(f), to provide the expert with access to all facilities, books, records, documents, and information as the expert may request in order to make such decision on a fully informed basis in an expeditious manner. The expert shall endeavor to resolve the dispute in question within thirty (30) days, and in any event no later than sixty (60) days, after his appointment, taking into account the circumstances requiring an expeditious resolution of the matter in dispute; provided that no failure to make a decision within such period shall invalidate the expert's determination. Upon the request of any Party, the expert shall hold an expedited, one-day hearing with each Party having equal time to be heard. All communications between the Parties and the expert shall be conducted in writing with copies sent simultaneously and by the same means to all Parties. If any meetings take place with the expert, such as during an inspection of facilities or the explanation of any documents or records, then all Parties shall receive reasonable advance notice and be entitled to attend.

(d) The costs and expenses of the expert shall be borne by the Parties in proportion to their interests in the Project.

17.4. Pre-Judgment Attachment

Except as otherwise specified in Article XI, each Party agrees that it shall not, and waives any right it might have to, seek to attach assets of any other Party prior to issuance of a final arbitral decision pursuant to this Article XVII.

17.5. Consolidation; Joinder

If any Party or any party to any Related Agreement or any other Person who is bound to this or another similar arbitration agreement in connection with the Project or activities conducted in the Project Area initiates multiple arbitration proceedings, the subject matters of which are related by common questions of law or fact and which could result in conflicting awards or obligations, the Parties hereby agree that all such proceedings may be consolidated into a single arbitral proceeding at the request of any Party. Without prejudice to the above, the Parties also agree that any guarantor of a Party's obligations under this Agreement or any Related Agreement may be joined or consolidated into any arbitration that results under this Agreement. The Parties agree that any party to a Related Agreement may be joined as a party in any arbitration proceeding.

If any party to a Related Agreement is joined in an arbitration hereunder, any provisions of such Related Agreement regarding the disclosure of information shall apply. Notwithstanding the provisions of Section 17.2(a), in the event that in any arbitration proceeding to which Corpoven Sub and Corpoven are both parties, the interests and positions of Corpoven Sub and Corpoven are not the same, the ICA shall appoint all arbitrators in the arbitration proceeding.

17.6. Costs

The costs of the arbitration proceedings (other than costs of arrangements for translations), including attorneys' fees and costs, shall be borne in the manner determined by the arbitral tribunal.

17.7. Waiver of immunity

The Parties agree that the activities contemplated by this Agreement and the Related Agreements are commercial in nature. To the extent that any Party has or hereafter may acquire any immunity from jurisdiction of any court, or from attachment in aid of execution or any other legal process (other than pre-judgment attachment) in any action or proceeding in any manner arising out of this Agreement or any Related Agreement with respect to itself or its assets, such Party hereby irrevocably agrees not to invoke such immunity as a defense and irrevocably waives such immunity.

17.8. Alternative Resolution of Disputes

In the event that any arbitration or award pursuant to an arbitration conducted according to the provision of this Article XVII is found invalid or unenforceable in Venezuela for any reason, the Parties agree, at the election of any Party, to submit any dispute arising out of or relating in any way to this Agreement to binding arbitration before the International Centre for Settlement of Investment Disputes ("ICSID") in accordance with its arbitration rules as in effect at the time of such dispute. The Parties agree that for purposes of ICSID arbitration, the activities contemplated by this Agreement will constitute an investment. Should ICSID be unwilling or unable to hear a dispute for any reason, the Parties shall select an alternate arbitration forum to determine the dispute. Subject to the requirements of any such forum, all other provisions of this Article XVII shall remain in effect with respect to any such arbitration.

84. Article 13 of the Hamaca Guarantee provides as follows:

13. Any disputes resulting from or related to this Guarantee or its performance will be resolved exclusively by arbitration and any arbitration ruling will be binding. The arbitration will be governed and conducted in accordance with the Mediation and Arbitration Rules of the International Arbitration Court (hereinafter referred to as the "ICA") of the International Chamber of Commerce (hereinafter referred to as the "ICC Rules"). The Guarantor will appoint one (1) arbitrator and the Foreign Parties (or if more than one Foreign Party is involved in the dispute, collectively, the Foreign Parties) will appoint one (1) arbitrator, and if the Guarantor or the Foreign Party (or the Foreign Parties collectively) fail to appoint their arbitrators within a period of thirty (30) days following receipt of the notice of the initiation of the arbitration process, the ICA will appoint an arbitrator to represent the party in question.

The two (2) arbitrators thus appointed, either by the parties or in representation of the parties, will appoint the third arbitrator, who will preside over the arbitration court, with a period of thirty (30) days following the date on which the last of the two arbitrators is appointed by or in representation of the Guarantor and the Foreign Party (or the Foreign Parties collectively). If the two (2) arbitrators thus appointed are unable to reach an agreement regarding the appointment of the third arbitrator to preside over the arbitration court within a period of thirty (30) days following the date on which the last of the two arbitrators is appointed by or in representation of the Guarantor or the Foreign Party (or the Foreign Parties collectively), and if the deadline is not extended, then the arbitrator who will preside of the arbitration court will be appointed by the ICA as soon as possible.

No arbitrator may have any direct or indirect financial interest in the dispute, nor may any arbitrator be a direct or indirect financial dependent of any of the parties to the dispute. All arbitrators will be impartial and will be subject to the Rules of Ethics for International Arbitrators issued by the International Bar Association. The arbitrator presiding over the court may not be of the same nationality as any of the parties to the dispute. All arbitrators must be knowledgeable in matters related to the international petroleum sector. The arbitration court established in the manner specified in this Guarantee will have the authority to issue orders imposing interim relief measures.

All arbitration procedures described in this Guarantee will be conducted in the city of New York, United States of America, unless all parties to the arbitration agree otherwise. The arbitration procedures will be conducted in English, with the corresponding arrangements for translation of any testimony and documents, and the cost of these arrangements will be shared equally by the parties to the arbitration.

The ruling, decision or determination of the arbitration court, which must be in writing and must be based on the corresponding facts and legal principles, will be final and binding for the Guarantor and each of the Foreign Parties. Recognition and enforcement of any ruling, decision or determination issued by the arbitration court may be obtained from any court or tribunal having jurisdiction. To the extent allowed by law, the Guarantor and each of the Foreign Parties hereby waive any right of appeal or review of any arbitration ruling by any court or tribunal. Any process before the courts of the United States of America related to the arbitration commitment, the arbitration process or the arbitration ruling, decision or determination will be exclusively subject to the Arbitration Law of the United States of America to the exclusion of any law of any State of the United States of America. The Guarantor and each of the Foreign Parties acknowledge that this Guarantee and any arbitration ruling, decision or determination issued under the terms of this Guarantee are international in nature, and that enforcement of this Guarantee or any ruling, decision or determination issued under the terms of this Guarantee, will be governed by the 1958 United Nations Convention on Recognition and Enforcement of Foreign Arbitration Rulings.

The cost of the arbitration (other than costs related to translation arrangements), including attorneys' fees and costs, will be assumed in the manner specified by the arbitration court.

Without limiting or restricting the above provisions, the Guarantor hereby agrees that, at the request of any Foreign Party, it will be joined as a party to any arbitration process initiated under the terms of the Agreement or any Related Agreement related to compliance by the Corpoven Affiliate with its obligations under the terms of the Agreement or any Related Agreement. The Guarantor and each of the Foreign Parties agree that any arbitration process initiated under the terms and conditions of this Guarantee, may be joined to any arbitration process initiated under the terms of the Agreement or any Related Agreement, if the subject matter of the processes is related due to common legal or factual issues which could result in contradictory rulings or obligations.

The Guarantor and each of the Foreign Parties agree that any ruling issued by an arbitration court in any of the arbitration processes to which the Guarantor is a party, will be final and binding upon the Guarantor and each Foreign Party. The Guarantor and each of the Foreign Parties also agree that any of the aforementioned arbitration processes (and, as mentioned below, the appointment of arbitrators) to which they are party, will be substantiated in accordance with the provisions of the Agreement and the corresponding Related Agreements. The Guarantor agrees that, for purposes of appointment of arbitrators and grouping of the parties for the corresponding appointments,

the interests and positions of the Guarantor will be understood to be identical to those of the Corpoven Affiliate (including any Affiliate considered to be a Corpoven Affiliate pursuant to the provisions of Section 8 of this Guarantee) and of Corpoven S. A., a business corporation incorporated in accordance with the laws of the Republic of Venezuela (Corpoven, S. A. and its successors and any Affiliate of the Corpoven Affiliate to which the rights and obligations of Corpoven are transferred under the terms of the Development Production Supply Agreement or the Acknowledgement Agreement, hereinafter referred to as "Corpoven"); with the understanding that, if the interests and positions of the Corpoven Affiliate and Corpoven are not identical, the ICA will appoint all of the arbitrators in the arbitration process.

If any arbitration or ruling issued under the terms of an arbitration conducted in accordance with the provisions of Section 13 is declared to be invalid and unenforceable in Venezuela for any reason, at the request of the Guarantor or any Foreign Party, the Guarantor and each of the Foreign Parties agree to submit any dispute resulting from or related in any way to this Guarantee or its enforcement, to binding arbitration conducted by the International Center for Settlement of Investment Disputes (hereinafter referred to as "ICSID"), subject to the arbitration regulations in effect at the Center at the time of the dispute. The Guarantor and the Foreign Parties agree that, for purposes of the ICSID arbitration, the activities described in the Agreement and the Related Agreements will constitute an investment. If the ICSID is unwilling or incapable of hearing the dispute for any reason, the Guarantor and the Foreign Parties who are parties to the dispute will select an alternate arbitration venue to resolve the dispute. Subject to the requirements of the venue in question, all other provisions included in this Section 13 will remain in full force and effect in any other arbitration process.

85. The Respondents' objections to the Tribunal's jurisdiction on the grounds of the alleged lack of arbitrability of the Willful Breach Claims is addressed in more detail at Section III.C.3.a below. Their objections to the admissibility of the Discriminatory Action Claims are addressed at Sections III.B.4.d and III.B.4.e below.

2. Place of Arbitration

86. The place of arbitration is New York City, New York (U.S.A.), pursuant to Article 13.16 of the Petrozuata AA, Article 4 of the Petrozuata Guaranty, Article 17.2(c) of the Hamaca AA and Article 13 of the Hamaca Guarantee.
87. The ToR provides that all proceedings shall take place in New York unless all Parties agree otherwise, or the Tribunal decides otherwise, upon request of one of the Parties or on its own motion, by showing of good cause.
88. Subsequently, on 14 June 2016, the Parties agreed that the Hearing should take place in Washington DC. The Tribunal recorded this agreement in PO 4.

3. Applicable law

89. The applicable substantive law is Venezuelan law, pursuant to Article 17.1 of the Hamaca AA, Article 13 of the Hamaca Guarantee, Article 13.15 of the Petrozuata AA and Article 4 of the Petrozuata Guaranty (which also refers to “generally accepted principles of international law to the extent that such principles do not contradict such [Venezuelan] laws”).

4. Applicable procedural rules

90. This arbitration is governed by (in the following order of precedence):

- a) The mandatory rules of the law on international arbitration applicable at the place of the arbitration;
- b) The ICC Rules of Arbitration of 2012;
- c) The ToR and the procedural rules issued by the Arbitral Tribunal, as reflected in PO 1, and any amendments thereof.

91. As set forth in the ToR, if the provisions therein do not address a specific procedural issue, the applicable procedural issue is to be determined by agreement between the Parties or, in the absence of such agreement, by the Arbitral Tribunal.

92. Further, in accordance with Section 10 of PO 1, the Tribunal may also seek guidance from, but is not bound by, the IBA Rules on the Taking of Evidence in International Arbitration 2010.

5. Language

93. The Parties have agreed that the language of the arbitration shall be English.

B. THE DISCRIMINATORY ACTION CLAIM

1. The Claimants’ position

94. The Claimants argue that, under Section 9.07 of the Petrozuata AA and Article 14.2 of the Hamaca AA, the Respondents assumed the obligation to indemnify the Claimants in accordance with the formulae stipulated therein in the event of: (i) the

occurrence of a DA,⁶⁹ and (ii) such DA being deemed compensable for causing either Significant Economic Damage (under the Petrozuata AA)⁷⁰ or Material Adverse Effect (under the Hamaca AA)⁷¹ to the Projects. The Claimants submit that the following measures by the Government constitute DAs for which compensation is due:

- i. The income tax increase enacted by the Government in October 2006 with effect from 1 January 2007, pursuant to which the income tax rate for the EHCO projects was increased from 34% to 50% (“Income Tax Increase”).⁷²
- ii. The dispossession of the Claimants’ full interests in the Projects in mid-2007 pursuant to the 2007 Nationalization Decree, whereby the Government seized control of the operations and assets of the Projects (the “Expropriation”).⁷³ According to the Claimants, the Expropriation “was not limited to a single confiscatory act, but instead comprised a campaign of coordinated measures designed to depress the value of, and then to take, the [AAs]”.⁷⁴ In this context, the Claimants refer to: (i) the abrogation of the Royalty Agreement⁷⁵ in October 2004, which resulted in an increase in applicable royalty rates from 1% to 16.66% (“Royalty Measure”); and (ii) the introduction of an additional tax in May 2006, which had the equivalent effect of further increasing the royalty rate to 33.33% (“Extraction Tax”). For the Claimants, “each of these coordinated steps [...] must be considered as a constituent part of the Expropriation, thus rendering the entirety of the Expropriation—and not just the Projects’ physical confiscation—a [DA] under both AAs”⁷⁶ (the “Overall Expropriation”, which thus encompasses the Expropriation, the Royalty

⁶⁹ Discriminatory Action is defined at Section 1.01 of the Petrozuata AA (*infra*, § 100) and at Article 14.1(b) of the Hamaca AA (*infra*, § 106).

⁷⁰ Significant Economic Damage is defined at Section 1.01 of the Petrozuata AA (*infra*, § 101).

⁷¹ Material Adverse Effect is defined at Article 14.2(a) of the Hamaca AA (*infra*, §§ 107-108).

⁷² For the purposes of clarity, the Tribunal has once again elaborated upon the measures/actions of the Government that the Claimants challenge. However, these qualified measures are as defined in the “Summary of the Main Facts” (*supra*, § 27).

⁷³ C-PHB, § 54.

⁷⁴ C-PHB, § 85.

⁷⁵ One among the various fiscal measures adopted to incentivize investment into the EHCO projects, was the reduction of the royalty rate to 1%. This was captured by way of the Royalty Reduction Agreement between PDVSA Petróleo, the Ministry, and the concerned EHCO project (C-67).

⁷⁶ C-PHB, § 97.

Measure and the Extraction Tax).⁷⁷ This is so given that the “AAs expressly require that the damaging actions be analyzed ‘globally’”.⁷⁸

95. Contrary to the Respondents’ position,⁷⁹ the Claimants also emphasize that they have (i) provided adequate and timely notice for their DA claims; as well as (ii) sufficiently pursued alternate remedies. Therefore, they cannot be considered to have either forfeited or waived their rights under the AAs to bring the DA claims.⁸⁰

2. The Respondents’ position

96. While the Respondents concede that the Expropriation constitutes a DA,⁸¹ they contest the Overall Expropriation argument raised by the Claimants. In the Respondents’ view, neither the Royalty Measure nor the Extraction Tax can be characterized as a DA.⁸² The Respondents submit that the “global” or “cumulative” view purported by the Claimants finds no basis in the text of the AAs⁸³ or their negotiation history.⁸⁴ By the same token, such “cumulative” view disregards the understanding of “expropriation” under both Venezuelan and international law.⁸⁵ Indeed, the Claimants themselves have conceded that the Royalty Measure and the Extraction Tax do not constitute DAs on a stand-alone basis.⁸⁶ It follows that no

⁷⁷ The Claimants initially argued that all the “value-reducing measures that preceded the nationalization, i.e. the Royalty [Measure], the Extraction Tax, and the Income Tax [...] must be considered a constituent part of the Expropriation, thus rendering the entirety of the Expropriation—and not just the Projects’ physical confiscation—a Discriminatory Action under both AAs” (Reply, § 170). In other words, the Claimants seemed to characterize the Income Tax Increase as part of the Overall Expropriation, i.e., as one of the qualified measures to be analyzed globally or in combination with the Expropriation. Subsequently, however, the Claimants were emphatic that there are only two DA Claims at issue: the Income Tax Increase, on the one hand, and the Expropriation, on the other (Tr. (Day 12), 2977:9-19 (Claimants’ Closing Statement)).

Accordingly, the Tribunal understands that: (i) the Income Tax Increase is not part of the Overall Expropriation, as it constitutes, according to the Claimants, a DA on a stand-alone basis; (ii) only the Royalty Measure and the Extraction Tax ought to be cumulatively assessed together with the Expropriation in order to ascertain whether the Overall Expropriation constitutes a DA under each AA; and (iii) the Expropriation and the Overall Expropriation are not to be deemed as two separate claims, but rather that the Expropriation serves as the main basis for the Claimants’ Overall Expropriation argument.

⁷⁸ C-PHB, § 18.

⁷⁹ *Infra*, § 98.

⁸⁰ C-PHB, § 56.

⁸¹ Rejoinder, § 21; Tr. (Day 1), 209:5-10 (Respondents’ Opening Statement); August 2016 ICSID Hearing Transcript, **R-186**, Day 2, 457: 20-21.

⁸² SoD, §§ 282-287; Rejoinder, §§ 21, 301-302, 307-322; R-PHB, §§ 499-511; Tr. (Day 1), 203:15-208:12 (Respondents’ Opening Statement).

⁸³ SoD, § 286, R-PHB, §§ 495, 498-499.

⁸⁴ Rejoinder, §§ 316-322; R-PHB, §§ 496, 512-520.

⁸⁵ R-PHB, §§ 501-505.

⁸⁶ R-PHB, fn. 1009, § 55.

compensation or indemnity can be deemed payable to the Claimants for either of these two measures.⁸⁷

97. The Respondents also negate the characterization of the Income Tax Increase as a DA. They submit that the Income Tax Increase applied to “all Venezuelan taxpayers deriving income from the production of hydrocarbons, including the mixed companies emerging from the 2005 migration process for the operating services agreements and the 2007 migration process for the associations”.⁸⁸ This being the correct comparator, the Income Tax Increase cannot be considered as a discriminatory measure. Hence, it does not constitute a DA.
98. Moreover, the Respondents submit that the Claimants have forfeited their right to pursue the DA Claim as a result of their failure to (i) notify the Respondents of the occurrence of a DA in accordance with the specific notice requirements under each AA;⁸⁹ and (ii) exhaust all local and administrative remedies, as stipulated by the AAs.⁹⁰

3. Relevant contractual provisions

99. Before addressing the Parties’ arguments, the Tribunal first sets out the relevant provisions in both AAs dealing with DAs.⁹¹ Because of their complexity, the Tribunal transcribes the aforementioned provisions in their entirety.

i. The Petrozuata AA

100. Section 1.01 of the Petrozuata AA defines DAs as follows:

‘Discriminatory Actions’ means any actions, decisions, or **changes in law**, adopted by national, state, or municipal, administrative, or legislative authorities, after a Development Decision has been made, **which singly or in combination**, result in **unjust discriminatory treatment** to [Petrozuata C.A.], any of its Shareholders (in their capacity as Shareholders), the associations created under Article 5 of the Organic Law or any of them, or any of their Shareholders (in their capacity as Shareholders), **which are not applicable to all enterprises in Venezuela** and **which produce Significant Economic Damage** to the Shareholders of [Petrozuata C.A.] other than [PDVSA Petróleo]; provided that:

⁸⁷ R-PHB, § 495.

⁸⁸ R-PHB, § 521.

⁸⁹ Petrozuata AA, **C-1**, Section 9.07(e); Hamaca AA, **C-3**, Article 14.3(a)-(b); R-PHB, §§ 522-549.

⁹⁰ Petrozuata AA, **C-1**, Section 9.07(d); Hamaca AA, **C-3**, Article 14.3(a); R-PHB, §§ 550-565.

⁹¹ Petrozuata AA, **C-1**, Section 9.07; Hamaca AA, **C-3**, Section 14.2.

(a) treatment shall not be considered discriminatory **if it equally applies to the enterprises (empresas) within the oil industry** in Venezuela, except that:

- (1) with respect to the application of income taxes and any valuations as a basis for income taxes (e.g. the Fiscal Export Value), **treatment shall be considered discriminatory if it is not generally applicable to most enterprises in Venezuela;**
- (2) with respect to limitations on:
 - (i) the ability to declare or repatriate dividends outside Venezuela;
 - (ii) the right to hold abroad the proceeds of the sale of Upgraded Crude Oil in non-Venezuelan currency; and
 - (iii) the unencumbered convertibility of non-Venezuelan currency into Venezuelan currency (and vice versa) at a free, universal market rate;

treatment shall be considered discriminatory if it is not generally applicable to most enterprises in Venezuela;

- (3) **even if treatment equally applies to the enterprises within the oil industry in Venezuela, treatment may nevertheless be discriminatory if after analyzing globally all actions, decisions, or, changes in law** that have been adopted in parallel or within a reasonable period of time, such actions, decisions, or changes in law resulted in economic damage to the shareholders of [Petrozuata C.A.], that was **not actually suffered by government owned companies within the oil industry**, or, if suffered by government owned companies within the oil industry, the negative impact on [Petrozuata C.A.] **is disproportionately onerous as compared to the government owned companies within the oil industry**, it being understood, however, that if special favorable treatment applicable only to the government owned companies is adopted, such treatment shall not be considered per se discriminatory.

(b) with respect to municipal taxes, if applicable to any of [Petrozuata C.A.'s] activities, treatment shall be considered discriminatory if the tariff rate applicable is higher than the highest tariff rate applicable to the industrial activity classification(s), as agreed by the Parties and attached hereto as Exhibit "Q," which have enterprises in actual operation in the corresponding municipality; and

(c) treatment adopted for the purpose of implementing technical or operational regulations relating to safety or the protection of the environment shall not be considered discriminatory:

For the purpose of this definition, treatment shall be considered unjust if it results in Significant Economic Damage (as defined below) and such Damage is subject to compensation under the terms of Section 9.07 of this Agreement.⁹²

101. In turn, Significant Economic Damage ("SED") is defined under the Petrozuata AA as:

[E]conomic damage arising as a result of Discriminatory Actions during any fiscal year, which amounts to at least US \$6.5 million (inflated from 1994 Dollars

⁹² Petrozuata AA, C-1, Section 1.01 (emphasis added).

to the then current time by the US Inflation Index) for all Class B Shareholders [*i.e.*, CPZ]. Such economic damage shall be determined by calculating any loan repayments or dividends that [CPZ] would have otherwise received and could otherwise have repatriated in a given fiscal year had no Discriminatory Actions occurred and subtracting therefrom the dividends, Advances thereon and loan repayments, that were actually received and repatriated in that fiscal year by [CPZ].⁹³

102. With due regard to the above provisions, Section 9.07 of the Petrozuata AA further stipulates that PDVSA Petróleo (and PDVSA, as Guarantor under the Guaranty) is obligated to indemnify the Claimants for the SED suffered by virtue of DAs taken by Venezuela. In particular, Section 9.07 provides that:

[I]n the event that a Class B Shareholder [*i.e.*, CPZ] suffers in any fiscal year Significant Economic Damage as a result of any Discriminatory Actions (“Injured Shareholder”), such Injured Shareholder shall be compensated by the Class A Privileged Shareholder [*i.e.*, PDVSA Petróleo] for the economic damage suffered by virtue of the Discriminatory Actions.⁹⁴

103. Sections 9.07(a) to (c) then proceed to set out the modalities and formula based on which compensation payable to the Injured Shareholder shall be calculated and paid. These are not relevant in the present analysis on liability. Hence, to the extent necessary, they will only be referred to in the Quantum section below.⁹⁵
104. Subsequently, Section 9.07(d) deals with the purported exhaustion of legal remedies. It provides as follows:

(d) [CPZ] shall, **to the fullest extent practicable, commence and exhaust all available legal and administrative actions which may provide a remedy from the application of such Discriminatory Actions.** If any such actions are available, [PDVSA Petróleo] may retain any amounts due under this Section 9.07 (which shall accrue interest at the Base Rate) until the earlier of: (i) the third anniversary date of the commencement of legal and administrative actions, provided they have been diligently pursued; (ii) the exhaustion of available legal and administrative actions; or (iii) [CPZ]'s success in obtaining a remedy from the application of the corresponding Discriminatory Actions; at which time [PDVSA Petróleo] shall pay to [CPZ] any amount owed (with interest at the Base Rate) which has not been compensated for with a remedy and shall thereafter make any additional payments required hereunder when due. If there is compensation under (i) above, [CPZ] shall diligently continue to pursue and exhaust any available remedies, or [CPZ] otherwise obtains economic relief intended to offset the Discriminatory Action, directly or indirectly, as a result of another legislative or administrative action which was not generally applicable to most enterprises in Venezuela, then: (1) [CPZ] shall refund to [PDVSA Petróleo] any discrimination compensation already paid which corresponds to the remedy or relief which has been obtained by [CPZ] (plus interest at the

⁹³ Petrozuata AA, C-1, Section 1.01.

⁹⁴ Petrozuata AA, C-1, Section 9.07.

⁹⁵ *Infra*, § 545.

Base Rate); and/or (2) the damages shall be recalculated to take into consideration the remedy or economic relief obtained, as the case may be.⁹⁶

105. Finally, Section 9.07(e) addresses the purported notice requirements as follows:

(e) The **right to compensation** of [CPZ] under this Section 9.07 **shall be limited to those damages** actually suffered by such Shareholder beginning with the fiscal year previous to the year in which **a written notice is sent** to [PDVSA Petróleo], indicating that the notifying Shareholder considers that a Discriminatory Action has taken place.⁹⁷

ii. The Hamaca AA

106. Article 14.1(b) of the Hamaca AA defines a DA as:

[A]ny change of Venezuelan national, state or municipal law, or any act or action with force of law, act of government (*actos de gobierno*), or action or decision of any Venezuelan national, state or municipal legislative or administrative authority (including any such action or decision resulting in a change in interpretation or application of Venezuelan law), which is (i) applicable to the Association, the Association Entities or a Party in its capacity as a participant in the Association or an Association Entity, (ii) unjust and (iii) not generally applicable to entities (both public and private) engaged on their own behalf (e.g., excluding service contract providers in the performance of such service activities) in the hydrocarbon industry in Venezuela; provided that:

- (1) **any change of Venezuelan national, state or municipal law, or any act or action with force of law, act of government, or action or decision of any Venezuelan national, state or municipal legislative or administrative authority (including any such action or decision resulting in a change in interpretation or application of Venezuelan law) in respect of tax rates** (including value added taxes, such as *impuestos a las ventas al mayor*, and the legal procedure established for its recovery), new taxes, financial burdens or charges for goods and services provided by governmental entities which are the equivalent of a tax (*i.e.*, financial burdens or charges on goods or services imposed by a governmental entity acting as the sole provider of such goods or services or in regulating an activity conducted under monopoly conditions), foreign exchange controls or **the expropriation of the assets of, or a Party's interest in**, the Association or Association Entities, **will be considered Discriminatory Actions if they are not generally applicable to corporations and other legal entities that are taxable in the same manner as corporations in Venezuela;**
- (2) the application of methods to determine transfer pricing for the purpose of taxes payable in respect of Extra-Heavy Oil (as recovered or industrialized) or Commercial Production produced by the Parties in their capacity as participants in the Association or goods and services provided in connection with the Project activities shall be considered Discriminatory Actions if such methods are not generally consistent with internationally recognized transfer pricing principles for taxation;
- (3) a binding determination by any competent Venezuelan authority that the Association Entities or the Parties in their capacity as participants in the

⁹⁶ Petrozuata AA, C-1, Section 9.07(d) (emphasis added).

⁹⁷ Petrozuata AA, C-1, Section 9.07(e) (emphasis added).

Association or in the Association Entities, are subject to taxation under a regime less favorable to the Parties than paragraph *unique* of Article 9 of the Venezuelan Income Tax Law (*i.e.*, a regime less favorable to the Parties than that generally applicable to corporations and other legal entities that are taxable in the same manner as corporations in Venezuela) shall be considered a Discriminatory Action;

- (4) **reductions or increases in the royalty rate applicable to the crude oil produced by the Parties in their capacity as participants in the Association, will not be considered Discriminatory Actions under this provision unless such changes result in a royalty rate for the Parties in their capacity as participants in the Association, in excess of the maximum rate specified by law for the hydrocarbon industry in general; and**
- (5) the imposition of municipal taxes (*patente de industria y comercio*) on the Parties in their capacity as participants in the Association or on the Association Entities, in spite of the provisions of the Conditions, will be considered a Discriminatory Action only if the aggregate municipal tax burden on the Affected Party's gross revenue from Project activities exceeds four percent (4%) of the Affected Party's gross revenue from Project activities in the relevant Fiscal Year, in which event the full amount of all municipal taxes will be taken into account in computing decreased Reference Net Cash Flow (calculated in accordance with Section 14.2(f)) for purposes of ascertaining whether the Affected Party has suffered a Material Adverse Effect (although the Affected Party will be compensated only for the decrease in Reference Net Cash Flow attributable to municipal taxes over four percent (4%)).

For the purposes of this Article XIV, "act of government" (*actos de gobierno*) shall mean any act of the higher bodies of the executive power directly based on the constitution of the Republic of Venezuela not related to formal law, but similarly enforceable.⁹⁸

107. Under the Hamaca AA, the Claimants' entitlement to receive compensation due to the enactment of a DA does not arise out of the causation of SED. Rather, the Hamaca AA refers to the equivalent notion of Material Adverse Effect ("MAE"). In particular, Article 14.2(a) states the following:

Corpoven Sub shall be required to compensate any Foreign Party, **in the manner described in this Article XIV, to the extent that the Party suffers a reduction of more than five percent (5%) in any Fiscal Year in its Reference Net Cash Flow as the result of one or more Discriminatory Actions (including Discriminatory Actions occurring after, but having an effect on the Reference Net Cash Flow from, such year) (any such Party, an "Affected Party")**, with such reduction being determined by comparing, with respect to any Party in any Fiscal Year, such Party's Reference Net Cash Flow for such year, including the effect of all uncompensated Discriminatory Actions, with the Party's Reference Net Cash Flow for such year excluding the effect of the uncompensated Discriminatory Actions (such reduction, a "Material Adverse Effect"), **it being understood that any Discriminatory Actions would be considered unjust if they resulted, individually or in the aggregate, in a Material Adverse Effect.**⁹⁹

⁹⁸ Hamaca AA, C-3, Article 14.1(b).

⁹⁹ Hamaca AA, C-3, Article 14.2(a) (underline in the original, emphasis added).

108. Articles 14.2(b) to (i) set out the formula for computation of damages payable to the affected party. As in the case of their equivalent in the Petrozuata AA,¹⁰⁰ Articles 14.2(b) to (i) of the Hamaca AA will only be invoked, to the extent necessary, in the Quantum analysis.¹⁰¹
109. Article 14.3 deals, chiefly, with: (i) the notification by the claiming party that a particular measure must be deemed a DA causing a MAE; and (ii) the subsequent legal proceedings to be initiated upon considering that a measure potentially constitutes a DA causing a MAE. Article 14.3, in its relevant part, provides:
- (a) In the event that a Foreign Party considers that a Discriminatory Action has occurred, it promptly shall give notice thereof (a “Notice of Discriminatory Act”) to Corpoven Sub and shall indicate whether it believe[s] that such Discriminatory Action will result in Material Adverse Effect. Promptly following receipt of such a notice, Corpoven Sub shall inform the notifying Party of whether or not Corpoven Sub agrees that the notified action is a Discriminatory Action which may lead to a Material Adverse Effect. Following Corpoven Sub’s response, the claiming Party (the “Claiming Party”) [i.e. CPH] and Corpoven Sub shall promptly meet to discuss the formal legal remedies, such as court or administrative proceedings, that may be appropriate to reverse or obtain relief from the alleged Discriminatory Action, and [CPH] shall commence independently (or if Corpoven Sub so requests, together with Corpoven Sub) and pursue such remedies. [CPH] shall diligently pursue any such proceedings commenced and any net proceeds received by [CPH] as a result of such pursuit, net of legal fees and costs, shall be applied against any amounts ultimately determined to be owing by Corpoven Sub to [CPH] or reimbursed to Corpoven Sub if Corpoven Sub has previously made payments to [CPH] in respect of such Discriminatory Action.
 - (b) Notwithstanding the pendency of formal legal proceedings, if any, in the event that any Foreign Party believes that it has suffered a Material Adverse Effect in any Fiscal Year as the result of actions in respect of which it had delivered Notices of Discriminatory Action, such Party shall be entitled to give notice to that effect (a “Notice of Triggering Event”) to Corpoven Sub; provided that each Party will be entitled to deliver only one Notice of Triggering Event during each Fiscal Year of the Association.
 - (c) Upon delivery of a Notice of Triggering Event, Corpoven Sub and the Claiming Party shall enter into good faith negotiations regarding whether each of the actions in respect of which a Notice of Discriminatory Action had been delivered was, in fact, a Discriminatory Action (to the extent such issue had not been previously agreed upon by Corpoven Sub and the Claiming Party or determined by arbitration in prior years) and whether the Claiming Party had suffered a Material Adverse Effect. If Corpoven Sub and the Claiming Party agree that a Discriminatory Action resulting in a Material Adverse Effect has occurred, and that the Claiming Party is thus an Affected Party, the Parties shall enter into good faith negotiations regarding the

¹⁰⁰ *Supra*, § 103.

¹⁰¹ *Infra*, § 553.

Amendments; provided that the Amendments shall not result in a cost to Corpoven Sub exceeding the Damages actually suffered by the Affected Party (or, if more than one Party is an Affected Party, the Affected Parties).¹⁰²

4. Analysis

110. In light of the relevant contractual provisions of both AAs cited above, and subject to the further analysis on liability that follows, it is the Tribunal's understanding that, broadly speaking, a DA exists where a given measure(s) is/are: (i) "discriminatory"; and (ii) "unjust" as a result of causing either SED or MAE.¹⁰³
111. In this context, the Tribunal first notes that the Parties agree that the Income Tax Increase, the Royalty Measure, the Extraction Tax and the Expropriation all represent either: (i) "actions, decisions, or changes in law, adopted by [Venezuelan] national, state, or municipal, administrative, or legislative authorities";¹⁰⁴ or (ii) "change[s] of Venezuelan national, state or municipal law, or [acts] or action[s] with force of law, act[s] of government (*actos de gobierno*), or action[s] or decision[s] of any Venezuelan national, state or municipal legislative or administrative authority (including any such action or decision resulting in a change in interpretation or application of Venezuelan law)".¹⁰⁵ Accordingly, all of the foregoing qualified measures fall under the purview of the relevant DA provisions of both AAs.¹⁰⁶
112. The Claimants put forward two sets of qualified measures that, in their view, constitute DAs: the Income Tax Increase and the Overall Expropriation, the latter being comprised of the Royalty Measure, the Extraction Tax and the Expropriation.
113. As to the Respondents, they dispute the Claimants' position. Overall, it is the Respondents' contention that the Royalty Measure and the Extraction Tax cannot be cumulatively assessed with the Expropriation.¹⁰⁷ That said, the Respondents acknowledge that the Expropriation in and of itself constitutes a discriminatory and unjust measure (i.e. an independent DA).¹⁰⁸

¹⁰² Hamaca AA, **C-3**, Article 14.3.

¹⁰³ For further analysis of these two criteria, see *infra*, §§ 131-133, 162.i-162.ii.

¹⁰⁴ Petrozuata AA, **C-1**, Section 1.01.

¹⁰⁵ Hamaca AA, **C-3**, Article 14.1(b).

¹⁰⁶ C-PHB, §§ 60, 74, 83, 85; R-PHB, §§ 492, 495-496; 2006 Income Tax Law, **C-145**; 2007 Nationalization Decree, **R-4**; Law on Partial Reform of Decree No. 1.510 (Extraction Tax), **R-15**; 2004 Royalty Measure, **R-12**.

¹⁰⁷ *Infra*, § 116.

¹⁰⁸ *Supra*, § 96.

114. Thus, based on the Parties' outstanding submissions and contentions, the Tribunal must answer the following questions in connection with the DA claims:

- a. Does the Overall Expropriation comply with the **first prong** for a qualified measure to be deemed a DA? Accordingly, is the Overall Expropriation (or its constitutive measures in dispute, namely, the Royalty Measure and/or the Extraction Tax) "**discriminatory**"?¹⁰⁹
- b. Does the Income Tax Increase comply with the **first prong** for a qualified measure to be deemed a DA? Accordingly, is the Income Tax Increase "**discriminatory**"?¹¹⁰
- c. Does the Income Tax Increase and/or the Overall Expropriation (or its constitutive measures in dispute) comply with the **second prong** for a qualified measure to be deemed a DA? Accordingly, are the Income Tax Increase and/or the Overall Expropriation (or its constitutive measures in dispute) "**unjust**" for causing SED or MAE?
- d. Were the Claimants required to notify the Respondents that, in their view, the Overall Expropriation (or its constitutive measures) and the Income Tax Increase constituted DAs? If so, have the Claimants complied with the notification requirement? If not, what are the consequences of such non-compliance?
- e. Were the Claimants required to exhaust local and administrative remedies? If so, have the Claimants complied with this requirement? If not, what are the consequences of such non-compliance?

115. The Tribunal now turns to the discussion of each of these issues.

a. *First prong for a qualified measure to be deemed a DA: the alleged discriminatory nature of the Overall Expropriation*

116. The Respondents concede that the Expropriation, effected by means of the 2007 Nationalization Decree, constitutes a DA under both AAs.¹¹¹ The issue in dispute between the Parties is thus whether the Overall Expropriation (i.e. the Royalty

¹⁰⁹ *Supra*, § 110.

¹¹⁰ *Supra*, § 110.

¹¹¹ *Supra*, § 96.

Measure, the Extraction Tax and the Expropriation taken together) should also be characterized as such.

117. For the Claimants the issue is clear: the Overall Expropriation constitutes a compensable DA pursuant to which the Respondents are required to indemnify the Claimants for the losses suffered.¹¹² However, the Tribunal observes that the arguments raised by the Claimants in this context vary considerably depending on whether the Overall Expropriation issue is to be assessed under the Petrozuata AA or the Hamaca AA. For the sake of consistency, the Tribunal will follow the Claimants' underlying structure with respect to this argument. Hence, it will assess the alleged discriminatory nature of the Overall Expropriation under each AA separately.¹¹³

i. Under the Petrozuata AA

118. The Claimants allege that they were subjected to “one deliberate, coordinated campaign [...] designed [...] to lead to the burial of the AAs [...]”.¹¹⁴ In support of this assertion, the Claimants refer to Chávez's 2007 Speech equating the Royalty Measure and the Extraction Tax with progressive “steps” leading-up to the Expropriation.¹¹⁵ The Claimants also refer to the academic opinion of Ms. Rondón de Sasó (former judge of the Venezuelan Supreme Court and legal adviser to PDVSA), describing the abovementioned succession of qualified measures as, *inter alia*, “intended” and “established” to “eliminate the [AAs]”.¹¹⁶

119. With this factual matrix in mind, the Claimants submit that “each of these coordinated steps (the successive fiscal measures, and the final dispossession) must be considered a constituent part of the Expropriation, thus rendering the [Overall Expropriation] — and not just the Projects' physical confiscation — a Discriminatory Action [...]”.¹¹⁷

120. In the Claimants' view, the characterization of the Overall Expropriation as a DA is recognized in “express terms” by the Petrozuata AA¹¹⁸ due to the following two

¹¹² C-PHB, § 85.

¹¹³ The Tribunal will, however, make certain necessary (cross) references to the Hamaca AA when dealing with the Petrozuata AA, and vice-versa. See *infra*, fn. 136, § 162.

¹¹⁴ C-PHB, § 95.

¹¹⁵ C-PHB, § 95; Chávez 2007 Speech, **C-197**, pp.3, 6-7.

¹¹⁶ C-PHB, § 96.

¹¹⁷ C-PHB, § 97; SoD, §§ 240-246; Reply §§ 170-178.

¹¹⁸ C-PHB, § 87.

reasons. First, the *chapeau* of Section 1.01 of the AA allows the consideration of qualified measures “in combination” for the purposes of assessing whether they can be defined as a DA.¹¹⁹ Second, and contributing to the definition of DA, the Claimants emphasize that Section 1.01(a)(3) of the AA reads as follows:

[T]reatment may nevertheless be discriminatory, if, after *analysing globally all actions, decisions and changes in law* that have been adopted in parallel or within a reasonable period of time, such actions, decisions and changes in law resulted in economic damage to the shareholders of the Company [...].¹²⁰

121. Relying on Mr. van Wageningen’s testimony, the Claimants explain that the aforesaid definition was designed to protect them from “death by a thousand cuts”.¹²¹ As stated by Mr. van Wageningen at the Hearing, the Claimants:

[W]anted to make sure that the concept was that you might have an individual Discriminatory Action, but you could also amalgamate several circumstances and events which, together or globally, would create a Discriminatory Action. That was our intent when we drafted it.¹²²

122. The Claimants thus explain that the Royalty Measure, the Extraction Tax, and the Expropriation, jointly, constitute an Overall Expropriation falling under the definition of DA because: (i) each of these measures were intended to progressively affect the value of the Projects, paving the way for the Expropriation to take place (a qualified measure that the Respondents concede constitutes a DA); and (ii) the terms “in combination” and “analysing globally” contained in Section 1.01 of the Petrozuata AA explicitly permit such a cumulative approach.

123. The Respondents, on the other hand, stress that, in line with the Claimants’ own concessions, neither the Royalty Measure nor the Extraction Tax can be categorized as DAs on a stand-alone basis.¹²³ Consequently, the aggregation of non-DAs (and presumably, the aggregation of non-DAs with a DA such as the Expropriation) cannot create a distinct DA. In the Respondents’ words, “one apple and one orange do not equal two apples”.¹²⁴

124. According to the Respondents, the Claimants have misconstrued the way qualified measures can be aggregated for the purposes of obtaining compensation for the

¹¹⁹ C-PHB, § 92(a).

¹²⁰ C-PHB, §§ 87 (emphasis added by the Claimants), 92(a).

¹²¹ van Wageningen WS I, **CWS-1**, § 22.

¹²² Tr. (Day 3), 714:10-15 (van Wageningen).

¹²³ R-PHB, fn. 1009.

¹²⁴ Rejoinder, § 320.

harm caused by a DA. In support of their argument, the Respondents rely in particular on the definition of SED set forth in Sections 9.07 and 1.01 of the Petrozuata AA.

125. As to Section 9.07 of the Petrozuata AA, the Respondents recall that only if Conoco suffers SED “as a result of any Discriminatory Action” could it be compensated “for the economic damage suffered as a result of the Discriminatory Actions”.¹²⁵ Thus “there can be no genuine dispute that compensation under the Compensation Provisions is payable only for ‘Discriminatory Actions’ [...]. [*A contrario*] no compensation of any kind is provided for governmental measures that are not ‘Discriminatory Actions’”.¹²⁶
126. With the foregoing in mind, the Respondents point next to Section 1.01 of the Petrozuata AA, which defines SED as “economic damage arising as a result of Discriminatory Actions during any fiscal year, which amounts to at least USD \$6.5 million [...] for all Class B Shareholders”.¹²⁷ In light of this provision, they argue that both AAs contain “*de minimis* exceptions to the State company’s obligation to compensate the private party for governmental actions, meaning that if the impact of ‘Discriminatory Actions’ is below the threshold, no compensation is granted”.¹²⁸ Thus, again referring to an *a contrario* argument, the Respondents explain that compensation is not payable unless the “total” economic damage arising as a result of a DA causes harm above USD 6.5 million.¹²⁹ In other words, the Petrozuata AA does allow for accumulation, but only with respect to damages resulting from qualified measures previously characterized as DAs—“it does not allow for the accumulation of economic damage resulting from non-Discriminatory Actions”, such as the Royalty Measure and the Extraction Tax.¹³⁰ Any other conclusion would uphold the absurd proposition that non-DAs can also be compensable.¹³¹
127. In support of their argument, the Respondents also rely on Mr. Wageningen’s testimony. Putting the Claimants’ allegory of “death by a thousand cuts” in context,¹³²

¹²⁵ Petrozuata AA, C-1, Section 9.07 (emphasis added by the Respondents); R-PHB, fn. 1010.

¹²⁶ R-PHB, § 495.

¹²⁷ Petrozuata AA, C-1, Section 1.01 (emphasis added by the Respondents); R-PHB, fn. 1052.

¹²⁸ R-PHB, § 517.

¹²⁹ R-PHB, § 518.

¹³⁰ R-PHB, § 518.

¹³¹ Rejoinder, § 316.

¹³² *Supra*, § 121.

the Respondents refer to Mr. van Wageningen's witness statement recounting the negotiation of Petrozuata's DA provisions:

In negotiating the DA provisions, Conoco was careful to ensure that both individual and cumulative harm from Government actions would be covered. In light of my experience with other projects in many different countries, I was concerned about the risk of "**death by a thousand cuts**", meaning a number of individual acts by the Government (at whatever level), which when taken together had a significant adverse effect on Conoco's investments in the Project. **As I wrote to Dr. Carrillo during the negotiations: "we want to make sure that Significant Economic Damage be cumulative because [Conoco] can be damaged bit by bit by events, circumstances or legal legislative actions each of which by itself would not consist of Significant Economic Damage, but cumulatively would make our continued involvement untenable."**¹³³

128. On the basis of the above testimony, the Respondents conclude that, in accordance with both the text and negotiating history of the Petrozuata AA, the cumulative approach suggested by the Claimants is only germane to facilitate surpassing the *de minimis* threshold required for establishing SED. Hence, while the aggregation of damages from qualified measures is permitted, the said measures must first and foremost satisfy the conditions to constitute a DA. The Petrozuata AA does not contemplate or permit the aggregation of damages resulting from non-DAs. Therefore, the characterization of the Overall Expropriation as a compensable DA must be rejected.
129. As discussed further below, the Tribunal agrees with the Respondents' general conclusion that the notion of DA under the Petrozuata AA does not allow for the aggregation of non-DAs in a way that would render these separate measures a compensable DA. That said, and as also observed by the Claimants, the Respondents' position chiefly focuses on the definition of SED. Therefore it does not directly engage with the Claimants' main argument which is based on the definition of Discriminatory Action and which focuses on the meaning of the terms "in combination" and "analysing globally".¹³⁴

¹³³ van Wageningen WS I, **CWS-1**, § 22 (emphasis added). The Respondents further refer to the letter quoted therein, sent by Mr. van Wageningen to Mr. Tomás Carrillo (Maraven's Manager of International Legal Affairs). The relevant full paragraph of that letter (and not only the excerpt quoted in Mr. van Wageningen's witness statement), reads as follows: "Finally, we want to make sure that Significant Economic Damage be cumulative because Conoco can be damaged bit by bit by events, circumstances or legal legislative actions each of which by itself would not consist of Significant Economic Damage, but cumulatively would make our continued involvement untenable. The benchmark for such cumulative damages should be the economic and legal conditions at the Effective Date of the HOP with all subsequent economic damage accumulated until it meets the threshold of Significant Economic Damage" (**C-27/12**; R-PHB, § 516).

¹³⁴ C-PHB, § 92.

130. On the other hand, however, the Tribunal also observes that the Claimants' main argument does not analyze these two key terms of Section 1.01 in their proper context: the Claimants pay insufficient regard to the fact that the term "in combination" finds itself in the *chapeau* of Section 1.01, while the term "analyzing globally" only appears in Section 1.01(a)(3). For the reasons given in the analysis below, the Claimants' cumulative approach is therefore unpersuasive.
131. The *chapeau* of Section 1.01 of the Petrozuata AA states that, for DAs to exist, qualified measures, "singly or in **combination**, [must] result in **unjust discriminatory treatment**".¹³⁵ In other words, qualified measures must be *both* "**unjust**" and "**discriminatory**" in order to be considered as DAs, this being the core of the definition of DA set forth in Section 1.01, particularly considering that the terms "unjust" and "discriminatory" are both given content in the remainder of the provision.¹³⁶
132. As to the term "unjust", the Petrozuata AA expressly links it to the notion of SED. The last paragraph of Section 1.01 explicitly states that, "for the purpose of [the definition of DAs], treatment shall be considered unjust if it results in [SED] and such [SED] is subject to compensation under the terms of Section 9.07 of this Agreement".¹³⁷ Indeed, throughout the entire Petrozuata AA, the term "unjust" is only defined by way of what amounts to SED, nothing else.¹³⁸
133. As to the issue of what comprises "discriminatory" treatment, it is considerably less straightforward, as it appears to be contingent on the type and scope of the qualified measure in question. If the qualified measure is general and does not fall within any of the categories below,¹³⁹ then treatment shall be considered discriminatory only if the measure is not "applicable to all enterprises in Venezuela".¹⁴⁰ In turn, if the qualified measure:

¹³⁵ Petrozuata AA, **C-1**, Section 1.01 (emphasis added); *supra*, § 100.

¹³⁶ As explained in further detail below when addressing the Hamaca AA (*infra*, §§ 162.i-162.ii), it is worth noting that if the terms "unjust" and "discriminatory" of Section 1.01 of the Petrozuata AA are read as constituting the basis of what can be deemed a DA under the Petrozuata AA, then there are no significant differences between the AAs in terms of their definition of DA.

¹³⁷ Petrozuata AA, **C-1**, Section 1.01 (emphasis added); *supra*, § 102.

¹³⁸ The Claimants themselves identify the same connection between the "unjust" criteria and SED, when they state that a measure is unjust if it results in SED (C-PHB, §§ 65-67).

¹³⁹ *Infra*, §§ 133.i-133.iv.

¹⁴⁰ Petrozuata AA, **C-1**, Section 1.01, *Chapeau*.

- i. concerns income taxes,¹⁴¹ the declaration or repatriation of dividends,¹⁴² the right to hold abroad the proceeds of the sale of Upgraded Crude Oil in non-Venezuelan currency,¹⁴³ or the unencumbered convertibility of non-Venezuelan currency into Venezuelan currency (and vice versa),¹⁴⁴ “the treatment shall be discriminatory if not generally applicable to most enterprises in Venezuela”;
- ii. is adopted with respect to municipal taxes, the “treatment shall be considered discriminatory if the tariff rate applicable is higher than the highest tariff rate applicable to the industrial activity classification(s), as agreed by the Parties [...]”;¹⁴⁵
- iii. entails treatment adopted for the purpose of implementing technical or operational regulations relating to safety or the protection of the environment, it “shall not be considered discriminatory”;¹⁴⁶
- iv. entails treatment equally applicable to enterprises within the oil industry in Venezuela, “it shall not be considered discriminatory”,¹⁴⁷ except if, “**after analyzing globally** all [qualified measures] that have been adopted **in parallel or within a reasonable period of time**, such [qualified measures] resulted in economic damage to the shareholders of [Petrozuata C.A.], that was **not actually** suffered by government owned companies within the oil industry, **or**, if suffered by government owned companies within the oil industry, the negative impact on [Petrozuata C.A.] **is disproportionately onerous as compared to the government owned companies within the oil industry**, [in which case the treatment may “nevertheless be discriminatory”]”.¹⁴⁸

134. It is with the foregoing in mind that the Tribunal can properly assess the allegedly “express terms” on which the Claimants rely as the basis for their cumulative

¹⁴¹ Petrozuata AA, C-1, Section 1.01(a)(1); *infra*, § 188

¹⁴² Petrozuata AA, C-1, Section 1.01(a)(2)(i).

¹⁴³ Petrozuata AA, C-1, Section 1.01(a)(2)(ii).

¹⁴⁴ Petrozuata AA, C-1, Section 1.01(a)(2)(iii).

¹⁴⁵ Petrozuata AA, C-1, Section 1.01(b).

¹⁴⁶ Petrozuata AA, C-1, Section 1.01(c).

¹⁴⁷ Petrozuata AA, C-1, Section 1.01(a).

¹⁴⁸ Petrozuata AA, C-1, Section 1.01(a)(3) (emphasis added).

approach to DAs.¹⁴⁹ The Tribunal first observes that the *chapeau* of Section 1.01 of the Petrozuata AA does envision that qualified measures may, “singly or in combination”, result in “unjust” discriminatory treatment. Given the explicit link between the term “unjust” and the notion of SED, the same logic should extend to the latter, namely, a series of qualified measures can be considered in the aggregate to determine whether SED has taken place, and thus whether the *de minimis* threshold of USD 6.5 million has been surpassed. In light of the Respondents’ position that SED can arise cumulatively,¹⁵⁰ it appears that this is a minimum common denominator between the Parties.¹⁵¹

135. The key issue is hence whether the *chapeau* of Section 1.01 of the Petrozuata AA also permits that a series of qualified measures may, “in combination”, result in “discriminatory” treatment. For the Tribunal, the answer is yes, although this finding does not necessarily support the Claimants’ Overall Expropriation DA claim.
136. The cumulative approach to discriminatory treatment foreshadowed in the *chapeau* of Section 1.01 is only further endorsed by the term “analyzing globally” in Section 1.01(a)(3) of the Petrozuata AA. No other part of Section 1.01 contains language enabling either the Parties (under Section 9.07(e)) or a decision-maker (under Section 13.16) to globally consider a series of qualified measures for the purposes of concluding whether they constitute DAs on the grounds of being discriminatory. The Claimants themselves admit that their argument is mostly based on the reference to “in combination” in the *chapeau* and the reference to “analyzing globally” in Section 1.01(a)(3).¹⁵²
137. It follows that, while the *chapeau* indeed suggests that all qualified measures can be considered “in combination”, Section 1.01(a)(3) circumscribes that prerogative to those measures that, *ab initio*, “equally appl[y] to the enterprises within the oil industry”, but that, in effect, do not. In other words, as discussed further below,¹⁵³ Section 1.01(a)(3) focuses on the *cumulative effect* of formally non-discriminatory qualified measures in order to assess whether, analyzed together, the accorded final treatment is discriminatory. Such a construction is in line with the overall structure of Section 1.01 of the Petrozuata AA.

¹⁴⁹ *Supra*, §§ 120, 122.

¹⁵⁰ *Supra*, § 128.

¹⁵¹ C-PHB, §§ 87-89.

¹⁵² C-PHB, § 92(a).

¹⁵³ *Infra*, § 144.

138. Generally speaking, all other categories of qualified measures are either: (i) not discriminatory;¹⁵⁴ (ii) discriminatory if not generally applicable to all/most enterprises in Venezuela;¹⁵⁵ or (iii) discriminatory if at odds with a technically defined standard.¹⁵⁶ Against either of these explicit benchmarks, it would have been unnecessary for the Parties to agree to a cumulative approach. In turn, if the purpose is to draw a distinction between those qualified measures that, on their face, “equally appl[y] to the enterprises within the oil industry” (which, in principle, “shall not be considered discriminatory”),¹⁵⁷ from those measures that do not entail equal treatment even within the Venezuelan oil industry, then taking all the relevant qualified measures in the aggregate is entirely sensible.
139. It is in light of the above that the Claimants’ reliance on Section 1.01(a)(3) of the Petrozuata AA lacks context. The Claimants argue that “[u]nder the Petrozuata AA, the definition of ‘Discriminatory Actions’ states how measures qualify as Discriminatory Actions, before addressing the second question of whether they meet the separate qualification of crossing over the value threshold of Significant Economic Damage”.¹⁵⁸ Then, referring to Section 1.01(a)(3), the Claimants contend that the “definition of [DAs] provides: [T]reatment may nevertheless be discriminatory, if, after *analyzing globally all* [qualified measures] that have been *adopted in parallel or within a reasonable period of time*, such [qualified measures] resulted in economic damage to the shareholders of the Company [...]”.¹⁵⁹
140. Nevertheless, it is not accurate to say that a qualified measure must first be deemed a DA before assessing whether it has caused a SED. As already established, a qualified measure may constitute a DA precisely because it is “unjust” and, as such, entails SED.¹⁶⁰ Further, as seen, Section 1.01(a)(3) does not define what is understood as a DA under the Petrozuata AA.¹⁶¹ It only deals with one of the two requirements thereof, namely, discriminatory treatment. It limits itself to cater for what can constitute discriminatory treatment in cases where the qualified measures at

¹⁵⁴ *Supra*, § 133.iii.

¹⁵⁵ *Supra*, §§ 133 - 133.i.

¹⁵⁶ *Supra*, § 133.ii.

¹⁵⁷ Petrozuata AA, **C-1**, Section 1.01(a).

¹⁵⁸ C-PHB, § 87 (emphasis and editions by the Claimants).

¹⁵⁹ C-PHB, § 87 (emphasis by the Claimants, brackets by the Tribunal).

¹⁶⁰ *Supra*, § 131-132. As developed below (*infra*, § 162.ii), the same structure is followed by the Hamaca AA in the context of MAE.

¹⁶¹ *Supra*, § 133, 133.iv.

stake are applicable to the Venezuelan oil industry. Moreover, Section 1.01(a)(3) is rather specific as to the categories of qualified measures to which it applies to. In other words, while it allows for taking qualified measures in the aggregate for discrimination purposes, Section 1.01(a)(3) clearly specifies the way in which a global analysis is to take place.

141. As the Claimants point out, Section 1.01(a)(3) treatment may nevertheless be discriminatory if, after “analyzing globally”, a series of qualified measures “adopted in parallel or within a reasonable period of time” result in “economic damage to the shareholders of the Company”.¹⁶² The Claimants’ analysis stops here; however, Section 1.01(a)(3) does not.
142. Section 1.01(a)(3) goes on to distinguish two categories of “economic damage” (which is a concept different to that of SED) against which the qualified measures in question can be “analyz[ed] globally”. The first category consists of “economic damage” that “was **not actually** suffered by government owned companies within the oil industry”.¹⁶³ The second category contemplates “economic damage” which might have also been “suffered by government owned companies within the oil industry, [but where] the negative impact on [Petrozuata C.A. was] **disproportionately onerous** as compared to the government owned companies within the oil industry”.¹⁶⁴ Thus, if either of these “economic damage[s]” is ascertained as a result of a cumulative/global analysis of the relevant qualified measures in question (i.e., those “adopted in parallel or within a reasonable period of time”), they could be deemed discriminatory despite being, facially, “equally applicable to enterprises within the oil industry in Venezuela”.
143. As explained below,¹⁶⁵ it is therefore clear that the Claimants’ Overall Expropriation DA claim is at odds with the standards set out in Section 1.01(a)(3) of the Petrozuata AA.
144. The text of Section 1.01(a)(3) only allows to controvert non-discriminatory qualified measures (i.e. that at the outset accord treatment equally applicable to enterprises within the oil industry in Venezuela) by way of their cumulative effect. Put differently, it is the effect of a series of qualified measures that renders them discriminatory. It is for

¹⁶² *Supra*, §§ 120, 139.

¹⁶³ Petrozuata AA, C-1, Section 1.01(a)(3) (emphasis added).

¹⁶⁴ Petrozuata AA, C-1, Section 1.01(a)(3) (emphasis added).

¹⁶⁵ *Infra*, §§ 144-151.

this reason that Section 1.01(a)(3) provides two categories of “economic damages”. In essence, the only relevant criteria to second-guess the non-discriminatory nature of a series of qualified measures is if their global analysis leads to the conclusion that the resulting “economic damage” (as defined in Section 1.01(a)(3)) is discriminatory. In fact, such an effects-based lodestar is not only incidental to Section 1.01(a)(3), but also to the entire Section 1.01 in the sense that regardless of the public qualified measures in question (income tax increase, repatriation of dividends, municipal taxes, etc.), it is the treatment (i.e. the effect) of that measure that makes it discriminatory.¹⁶⁶

145. As far as the possibility of aggregating qualified measures is concerned, the intent behind the issuance of the said measures therefore seems irrelevant. To some extent, such understanding is consistent with Mr. van Wageningen’s testimony. As highlighted by the Respondents,¹⁶⁷ Mr. van Wageningen’s concern over the risk of “death by a thousand cuts” was mainly (if not exclusively) associated with the notion of SED. In particular, one of Mr. van Wageningen’s concerns while negotiating the Petrozuata AA was to “make sure that **Significant Economic Damage** be **cumulative** because [Conoco] can be damaged bit by bit by events, circumstances or legal legislative actions each of which by itself would not consist of **Significant Economic Damage**, but **cumulatively** would make our continued involvement untenable”.¹⁶⁸ While the foregoing only concerns the “unjust” requirement of DAs (i.e. the causation of SED), it caters to the finding that the cumulative analysis of qualified measures was not meant to be subjective.
146. Overall, the Claimants have failed to establish any textual basis or otherwise convincing argument with respect to the the Petrozuata AA, whereby the intention behind the adoption of a series of qualified measures should be considered to categorize them as DAs (be it for being discriminatory or unjust). Consequently, the Tribunal considers that the Claimants’ reliance on President Chávez’s 2007 Speech

¹⁶⁶ *Supra*, § 133.

¹⁶⁷ *Supra*, § 127.

¹⁶⁸ van Wageningen WS I, **CWS-1**, § 22; **C-27/12** (emphasis added). Tribunal gives preference to Mr. van Wageningen’s witness statement over his oral testimony at the Hearing: (i) on this point, Mr. van Wageningen’s witness statement is considerably more exhaustive than his oral testimony; (ii) when asked at the Hearing whether he wanted make any corrections to his witness statements, Mr. van Wageningen answered in the negative (Tr. (Day 3), 706:16-22); and (iii) in any event, the link between the risk of “death by a thousand cuts” and that of SED made in his witness statement is not flat out contrary to Mr. van Wageningen’s understanding at the Hearing (Tr. (Day 3), 714: 10-15).

and Ms. Rondón de Sasó opinion is, in the context of the Petrozuata AA and its DA provisions, entirely inapposite.¹⁶⁹

147. It follows that, considering the exclusive effects-based criteria in Section 1.01(a)(3), neither the Royalty Measure nor the Extraction Tax can be deemed discriminatory. “Analyz[ed] globally”, both of these qualified measures were equally applicable to the enterprises within the Venezuelan oil industry. Moreover:

- i. The Claimants have not argued, let alone demonstrated that the “economic damage” resulting from their cumulative application was “not actually suffered” by government owned companies within the oil industry. In fact, it appears undisputed that both the Claimants and all other private hydrocarbon operators, on the one hand, and PDVSA and its affiliates, on the other, were formally and materially subject to: (i) a 16.66% extraction tax from 2004 to 2006 (as a result of the Royalty Measure); and (ii) a 33.33% extraction tax from 2006 onwards (as a result of the Extraction Tax).¹⁷⁰
- ii. Likewise, the Claimants have failed to demonstrate that the “economic damage” resulting from their cumulative application was “disproportionately onerous” as compared to the one suffered by PDVSA, its affiliates, or any other government owned oil company.

148. The pivotal issue is then whether, in light of the Expropriation, the Royalty Measure and the Extraction Tax can nonetheless be deemed discriminatory. In the Tribunal’s view, this question must be answered in the negative.

149. Section 1.01(a)(3) certainly permits assessing whether a series of *ab initio* non-discriminatory qualified measures generate discriminatory treatment as defined therein. However, such assessment must not be mistaken with an endorsement to aggregate non-discriminatory qualified measures with those that are discriminatory and, in fact, unquestionably so. There is nothing in the language of Section 1.01(a)(3), or in the entire Section 1.01 for that matter, that would permit the accumulation of non-discriminatory and discriminatory qualified measures: (i) to render non-discriminatory qualified measures discriminatory; or (ii) conversely, to

¹⁶⁹ *Supra*, § 118.

¹⁷⁰ R-PHB, § 261-267; 8 October 2004 Letter from Minister Ramírez to President Rodríguez of PDVSA, **R-12/C-106**, pp. 2-3, 12; 14 January 2005 Letter from Mr. Berry to Minister Ramírez, **R-14**, p.1; ICSID Hearing Transcript, **C-381**, pp 643:4-646:20; SoD, §§ 155-167; SoC, §§ 105-122; Legislative History of the Extraction Tax, National Assembly Session of 16 May 2006, **R-115**, pp 21-22.

extend the treatment of measures qualified as discriminatory to non-discriminatory measures.

150. Turning to the facts of the present case, it is evident that the effect of the Expropriation was distinct from the treatment accorded by the Royalty Measure and/or the Extraction Tax. It cannot be seriously argued that, because of the 2007 Expropriation, the “economic damage” caused by the Royalty Measure and/or the Extraction was not “actually suffered” by government owned companies.¹⁷¹ It would be equally contrived to argue that, because of the Expropriation, the “economic damage” caused to the Claimants by the Royalty Measure and/or the Extraction Tax was, suddenly, “disproportionately onerous” as compared to the damage suffered by government owned companies.¹⁷²
151. The crux of the Claimants’ Overall Expropriation DA Claim is that the alleged coordinated intent behind the Royalty Measure, the Extraction Tax and the Expropriation is material for their cumulative analysis.¹⁷³ However, as seen, Section 1.01(a)(3) only allows for a cumulative assessment of qualified measures in light of an effects-based criterion.¹⁷⁴ On that footing, the Claimants’ proposition is untenable: if non-discriminatory measures could be cumulatively assessed without paying due regard to their individual effect (as the Claimants seemingly suggest), then it would only take one measure clearly according discriminatory treatment to carry forward all damages caused by an undetermined number of preceding non-discriminatory measures. Such a counterintuitive interpretation would entirely circumvent the whole purpose of Section 1.01 of the Petrozuata AA. As the Respondents submit,¹⁷⁵ such a view leads to the absurd result that non-DAs could be deemed compensable: a position that the Tribunal cannot uphold.
152. For the reasons set out above, the Tribunal determines that the Royalty Measure and the Extraction Tax are not, individually, discriminatory under the Petrozuata AA, something that is not disputed by the Claimants.¹⁷⁶ The same conclusion stands even if these two measures are being “analyz[ed] globally” along with the Expropriation.

¹⁷¹ *Supra*, § 147.i.

¹⁷² *Supra*, § 147.ii.

¹⁷³ C-PHB, §§ 85-87.

¹⁷⁴ *Supra*, §§ 144-147.

¹⁷⁵ Rejoinder, § 316; *supra*, § 126.

¹⁷⁶ Tr. (Day 12), 2977:9-18 (Claimants’ Closing Statement).

Consequently, the Overall Expropriation cannot be qualified as a discriminatory measure under the Petrozuata AA.

ii. Under the Hamaca AA

153. Building on the same factual premises laid out in the context of the Petrozuata AA,¹⁷⁷ the Claimants argue that the Overall Expropriation is a DA under the Hamaca AA. The textual base for the Claimants' claim is Article 14.1(b)(1) of the Hamaca AA. Rather than referring to criteria catering to a cumulative analysis of qualified measures (like under Section 1.01(a)(3) of the Petrozuata AA), Article 14.1(b)(1) of the Hamaca AA incorporates the concept of "expropriation" in its definition of DAs.¹⁷⁸
154. In this regard, the Claimants refer to Mr. Manning's testimony, explaining that "Phillips wanted contractual indemnification from harmful effects of Government measures considered separately or all together".¹⁷⁹ The Claimants also stress that the AAs are governed by Venezuelan law, "which recognizes that expropriation can constitute a series of regulatory acts that together have the cumulative effect of depriving an investor of the use and enjoyment of her investment, even in the absence of a physical taking".¹⁸⁰ According to the Claimants, this "tracks international law jurisprudence, which confirms the concepts of 'creeping' and 'indirect' 'expropriation,' prohibiting constituent elements with the cumulative effect of expropriation, even if a single individual element may not alone rise to the level of being expropriatory".¹⁸¹
155. With reference to President Chávez's 2007 Speech and Ms. Rondón de Sasó's opinion,¹⁸² the Claimants submit that the Royalty Measure, the Extraction Tax and the Expropriation were all part of a "deliberate [and] coordinated [expropriation]

¹⁷⁷ *Supra*, § 118.

¹⁷⁸ Hamaca AA, **C-3**, Section 14.1(b)(1) ("[A]ny change of Venezuelan national, state or municipal law, or any act or action with force of law, act of government, or action or decision of any Venezuelan national, state or municipal legislative [...] in respect of [...] the **expropriation of the assets of, or a Party's interest in, the Association** [...] will be considered Discriminatory Actions [...]") (emphasis added).

¹⁷⁹ C-PHB, § 90; Manning WS I, **CWS-2**, § 19.

¹⁸⁰ C-PHB, § 91.

¹⁸¹ C-PHB, § 91. The Tribunal notes that, unlike the Petrozuata AA, the Hamaca AA does not incorporate specific language allowing for a cumulative analysis in order to assess the possible discriminatory nature of qualified measures (see *infra*, § 162.v). Conversely, unlike the Hamaca AA, the Petrozuata AA does not explicitly define an expropriation as a discriminatory qualified measure. In this context, the Tribunal understands that: (i) the Claimants' recourse to the term "expropriation" in Article 14.1(b)(1) of the Hamaca AA responds to the assumption that it permits undertaking a similar global analysis as Section 1.01 of the Petrozuata AA; and (ii) the international and domestic law arguments regarding the notion of expropriation are mostly germane to the characterization of a series of qualified measures as discriminatory under the Hamaca AA, not under the Petrozuata AA.

¹⁸² Chávez 2007 Speech, **C-197**, pp.3, 6-7; *supra*, § 118.

campaign”.¹⁸³ As such, the first two measures “must be considered a constituent part of the Expropriation”,¹⁸⁴ and, pursuant to Article 14.1(b)(1), the Overall Expropriation must be deemed a DA under the Hamaca AA.

156. The Respondents argue in response that the text of the Hamaca AA does not support the Claimants’ “bizarre interpretation” that Article 14.1(b)(1) allows to characterize the Overall Expropriation as a DA. First, while Article 14.1(b)(1) lists an “expropriation of [...] assets [...] or [...] interests” as a potential DA, royalties and taxes are treated separately.¹⁸⁵ Second, construing the term “expropriation” in Article 14.1(b)(1) so as to include the concepts of indirect and creeping expropriation is incorrect as a matter of Venezuelan and international law.¹⁸⁶
157. With respect to Venezuelan law, the Respondents first draw a distinction between “expropriation”, on the one hand, and “contributions, restrictions and obligations”, on the other.¹⁸⁷ Against this framework, they highlight that, under Article 2 of the 2002 Expropriation Law,¹⁸⁸ and pursuant to the approach taken by the Venezuelan Supreme Court,¹⁸⁹ for an act to be considered expropriatory, it must involve: (i) the compulsory transfer of ownership or of any other right to the State’s patrimony; (ii) a final judgment to that effect; and (iii) timely payment of just compensation.¹⁹⁰
158. The Respondents then argue that measures that do not imply such compulsory transfer of title, but only specify the scope and duration of such title, are “‘limitations’, ‘contributions’, ‘obligations’ and ‘restrictions’, not expropriations”.¹⁹¹ On this basis, alluding to the Royalty Measure and the Extraction Tax, they submit that “not every diminution of property rights, abstractly considered, constitutes an expropriation”.¹⁹²

¹⁸³ C-PHB, § 95.

¹⁸⁴ C-PHB, § 97.

¹⁸⁵ R-PHB, § 498; Hamaca AA, **C-3**; Articles 14.1(b)(1), Section 14.1(b)(4).

¹⁸⁶ R-PHB, § 500

¹⁸⁷ R-PHB, § 501.

¹⁸⁸ Law of Expropriation for Reasons of Public Utility or Social Interest, García Montoya ER II, **RER-5 App. GM-180**, Article 2.

¹⁸⁹ *Supreme Court of Justice (Political-Administrative Chamber), Judgment dated February 24, 1965*, in Allan Randolph Brewer-Carías, LA EXPROPIACIÓN POR CAUSA DE UTILIDAD PÚBLICA O INTERÉS SOCIAL (1966), García Montoya ER II, **RER-5 App. GM-182**, p. 29.

¹⁹⁰ R-PHB, § 501; García Montoya ER II, **RER-5**, §§ 129-130.

¹⁹¹ R-PHB § 501.

¹⁹² R-PHB, § 502; Sebastian Martín-Retortillo, *Presentation*, in Allan R. Brewer-Carías, LA EXPROPIACIÓN POR CAUSA DE UTILIDAD PÚBLICA O INTERÉS SOCIAL (1966), García Montoya ER II, **RER-5 App. GM-187**, pp. 16-17.

159. The Respondents concede that measures may be considered “equivalent” in effect to expropriation. However, referring to the Claimants’ own submissions, the Respondents emphasize that such equivalence can only be found if the measures at hand “have the cumulative effect of depriving an investor of the use and enjoyment of its investment, even in the absence of a physical taking”.¹⁹³ By contrast, in the present case “there is no issue of ‘creeping’ or ‘indirect’ expropriation, as the Projects were formally and directly expropriated; nor is there any argument that the fiscal measures, either individually or in the aggregate, deprived the investor of the use and enjoyment of its investment”.¹⁹⁴
160. With reference to Venezuelan Supreme Court decisions,¹⁹⁵ the Respondents thus submit that fiscal measures (such as the Royalty Measure and the Extraction Tax) can only be deemed expropriatory if they constitute a “complete or unreasonable impairment” that “extinguishes” the taxpayer’s patrimony.¹⁹⁶ Accordingly, given that despite each of the aforesaid qualified measures, the Projects were nonetheless much more profitable than had been anticipated at their inception,¹⁹⁷ the Claimants’ creeping or indirect expropriation argument (i.e. the Overall Expropriation) is “laughable”.¹⁹⁸
161. Turning to international law, the Respondents rely on the award rendered in the *Mobil* case which, “considering the same fiscal measures that are at issue here”,¹⁹⁹ stated as follows:

[U]nder international law, a measure which does not have all the features of a formal expropriation may be equivalent to an expropriation if it gives rise to an effective deprivation of the investment as a whole. Such a deprivation requires either a total loss of the investment’s value or a total loss of control by the investor of its investment, both of a permanent nature.

It is undisputed that those conditions are not fulfilled in the present case with respect to either [of the Projects]. Accordingly, the pre-migration measures

¹⁹³ R-PHB, § 503, citing Reply, § 174.

¹⁹⁴ R-PHB, § 503.

¹⁹⁵ *Partial Nullity Action against the Ordenanza sobre Patente de Industria y Comercio del Municipio San Joaquín del Estado Carabobo*, Supreme Tribunal of Justice (Constitutional Chamber), Case No. 00-0833, Judgment dated March 6, 2001, García Montoya ER II, **RER-5 App. GM-189**, p.12

¹⁹⁶ R-PHB, § 504.

¹⁹⁷ R-PHB, §§ 506-509.

¹⁹⁸ R-PHB, § 510.

¹⁹⁹ R-PHB, § 505.

enumerated by the Claimants cannot be characterized as equivalent to an expropriation of the Claimants' investments.²⁰⁰

162. Before venturing into the analysis of the Parties' positions, the Tribunal deems it important to first make the following preliminary observations:

- i. Similar to the Petrozuata AA,²⁰¹ the Hamaca AA defines DA as a qualified measure which is both: "(ii) unjust and (iii) [as a default comparator] not generally applicable to entities (both public and private) [...] in the hydrocarbon industry in Venezuela [(i.e. discriminatory)]".²⁰²
- ii. Like in the Petrozuata AA,²⁰³ the term "unjust" in Article 14.1(b) of the Hamaca AA is given content by reference to the definition of MAE (which is equivalent to SED). Article 14.2(a) thus states that a qualified measure (or a series thereof) shall be considered "unjust" if it results, "individually or in the aggregate", in MAE.²⁰⁴ No other provision in the Hamaca AA further develops the "unjust" requirement of Article 14.1(b). Hence, the notion of MAE is not a distinct component added to the general notion of DA as defined in the Hamaca AA. Rather, in order to potentially constitute a DA, the qualified measure in question must be deemed "unjust" as a result of causing MAE.
- iii. Also in line with the Petrozuata AA,²⁰⁵ the comparator for a qualified measure to be deemed discriminatory varies depending on the type of qualified measure in question. Article 14.1(b) establishes as its default comparator for discrimination purposes measures that are "not generally applicable to entities (both public and private) [...] in the hydrocarbon industry".²⁰⁶ Subject to the specific nature of a given measure, other relevant comparators include measures that are (i) not "generally applicable to corporations and other legal entities that are taxable in the same manner as corporations in Venezuela";²⁰⁷ (ii) "not generally consistent with internationally recognized transfer pricing

²⁰⁰ *Mobil v. Venezuela*, ICSID Case No. ARB/07/27, Award dated 9 October 2014, **RLA-2**, §§ 286-287.

²⁰¹ *Supra*, § 131.

²⁰² Hamaca AA, **C-3**, Article 14.1(b).

²⁰³ *Supra*, § 132.

²⁰⁴ Hamaca AA, **C-3**, Article 14.2(a).

²⁰⁵ *Supra*, § 133.

²⁰⁶ *Supra*, § 162.i.

²⁰⁷ Hamaca AA, **C-3**, Article 14.1(b)(1), Article 14.1(b)(3); *infra*, § 189.

principles for taxation”;²⁰⁸ and (iii) “in excess of the maximum rate specified by law for the hydrocarbon industry in general”.²⁰⁹

- iv. The adequate comparator to assess whether an “expropriation” is discriminatory is whether it is not “generally applicable to corporations and other legal entities that are taxable in the same manner as corporations in Venezuela”.²¹⁰ Article 14.1(b)(1) of the Hamaca AA appears to establish this comparator not only in order to determine if an “expropriation” is discriminatory, but, more broadly, to determine if a qualified measure is a DA.²¹¹ Nonetheless, because Article 14.1(b)(1) conditions the characterization of an “expropriation” as a DA to a particular discriminatory comparator without excusing an “expropriation” from nonetheless being “unjust” (as defined in Article 14.2(a)),²¹² the Tribunal finds that, essentially, Article 14.1(b)(1) only deals with a potential DA’s discriminatory element.
- v. Unlike the Petrozuata AA, the Hamaca AA does not have any explicit language catering for a cumulative or global analysis at the moment of assessing the discriminatory nature of a series of qualified measures. Indeed, it is only Article 14.2(a), dealing with the concept of MAE, which states that for the effects of discriminatory qualified measures to be unjust, they must (“individually or in the aggregate”) cause a MAE.²¹³ For the Tribunal, the foregoing accommodates the argument that, in the negotiation of the AAs, the Claimants also wanted to avoid “death by a thousand cuts”.²¹⁴ As seen with respect to the notion of SED in the Petrozuata AA (and having no reason to believe that the issue should be any different with respect to the notion of MAE in the Hamaca AA),²¹⁵ the Claimants’ concern of “death by a thousand cuts” pertained to the economic consequences of qualified measures—not to their discriminatory nature. In this context, the Tribunal agrees with the

²⁰⁸ Hamaca AA, **C-3**, Article 14.1(b)(2).

²⁰⁹ Hamaca AA, **C-3**, Article 14.1(b)(4).

²¹⁰ Hamaca AA, **C-3**, Article 14.1(b)(1).

²¹¹ Hamaca AA, **C-3**, Article 14.1(b)(1) (“any change of Venezuelan national, state or municipal law, or any act or action with force of law, act of government, or action or decision of any Venezuelan national, state or municipal legislative [...] in respect of [...] the expropriation of the assets of, or a Party’s interest in, the Association or Association Entities, will be considered **Discriminatory Actions** if they are not generally applicable to corporations and other legal entities that are taxable in the same manner as corporations in Venezuela”).

²¹² *Supra*, § 162.ii.

²¹³ Hamaca AA, **C-3**, Article 14.2(a).

²¹⁴ R-PHB, § 100.

²¹⁵ *Supra*, § 145.

Respondents' position that, in the event certain qualified measures are deemed non-discriminatory, they cannot be aggregated in order to prompt the Respondents to accord compensation for the resulting MAE.²¹⁶

- vi. Again similarly to the Petrozuata AA, nothing in the Hamaca AA suggests that the intent behind a series of qualified measures is relevant for the purposes of determining whether said measures are either discriminatory or unjust. Thus, the Tribunal reiterates its view that the Claimants' reliance on the Chávez's 2007 Speech and Ms. Rondón de Sasó opinion is, under the Hamaca AA and its provision on DAs, inapposite.²¹⁷

163. With the foregoing in mind, the Tribunal notes that the term "expropriation" in Article 14.1(b)(1) is not defined elsewhere in the Hamaca AA. Neither Party has submitted any evidence as to whether and, if so, why "expropriation" ought to be understood with due regard to the development of this concept under international (investment) law. In turn, Article 17.1 explicitly states that the Hamaca AA "shall be governed and construed in accordance with the law of the Republic of Venezuela".²¹⁸ In view of this, the Tribunal will leave open the relevance of the Parties' arguments on international investment law in the present context. Accordingly, insofar as the concept of "expropriation" is concerned, the Tribunal will primarily consider Venezuelan law. In any event, as developed further below,²¹⁹ the application of international law in the present context would not lead to a different result.

164. Precisely because the term "expropriation" is not defined in the Hamaca AA,²²⁰ there is no contractual basis for construing it (without further reasons) as a taking which comprises multiple consecutive measures. The Tribunal has considered the Claimants' argument that nothing in the negotiating history of the Hamaca AA precludes that possibility either.²²¹ However, such an argument is self-serving. If the negotiating history is to be considered, the point is not whether it excluded the Claimants' purported understanding, but rather whether it can be said to include it. It is the Claimants that have the burden of proof in substantiating their assertion and they have failed to do so.

²¹⁶ Tr. (Day 12), 3044:7-22 (Respondents' Closing Statement).

²¹⁷ *Supra*, §§ 118, 145.

²¹⁸ Hamaca AA, **C-3**, Article 17.1.

²¹⁹ *Infra*, §§ 172-175.

²²⁰ *Supra*, § 163.

²²¹ Reply, fn. 453.

165. More specifically, the Claimants have not supported their contention that under Venezuelan law: (i) the Claimants are entitled to compensation for “value-depressing measures” such as the Royalty Measure and the Extraction Tax;²²² or that (ii) an “expropriation can constitute a series of regulatory acts that together have the cumulative effect of depriving an investor of the use and enjoyment of her investment, even in the absence of a physical taking”.²²³
166. The Tribunal also finds it telling that the Claimants have not referred to any Venezuelan statutory provisions or judicial decisions in support of their position. Instead, the authorities relied upon by the Claimants are all doctrinal writings, which in any event merely suggest that:
- i. Under Venezuelan law, temporary or permanent occupation of residential or corporative property may amount to expropriation of that property if the proprietors are precluded from the “use, enjoy[ment] or convey[ance]” of their property.²²⁴ Yet, such a view, closely related to the notion of indirect expropriation, is irrelevant to the case at hand. As is indeed evident, the Expropriation in the present case constitutes a classic example of direct expropriation. Moreover, it cannot be seriously suggested that the Royalty Measure and the Extraction Tax (individually or in the aggregate) could be equated with either a temporal or permanent: (i) occupation of the Projects; and/or (ii) deprivation of the Claimants’ shareholder rights in the Projects.
 - ii. Depending on the circumstances, regulatory acts adopted by Venezuela could potentially be tantamount to expropriation in the context of international investment law, such as under Bilateral Investment Treaties concluded by Venezuela.²²⁵ While this is generally uncontroversial, it is not clear how it is relevant to the present case.
167. Overall, the Tribunal finds that the Claimants have not rebutted the Respondents’ arguments that: (i) the Projects were formally and directly expropriated by way of the Expropriation, rather than through a series of qualified measures whose cumulative effects were equivalent to a physical taking (i.e. indirect or creeping expropriation);

²²² C-PHB, fn. 124.

²²³ R-PHB, fn. 131.

²²⁴ Antonio Canova González, Luis Alfonso Herrera Orellana and Karina Anzola Spadaro, *EXPROPRIATIONS OR DE FACTO TAKEOVER MECHANISMS?* (2009), **CLA-52**, pp. 161-165

²²⁵ José Gregorio Torrealba, *PROMOTION AND PROTECTION OF FOREIGN INVESTMENTS IN VENEZUELA* (2008), **CLA-51**, pp. 83-87, 92, 102.

and (ii) neither the Royalty Measure nor the Extraction Tax, individually or in the aggregate, precluded the Claimants from operating the Projects pursuant to the AAs.²²⁶

168. In other words, the Claimants have failed to justify the proposition that, under Venezuelan law: (i) an uncontested direct “expropriation” (such as the Expropriation) should somehow account for preceding non-expropriatory qualified measures; (ii) the Expropriation *ex post facto* transforms the Royalty Measure and the Extraction Tax into constitutive elements of a progressive “expropriation” culminating with the Expropriation (i.e. the Claimants’ Overall Expropriation DA claim); or (iii) conversely, that the Expropriation, despite being an outright “expropriation”, should be deemed nothing more than one constitutive element of the Overall Expropriation.
169. Indeed, it appears that the Royalty Measure and the Extraction Tax are nothing more than “limitations”, “contributions”, “obligations”, and/or “restrictions” in relation to property.²²⁷ As explained by the Respondents’ legal expert, Prof. García Montoya, these concepts are well established in Venezuelan law and suggest that the very notion of property rights presupposes the imposition of certain burdens on the title holder.²²⁸ In fact, in a publication pre-dating the current Venezuelan Constitution, Prof. Brewer-Carías, one of the Claimants’ legal experts, had also adopted the view that property rights are not unfettered under Venezuelan law.²²⁹ According to Prof. García Montoya, this is particularly the case when the impact on the property right stems from the State’s prerogative to adopt fiscal measures, as long as the exercise of such power does not result in the confiscation of the right in question.²³⁰ In this context, the Tribunal notes in passing that the safeguard against confiscatory taxation is to be found in Article 317 of the Venezuelan Constitution,²³¹ not in Article 115, which grants the right to property and conditions expropriation to “reasons of public

²²⁶ *Supra*, § 159; *infra*, §§ 169-170.

²²⁷ *Supra*, §§ 157-158.

²²⁸ García Montoya ER II, **RER-5**, §§ 130-132.

²²⁹ Allan R. Brewer-Carías, *Current Status of Property Rights and Economic Freedom in Venezuela*, in ESTUDIOS SOBRE LA CONSTITUCIÓN Vol.II (1979), García Montoya ER II, **RER-5 App. GM-186**, p. 1159 (“Limitations on the exercise of property rights, of course, not only presuppose that the right exists, but also do not affect title ownership of the right. Moreover, these limitations constitute the normal context of ownership, that is to say, **they constitute the normal regime applicable to property rights**. Through them the property title owner knows the extent of his rights and claims regarding the use, enjoyment and disposition of the same”) (emphasis added).

²³⁰ García Montoya ER II, **RER-5**, §§ 133-135.

²³¹ 1999 Constitution, **R-208**, Article 317 (“No tax shall have a confiscatory effect”).

utility or social interest, by final judgment and timely payment of just compensation”.²³²

170. The Claimants do not openly contest the Respondents’ characterization of the Royalty Measure and the Extraction Tax as *ab initio* limitations on property rights. Indeed, given the concession made by Mr. Heinrich that, before the Expropriation, the Claimants’ profits had exceeded their initial expectations despite the adoption of the Royalty Measure and the Extraction Tax, an argument to the contrary would be unfathomable.²³³ Instead, the Claimants briefly argue that the Respondents’ distinction between “expropriation”, on the one hand, and “contributions, restrictions and obligations”, on the other, “miss[es] the point”.²³⁴ According to the Claimants, this is so because they “do not and have never argued that the individual fiscal measures were expropriatory by themselves [but] that the measures together formed part of one campaign of expropriation. And [...] Venezuelan law [...] recognize[s] that the concept of expropriation may take such connected measures into account”.²³⁵
171. However, as already explained above, the Claimants have not demonstrated that Venezuelan law lends support to their position. In particular, the Claimants have not demonstrated: (i) why, under Venezuelan law, the Royalty Measure and the Extraction Tax should lose their status as mere limitations to property with the issuance of the Expropriation; and (ii) why, in light of the Expropriation, the Royalty Measure and the Extraction Tax should be deemed an “expropriation” under Venezuelan law despite the fact that the protection against confiscatory taxation has a distinct legal basis.²³⁶ Put simply, the Claimants have failed to establish that the Overall Expropriation constitutes an “expropriation” in accordance with Article 14.1(b)(1) of the Hamaca AA or, more generally, under Venezuelan law.
172. The Tribunal’s conclusion is no different even after considering the Parties’ arguments on international (investment) law. With reference to *Crystallex*²³⁷ and *Phillips*,²³⁸ the Claimants submit that, through the notions of “creeping” and “indirect”

²³² 1999 Constitution, **R-208**, Article 115.

²³³ Tr. (Day 2), 483:19-486:4, 502:6-504:25 (Mr. Heinrich); R-PHB, § 510.

²³⁴ C-PHB, § 498.

²³⁵ C-PHB, § 498.

²³⁶ *Supra*, fn. 231, 232.

²³⁷ *Crystallex v Venezuela*, ICSID Case No. ARB(AF)/11/2, Award of 4 April 2016, **CLA-69** (hereinafter, “*Crystallex*”);

²³⁸ *Phillips Petroleum Company Iran v The Islamic Republic of Iran and The National Iranian Oil Company*, 21 IRAN-U.S. C.T.R. 79, Award No. 425-39-2 of 29 June 1989, **CLA-11** (hereinafter, “*Phillips*”).

expropriation, “international law jurisprudence” prohibits “constituent elements with the cumulative effect of expropriation, even if a single individual element may not alone rise to the level of being expropriatory”.²³⁹ The Claimants are right. In both *Crystallex* and *Phillips* it was held that expropriation may be attained through the adoption of a series of non-expropriatory measures whose effect is, retrospectively and in the aggregate, expropriatory.²⁴⁰ However, despite putting forward a legally correct conclusion, the precedential value that the Claimants seek to derive from these two cases is besides the point.

173. Creeping and indirect expropriation are well established concepts in international (investment) law. Further one may leave aside for the sake of reasoning whether these concepts would apply (and under what kind of adjustments) in a contractual context. However, neither *Crystallex* nor *Phillips* dealt with a series of non-expropriatory measures culminating with one clear and outright formal direct expropriation, as in the case at hand. As argued by the Respondents, “there is no issue of ‘creeping’ or ‘indirect’ expropriation [in the present case], as the Projects were formally and directly expropriated; nor is there any argument that the fiscal measures, either individually or in the aggregate, deprived the investor of the use and enjoyment of its investment”.²⁴¹ Differently stated, it was the Expropriation, not the Royalty Increase or the Extraction Tax, which deprived the Claimants of their investment in Venezuela. As such, only the Expropriation could ultimately be deemed contrary to international law under the generally recognized standard protecting foreign investors against unlawful expropriation. Because the Expropriation can be characterized as an independent wrongful act, the Royalty Increase and the Extraction Tax, together with the Expropriation, are precluded from giving rise to one composite wrongful act under the same standard.

174. In any event, as argued by the Respondents, “it is actually quite elementary under international law that a fiscal measure or even a series of fiscal measures cannot be considered expropriatory unless they virtually bankrupt the company, and it is

²³⁹ Reply, § 276; C-PHB, § 91. The Claimants also refer to the writings of Reisman and Sloane to support their conclusion. See W. Michael Reisman and Robert D. Sloane, INDIRECT EXPROPRIATION AND ITS VALUATION IN THE BIT GENERATION, FACULTY SCHOLARSHIP SERIES (2004), **CLA-88**, pp. 123-124 (“Discrete acts, analyzed in isolation rather than in the context of the overall flow of events, may, whether legal or not in themselves, seem innocuous *vis-à-vis* a potential expropriation. Some may not be expropriatory in themselves. Only in retrospect will it become evident that those acts comprised part of an accretion of deleterious acts and omissions, which in the aggregate expropriated the foreign investor’s property rights.”).

²⁴⁰ *Crystallex*, **CLA-69**, §§ 700-705; *Phillips*, **CLA-11**, §§ 89-101.

²⁴¹ R-PHB, § 503.

undisputed that the 2004 Royalty Measure and the Extraction Tax did not come close to that”.²⁴²

175. In sum, the Claimants’ argument that the Overall Expropriation ought to be considered as an “expropriation” pursuant to Article 14.1(b)(1) of the Hamaca AA, fails both under Venezuelan and international law.
176. The foregoing is dispositive of the issue in favor of the Respondents. Nevertheless, for the sake of completeness the Tribunal will also address the Respondents’ argument that the Hamaca AA deals separately with the notions of “expropriation” and “royalties”; an argument which further reinforces the Tribunal’s decision on this point.²⁴³
177. Despite being labelled an Extraction Tax, it is common ground between the Parties that the Extraction Tax increased the royalty rate on crude oil to 33.33% (which had already been increased by the Royalty Measure from 1% to the 16.66% contemplated in Article 41 of the 1943 Hydrocarbons Law).²⁴⁴ In fact, the Tribunal notes that, rather than using the term “royalty” *per se*, Article 41 of the 1943 Hydrocarbons Law has all along referred to an “exploitation tax”. Further, as recognized by Mr. Heinrich at the Hearing, the Extraction Tax was calculated in the same way as the royalty and could be even understood as a “Royalty Tax Number 2”.²⁴⁵ Moreover, the Parties’ counsel have both referred to the Royalty Measure and the Extraction Tax, jointly, as “royalty Measures”.²⁴⁶
178. With this in mind, it is important to recall that Article 14.1(b)(4) of the Hamaca AA states that “increases in the royalty rate applicable to the crude oil produced by the Parties” will not be considered discriminatory “unless such changes result in a royalty rate [...] in excess of the maximum rate specified by law for the hydrocarbon industry in general”.²⁴⁷ It is also noteworthy that the material royalty increase to 33.33%

²⁴² R-PHB, § 505.

²⁴³ *Supra*, § 156.

²⁴⁴ SoC, § 118 (“On 16 May 2006, the National Assembly duly approved and implemented the Extraction Tax, which effectively raised the royalty rate to [33.33%]. For the Petrozuata and Hamaca Projects, the net result of that, within an 18 month period, the applicable *royalty rate* had jumped from one percent to [33.33%]”(emphasis added)); 8 October 2004 Letter from Minister Ramírez to President Rodríguez of PDVSA, **R-12 /C-106**, pp. 2-3, 12; 14 January 2005 Letter from Mr. Berry to Minister Ramírez, **R-14**, p.1; ICSID Hearing Transcript, **C-381**, pp 643:4-646:20 (Mr Goff); SoD, §§ 155-167.

²⁴⁵ Tr. (Day 2), 509:1-8 (Mr. Heinrich). Essentially the same opinion was shared by the Claimants’ quantum expert, Mr. Abdala (Abdala ER I, **CER-3**, § 33).

²⁴⁶ Tr. (Day 12), 2977:16, 3105:11 (Parties’ Closing Statements).

²⁴⁷ Hamaca AA, **C-3**, Article 14.1(b)(4).

(resulting from the cumulative application of the Royalty Measure and the Extraction Tax) was assumed by all private hydrocarbon operators, PDVSA, and all other government owned oil companies.²⁴⁸ Accordingly, the Tribunal cannot accept the proposition that the Overall Expropriation constitutes a discriminatory qualified measure under the Hamaca AA, when two of its constituent elements (i.e. the Royalty Measure and the Extraction Tax) cannot be qualified as discriminatory in the first place.

179. In general, the Claimants have been unable to overcome the hurdle that their Overall Expropriation DA claim comprises a Royalty Measure and an Extraction Tax which: (i) the Claimants themselves admit do not constitute DAs on a stand alone-basis;²⁴⁹ and (ii) the effects of which, if assessed against the default comparator in the Hamaca AA for discrimination purposes,²⁵⁰ rather than against the standard set out in Article 14.1(b)(4) excluding royalty increases from being deemed discriminatory,²⁵¹ would be “generally applicable to entities (both public and private) [...] in the hydrocarbon industry”.²⁵²
180. Therefore, the Tribunal finds it incoherent to argue that, because of the Expropriation, the comparator for assessing the discriminatory nature of either the Royalty Measure and/or the Extraction Tax should vary. The DA provisions of the Hamaca AA do not withstand such an interpretation.
181. For the reasons set out above, the Tribunal determines that the Overall Expropriation does not constitute an “expropriation” pursuant to Article 14.1(b)(1) of the Hamaca AA. As such, the Overall Expropriation is not discriminatory under the Hamaca AA. By the same token, the Royalty Measure and/or the Extraction Tax are not discriminatory under the Hamaca AA either.
182. In light of all of the above analysis of each AA, the Tribunal concludes that only the Expropriation constitutes a discriminatory measure under both the Petrozuata and Hamaca AAs. Conversely, the remaining constitutive elements of the Overall Expropriation, namely, the Royalty Measure and the Extraction Tax, cannot be deemed discriminatory under either the Petrozuata or the Hamaca AAs. Therefore,

²⁴⁸ *Supra*, § 147.i.

²⁴⁹ Tr. (Day 12), 2977:9-18 (Claimants’ Closing Statements).

²⁵⁰ *Supra*, § 162.iii.

²⁵¹ *Supra*, §§ 176-178.

²⁵² Hamaca AA, **C-3**, Article 14.1(b).

given that the discriminatory nature of a qualified measure is essential in order for it to be characterized as a DA, the Royalty Measure, the Extraction Tax and the Overall Expropriation do not constitute DAs under either AA.

b. *First prong for a qualified measure to be deemed a DA: the alleged discriminatory nature of the Income Tax Increase*

183. The Claimants submit that, in order to determine whether the Income Tax Increase was discriminatory under the Petrozuata AA, the standard or comparator to be applied is whether this qualified measure was “generally applicable to most enterprises in Venezuela”.²⁵³ With respect to the Hamaca AA, the Claimants submit that the adequate comparator must be whether the Income Tax Increase was “generally applicable to corporations and other legal entities that are taxable in the same manner as corporations in Venezuela”.²⁵⁴ In essence, the Claimants argue that “both AAs provide that a tax measure is discriminatory if it is not generally applicable to all corporations in Venezuela”.²⁵⁵
184. On this basis, the Claimants stress that, due to the Income Tax Increase, the income tax payable by corporations pertaining to the hydrocarbon industry or related ventures (including the EHCO projects) was raised from 34% to 50%. In contrast, all other corporations in Venezuela continued to pay income tax at the rate of 34%.²⁵⁶ Therefore, the Income Tax Increase must be deemed discriminatory.
185. It has been the Respondents’ position throughout the proceedings that the alleged discriminatory nature of the Income Tax Increase hinges on what institutes a “generally applicable” tax.²⁵⁷ In the Respondents’ own terms, the issue to be considered by the Tribunal runs as follows:

If the [Income Tax Increase was] generally applicable because [it] applied to any taxpayer engaging in the oil business, then [it] cannot be [discriminatory]. If “generally applicable” means that the 50% rate had to apply to all enterprises, regardless of whether they were engaged in the oil business, then the [Income Tax Increase] would fall within the definition [of discriminatory].²⁵⁸

²⁵³ C-PHB, § 80(a); Petrozuata AA, **C-1**, Section 1.01(a)(1).

²⁵⁴ C-PHB, § 80(b); Hamaca AA, **C-3**, Article 14.1(b)(1).

²⁵⁵ C-PHB, § 80(c).

²⁵⁶ C-PHB, § 75.

²⁵⁷ SoD, § 289; Rejoinder, § 324.

²⁵⁸ R-PHB, § 521.

186. In this regard, the Respondents argue that the first of the previous two possible interpretations is to be preferred.²⁵⁹ Bearing in mind that the Income Tax Increase was indeed applicable to all enterprises engaged in the oil business, in the Respondents' view it follows that it was not discriminatory and thus cannot be characterized as a DA.
187. The Tribunal finds the Respondents' conclusion unsubstantiated. Overall, the DA provisions of both AAs are complicated and heavily conditioned upon multiple layers of carve-outs, exceptions, and counter-exceptions. That being said, in the context of income tax, the specific passages of the DA provisions invoked by the Claimants (the relevance of which has not been contested by the Respondents) are clear. Thus, the interpretation offered by the Respondents simply does not play out against the text of either AA.
188. In the Petrozuata AA, the default comparator to assess discrimination is established in the *chapeau* of the definition of DAs. It refers to qualified measures whose "treatment" is "not applicable to all **enterprises in Venezuela**".²⁶⁰ Then, the same provision lays out a first carve-out to the foregoing default comparator. In particular, it stipulates that "treatment shall not be considered discriminatory if it equally applies to the enterprises (empresas) within **the oil industry in Venezuela**".²⁶¹ Subsequently, a first exception to the preceding carve-out is provided. In unmistakably clear terms, the said exception clarifies that, "with respect to the application of **income taxes** and any valuations as a basis for income taxes (e.g. the Fiscal Export Value), treatment shall be considered **discriminatory** if it is **not generally applicable to most enterprises in Venezuela**".²⁶² Put simply, by way of the income-tax-exception to the carve-out, the default comparator established in the *chapeau* is, in essence, again rendered applicable.²⁶³

²⁵⁹ R-PHB, § 521.

²⁶⁰ Petrozuata AA, **C-1**, Section 1.01.

²⁶¹ Petrozuata AA, **C-1**, Section 1.01(a).

²⁶² Petrozuata AA, **C-1**, Section 1.01(a)(1) (emphasis added).

²⁶³ As seen *supra* at § III.B.4.a.i, Section 1.01(a)(3) of the Petrozuata AA states that, under certain circumstances, qualified measures may nonetheless be discriminatory despite being equally applicable to enterprises within the Venezuelan oil industry. This is so if, "analyz[ed] globally", it can be ascertained that the measures result in an "economic damage" that: (i) was not "actually suffered" by government owned companies in the oil sector; or (ii) was "disproportionally onerous" to the private party "as compared" to government owned companies in the oil sector (*supra*, §§ 141-142). As such, Section 1.01(a)(3) of the Petrozuata AA provides for two different comparators that serve as a second exception to the carve-out in Section 1.01(a), according to which "treatment shall not be considered discriminatory if it equally applies to the enterprises (empresas) within the oil industry in Venezuela" (*supra*, fn. 261). That being said, the Tribunal notes that the Parties have not advanced their arguments with respect to the Income Tax Increase on the basis of Section 1.01(a)(3) of the Petrozuata AA,

189. The Hamaca AA follows a similar structure. The relevant provision therein fixes as a default comparator for discrimination purposes those qualified measures “not generally applicable to entities (both public and private) [...] **in the hydrocarbon industry in Venezuela**”.²⁶⁴ Subsequently, the same provision caters for multiple exceptions, the first of which, as the Claimants point out, refers to “tax rates”. More specifically, the exception determines that qualified measures “in respect of tax rates” will not be considered discriminatory if “generally applicable **to corporations and other legal entities that are taxable in the same manner as corporations in Venezuela**”.²⁶⁵ For the Tribunal, it is evident that the reference to “tax rates” in the Hamaca AA covers, *inter alia*, income tax variations such as the Income Tax Increase.²⁶⁶
190. Two related aspects follow. First, the AAs share common ground: the possible discriminatory effects of changes to the income tax are addressed by way of an exception. The Tribunal deems this to be dispositive of the issue in favor of the Claimants. Had the Parties intended to agree on the interpretation offered by the Respondents, it is hard to conceive the reasons behind the introduction of such express exceptions. In the Claimants’ words, the Respondents’ argument regarding the non-discriminatory nature of the Income Tax Increase “makes no sense, because if [it] were true, [there] would not be an [income tax] exception” in each AA to begin with.²⁶⁷ The Tribunal agrees.
191. Second, in order to accept the Respondents’ interpretation, the Tribunal would essentially be required to give effect to distinct contractual provisions. Indeed, understanding the term “generally applicable” as meaning “[applicable] to any taxpayer engaging in the oil business”,²⁶⁸ suggests that the content of “generally applicable” would be undistinguishable from: (i) “[applicable] to the enterprises (empresas) within the oil industry in Venezuela”, as in Section 1.01(a) of the Petrozuata AA (i.e. the first carve-out to the default comparator),²⁶⁹ and (ii) “applicable

and rightly so: Section 1.01(a)(1) of the Petrozuata AA establishes a specific comparator in order to assess whether a taxation measure such as the Income Tax Increase is discriminatory or not (*supra*, fn. 262). Therefore, it is unnecessary for the Tribunal to assess the alleged discriminatory nature of the Income Tax Increase against Section 1.01(a)(3).

²⁶⁴ Hamaca AA, **C-3**, Article 14.1(b).

²⁶⁵ Hamaca AA, **C-3**, Article 14.1(b)(1).

²⁶⁶ Although not alluded to by the Claimants, the Tribunal cannot help but note that a second exception to the general comparator in Article 14.1(b) expressly refers to income taxes. Indeed, Article 14.1(b)(3) fixes the same comparator as Article 14.1(b)(1) with respect to income tax regimes (Hamaca AA, **C-3**, Article 14.1(b)(3)).

²⁶⁷ C-PHB, § 81.

²⁶⁸ *Supra*, § 185.

²⁶⁹ *Supra*, fn. 261.

to entities (both public and private) [...] in the hydrocarbon industry in Venezuela”, as in Article 14.1(b) of the Hamaca AA (i.e. the exception to the default comparator).²⁷⁰

192. Such a construction, however, does not withstand scrutiny. Being an essential part of the income-tax-exception found in both AAs, it cannot be that the term “generally applicable” is construed in the same fashion as the comparator from which the said exception seeks to depart from. Put differently, it would be absurd and nonsensical to accept that a rule and its exception have the same effect.

193. For the reasons set out above, the Tribunal determines that the Income Tax Increase is discriminatory both under the Petrozuata and the Hamaca AAs.

c. *Second prong for a qualified measure to be deemed a DA: the alleged unjust character of the Income Tax Increase and/or of the Expropriation*

194. The Petrozuata AA states that, for the purpose of the definition of DAs, treatment accorded by a qualified measure shall be considered “unjust” if it results in SED.²⁷¹ In tandem, the Hamaca AA states that a qualified measure shall be deemed “unjust” if it results in MAE.²⁷²

195. The Tribunal has found that neither the Royalty Measure nor the Extraction Tax (and therefore, the Overall Expropriation as advanced by the Claimants to the extent that it represents the amalgamation of these measures) can be deemed discriminatory under either the Petrozuata or the Hamaca AAs. Because DAs under each AA must be both “discriminatory” and “unjust”, the Royalty Measure and the Extraction Tax cannot be characterized as DAs. Hence, the Tribunal finds it unnecessary to assess whether they are “unjust” as defined in each AA. Accordingly, the Tribunal will only ascertain whether the Income Tax Increase and the Expropriation are “unjust” for causing SED and/or MAE. In doing so, the Tribunal bears in mind that the Respondents admit that the Expropriation constitutes a DA.²⁷³

²⁷⁰ *Supra*, fn. 264.

²⁷¹ *Supra*, § 132.

²⁷² *Supra*, § 162.ii.

²⁷³ Rejoinder, § 21; Tr. (Day 1), 209:5-10 (Respondents’ Opening Statement); August 2016 ICSID Hearing Transcript, **R-186**, Day 2, 457: 20-21.

196. The Tribunal first recalls that the harm resulting from measures that qualify as discriminatory can be cumulatively assessed in order to determine whether SED or MAE has been caused. This is not controversial between the Parties.²⁷⁴
197. In accordance with Section 1.01 of the Petrozuata AA, SED is caused when, as a result of discriminatory measures, the Claimants suffer in any given fiscal year a minimum damage of USD 6.5 million.²⁷⁵ In turn, pursuant to Article 14.2(a) of the Hamaca AA, MAE exists when discriminatory measures cause a reduction of at least 5% in the Claimants' net cash flow in any given year.²⁷⁶
198. In light of the foregoing, the Respondents' own quantum scenarios suggest that, should the Claimants prevail on the merits of their DA claim, the potential damage suffered by the Claimants has exceeded the thresholds necessary to establish SED or MAE.
199. Indeed, according to one of the valuation scenarios put forward by the Respondents,²⁷⁷ the Claimants would be due USD 47.8 million under the Petrozuata AA and USD 59.5 million under the Hamaca AA for their DA claims.²⁷⁸ It is worth noting that the foregoing scenario assumes that the Expropriation is the only discriminatory qualified measure at issue. It thus shows that the effects of the Expropriation alone were deemed sufficient to surpass the *de minimis* threshold required to cause both SED and MAE.²⁷⁹
200. It follows that factoring-in the effects of the Income Tax Increase can only further raise the margin between the *de minimis* threshold and the actual harm suffered. Indeed, with the same assumptions of the Respondents' second most favorable valuation

²⁷⁴ Reply, §§ 176-177; Rejoinder, §§ 303, 316-321; *supra*, §§ 126, 145, 162.ii, 162.v.

²⁷⁵ *Supra*, § 101.

²⁷⁶ *Supra*, § 107.

²⁷⁷ The Respondents essentially advance two valuation scenarios. The first one assumes the dismissal of the Claimants' DA claims in their entirety due to the latter's alleged non-compliance with the requirements of notice and exhaustion of local remedies of each AA. The second one (referenced herein) regards the Expropriation to be the only DA in place (i.e. it does not account for the Income Tax Increase) and rejects all of the Claimants' additional quantum assumptions (R-PHB, §§ 895-897). Yet it accepts to different degrees the Claimants' position on the notification and exhaustion of local remedies. The Respondents' position on the alleged notification and exhaustion of local remedies will be examined further below (*infra*, §§ 202 ss, 259 ss). These arguments, however, pertain solely to the issue of whether there is a duty to compensate for the SED/MAE suffered by the Claimants. It is not germane to the question of whether SED/MAE has been caused as a result of discriminatory qualified actions. Therefore, the Respondents' position regarding notice and exhaustion of local remedies is not relevant for assessing whether DAs exist or not.

²⁷⁸ R-PHB, § 895.

²⁷⁹ In any event, the amount awarded to the Claimants in consideration of the position of both Parties clearly demonstrates that the threshold required by both AA for the existence of SED or MAE has been satisfied (*infra*, §§ 543, 1127, 1163).

scenario (yet accounting for the Income Tax Increase as an additional discriminatory measure),²⁸⁰ in principle the Claimants would be owed USD 68.6 million under the Petrozuata AA and USD 76 million under the Hamaca AA.²⁸¹

201. For these reasons, the Expropriation and the Income Tax Increase both constitute discriminatory qualified measures that give rise to SED and MAE. Put simply, both the Expropriation and the Income Tax Increase are DAs under the Petrozuata and the Hamaca AAs.

d. *The alleged notification requirements*

202. The Respondents argue that the AAs contain notice requirements applicable to all claims for compensation based on the occurrence of a DA. In this regard, the Respondents point to Section 9.07(e) of the Petrozuata AA, which states:

The right to compensation of [CPZ] under this Section 9.07 shall be limited to those damages actually suffered by such Shareholder beginning with the fiscal year previous to the year in which a written notice is sent to [PDVSA Petróleo], indicating that the notifying Shareholder considers that a Discriminatory Action has taken place.²⁸²

203. By the same token, the Respondents refer to Articles 14.3(a) and 14.3(b) of the Hamaca AA which, in their view, requires the following two separate notices as “preconditions to obtaining” compensation for the harm caused by a DA:

[F]irst, a “Notice of Discriminatory Action,” set forth in Section 14.3(a), to be given “promptly” after the injured party “considers that a Discriminatory Action has occurred”; and second, a “Notice of Triggering Event,” set forth in Section 14.3(b), to be sent in the event that the party determines that the Discriminatory Action caused a “Significant Adverse Effect.”²⁸³

204. The Respondents argue that the Claimants have not met any of the requirements contained in these two provisions. The Respondents are “fully aware” that the Claimants indeed objected to the application of the Royalty Measure, the Extraction Tax, the Income Increase and the Expropriation.²⁸⁴ However, according to the Respondents, both the Petrozuata and Hamaca AAs specifically required notice to PDVSA’s subsidiaries once the Claimants considered that a DA had taken place. Yet,

²⁸⁰ *Supra*, fn. 277.

²⁸¹ Brailovksy/Flores ICSID 2016 Valuation Model, **App. BF-406**. These results are obtained by selecting the “B&F –With the Compensation Provisions” button on the “Control Panel” tab, modifying “Compensation/Past” and “Interest” to only include amounts from 2013 through 2016, and toggling the “Income Tax Modification” in the “Control Panel” tab to “No”.

²⁸² Petrozuata AA, **C-1**, Section 9.07(e); R-PHB, § 523.

²⁸³ R-PHB, § 528.

²⁸⁴ R-PHB, §§ 531-539.

“nowhere in any of the Claimants’ ‘numerous letters’ do the words ‘Discriminatory Action’ ever appear”.²⁸⁵ Hence, the Claimants’ general objections say “nothing about whether the Claimants provided the requisite notices of “Discriminatory Actions”. [...] The requirements of the Associations Agreements are not satisfied by either awareness of objections to a governmental measure or by documents that are plainly not notices of the occurrence of a ‘Discriminatory Action’, and combining both does not change that fact”.²⁸⁶

205. The Respondents describe the consequences of the Claimants’ omission as follows:

In the case of the Petrozuata Association Agreement, the legal consequences are spelled out in the Compensation Provisions themselves – no compensation is payable in respect of any fiscal year prior to the year in which notice of a Discriminatory Petrozuata Action is given. In the case of the Hamaca Association Agreement, the legal consequence of a failure to give the required notices is provided by the applicable law – forfeiture (or *caducidad*) of the right to obtain compensation.²⁸⁷

206. The Respondents therefore submit that, since no “notice of Discriminatory Action” was ever provided by the Claimants to any of PDVSA’s subsidiaries, the Claimants “are prevented from [receiving compensation for] their untimely [DA] claims”.²⁸⁸

207. The Claimants submit, on the other hand, that the Respondents’ position is “purely formal in nature”.²⁸⁹ According to the Claimants, “nothing in the AAs or in Venezuelan law requires the recitation of talismanic words”.²⁹⁰ Rather, the underlying purpose of the notification requirement in the AAs was to “alert” Respondents to the complained-of actions taken by the Government.²⁹¹ In this regard, the Claimants note that the Respondents acknowledge the Claimants’ objections to the various qualified measures adopted by Venezuela.²⁹² Therefore, “there can be no question that the Respondents were fairly put on notice of their obligations under AAs, including their indemnity obligations under the DA provisions”.²⁹³ Put simply, the Respondents and the Venezuelan Government were “fully aware” of the qualified measures questioned

²⁸⁵ R-PHB, § 530.

²⁸⁶ R-PHB, § 541.

²⁸⁷ R-PHB, § 522.

²⁸⁸ R-PHB, § 549.

²⁸⁹ C-PHB, § 121.

²⁹⁰ C-PHB, § 122.

²⁹¹ C-PHB, § 143.

²⁹² C-PHB, § 121.

²⁹³ C-PHB, § 122.

by the Claimants and their effect on the AAs.²⁹⁴ Consequently, it must be understood that the Claimants properly discharged any notice requirement in the AAs.²⁹⁵

208. In any event, the Claimants argue that any additional or more specific notifications by the Claimants would have been futile – futility being a principle recognized by Venezuelan law.²⁹⁶ This is so because the notification requirements in the AAs were not only intended to inform the Respondents of the existence of a contested qualified measure, but they also sought to “ensure” that the Respondents had the “opportunity to act to remedy them”.²⁹⁷ However, the Claimants had no reason to believe that the Respondents could or would act independently to assist in opposing the qualified measures objected by the Claimants. In this context, “issuing further notices under the AAs using different formulations would have served no purpose”.²⁹⁸ This is particularly the case given that PDVSA was aware of its obligation under the AAs “to pay compensation” to the Claimants pursuant to the “contractual indemnities” contained therein.²⁹⁹

209. The issue therefore boils down to three issues. First, whether the AAs required the Claimants to provide notice to the Respondents should the former consider that a DA had taken place. Second, whether such a requirement (if extant) was complied with by the Claimants. Third, in case of non-compliance, whether the Claimants are now precluded from seeking compensation for any SED or MAE caused by a qualified measure deemed a DA.

i. Did the AAs require the Claimants to provide notice to the Respondents?

210. Before venturing into the foregoing analysis, the Tribunal recalls that only the Income Tax Increase and the Expropriation have been deemed DAs. Consequently, the Tribunal will only assess whether the Claimants discharged any alleged notice requirement *vis-à-vis* these two measures. Conversely, the Royalty Increase and/or the Extraction Tax will not be part of the Tribunal’s analysis.

211. With this in mind, the Tribunal considers that the first issue, namely, whether the AAs required the Claimants to notify the Respondents should they consider that a DA had

²⁹⁴ C-PHB, §§ 141, 149, 151-153.

²⁹⁵ C-PHB, § 141.

²⁹⁶ C-PHB, § 148.

²⁹⁷ C-PHB, §§ 143, 145.

²⁹⁸ C-PHB, § 145.

²⁹⁹ C-PHB, §§ 152-153, referring to Tr. (Day 6), 1560:17-1561:22 (Dr. Mommer).

taken place, must be resolved in the affirmative. The AAs are clear. In accordance with Section 9.07(e) of the Petrozuata AA, the Claimants were expected to “indicat[e]” that a “Discriminatory Action [had] taken place”.³⁰⁰ In turn, further to Article 14.3(a) of the Hamaca AA, Claimants were to give a “Notice of Discriminatory Action” “indicat[ing]” whether they “believ[ed] that such a Discriminatory Action will result in a Material Adverse Effect”.³⁰¹ Moreover, pursuant to Article 14.3(b) of the Hamaca AA, the Claimants were “entitled to give a [...] Notice of Triggering Event” in case they believed that they “[had already] suffered a Material Adverse Effect [...] as a result of actions in respect of which [they] had delivered Notices of Discriminatory Action”.³⁰²

212. Indeed, the existence as such of the notice requirement does not appear to be contentious. Rather, the Claimants submit that they discharged any notice requirement under the AA.³⁰³ Alternatively, they argue that strict compliance with such a requirement would have been futile.³⁰⁴ However, as far as the text of the AAs is concerned, at no point have the Claimants argued that the AAs did not contain a notice requirement and rightfully so.

ii. Have the Claimants complied with the notice requirement?

213. The second issue, namely, whether the Claimants complied with the AAs’ notice requirement, is less straightforward. It is common ground between the Parties that the Claimants issued several communications objecting to the applicability of the Income Tax Increase and the Expropriation.³⁰⁵ The pivotal question is therefore whether such objections are sufficient to satisfy the notice requirement under the AAs by alerting the Respondents to the Claimants’ belief that the qualified measures at issue constituted DAs. The Tribunal will discuss the said objections in turn.

214. With respect to the Income Tax Increase, the Tribunal has found the following facts to be of particular relevance:

- i. On 29 November 2006, the Claimants sent a letter to Mr. Mommer and the representatives of all three Respondents. In this correspondence, the Claimants “protest[ed]” about the “recent changes made to the fiscal regime

³⁰⁰ Petrozuata AA, **C-1**, Section 9.07(e); R-PHB, § 523.

³⁰¹ Hamaca AA, **C-3**, Article 14.3(a).

³⁰² Hamaca AA, **C-3**, Article 14.3(b).

³⁰³ C-PHB, § 141; *supra*, § 207

³⁰⁴ *Supra*, § 208.

³⁰⁵ C-PHB, §§ 129-140; R-PHB, §§ 536-540.

applicable to the investments made by [the Claimants] within the territory of [Venezuela]”. The letter makes reference to, *inter alia*, the “increased income tax from 34% to 50%”, and “reserved all of its rights under Venezuelan and International Law with respect to such changes”.³⁰⁶

- ii. On 31 January 2007, copying Dr. Mommer (in his capacity of Vice Minister of Hydrocarbons), the Claimants sent a letter to Mr. Ramírez (in his capacity of Minister of Energy), President Maduro (in his then capacity of Minister of Foreign Affairs), and Ms. Gladis Gutiérrez (in her capacity of Attorney General). In their letter the Claimants refer to, *inter alia*, the Income Tax Increase, deeming it “without basis and inconsistent with the Association Agreements”. The letter goes on to question President Chávez’s announcement of his intention to expropriate the Claimants’ investments in Venezuela. The letter concludes by considering “Venezuela’s actions” as “contrary to the protections afforded to ConocoPhillips under the [Venezuela-Netherlands BIT], as well as the Foreign Investment Law”, and therefore “notifies Venezuela in writing of the existence of a dispute in accordance with the provisions of the [latter two instruments]”.³⁰⁷

215. As far as the Expropriation is concerned, the Tribunal finds it unnecessary to refer to each communication in detail. Suffice it to note that in practically all the objections raised from 26 February 2007 to 30 April 2007, the Claimants referred to the Expropriation and reserved their rights to take legal action pursuant to the AAs, Venezuela’s Investment Law, the Venezuela-Netherlands BIT and/or international law.³⁰⁸

216. Having reviewed the record, the Tribunal finds truth in the Respondents’ observation that none of the communications relied upon by the Claimants explicitly referred to the occurrence of a DA.³⁰⁹ Indeed, the term Discriminatory Action, or for that matter, the notions of “discriminatory” or “unjust”, are conspicuously absent in any such communication. Nonetheless, it would be excessively formalistic for the foregoing to be dispositive of the issue in favor of the Respondents.

³⁰⁶ Letter from Claimants to Dr. Mommer and others, 29 November 2006, **C-151**.

³⁰⁷ Letter from Claimants to Minister Ramírez and others, 31 January 2007, **C-162**.

³⁰⁸ C-PHB, §§ 133-140.

³⁰⁹ *Supra*, fn. 285.

217. The Respondents refer to Article 1264 VCC in order to argue that, as far as the notice requirement is concerned, the Parties cannot be allowed to depart from the literal tenor of the AAs.³¹⁰ The Tribunal is aware that, in accordance with Article 1264 of the VCC, “[o]bligations must be complied with exactly as they have been prescribed”.³¹¹ Nevertheless, immediately thereafter Article 1264 of the VCC states that “[t]he debtor is liable for damages, in case of breach”.³¹² This last *tranche* of Article 1264 VCC leads the Tribunal to believe that its content is applicable to obligations of a substantive nature (as opposed to a mere duty or an “obligation” of a different nature). Indeed, the lack of strict compliance with substantive contractual obligations should usually result in damages to the creditor of the obligation at issue. Evidently, however, Section 9.07(e) of the Petrozuata AA and Articles 14.3(a) and 14.3(b) of the Hamaca AA cannot be characterized as encompassing substantial obligations.
218. First, in and of themselves these provisions do not establish a relationship between creditor and debtor. Second, their non-compliance by the Claimants cannot cause harm to the Respondents for which they could seek compensation. Put differently, non-compliance with the notice provisions in the AAs do not amount to a compensable breach of contract: the Respondents seek a different remedy, namely, the non-applicability of contractual rights—not a breach of the AAs.
219. The notice provisions in the AAs simply cater to a procedural requirement for the Claimants to secure an entitlement granted by contract: indemnity for the issuance of qualified measures constituting DAs. Accordingly, the Tribunal is of the view that the stringent standard put forward by Article 1264 VCC is non-controlling. Rather, the Tribunal considers that the issue of whether the Claimants have met the notice requirements of the AAs must be assessed in light of the purpose of agreeing to such provisions.
220. In this respect, the Claimants submit that the purpose underlying the notice requirements was twofold. First, to “alert Respondents to the complained-of actions by the Government”.³¹³ Second, “ensure that Respondents had the opportunity to act to remedy [the said complained-of actions]”.³¹⁴ These explanations are unpersuasive.

³¹⁰ R-PHB, fn. 1060.

³¹¹ VCC, **RLA-148**, Article 1264 (“Obligations must be complied with exactly as they have been subscribed. The debtor is liable for damages, in case of breach”); R-PHB, fn. 1060.

³¹² VCC, **RLA-148**, Article 1264.

³¹³ C-PHB, § 143.

³¹⁴ C-PHB, § 143.

221. Both Mr. van Wageningen and Mr. Manning, the Claimants' witnesses, have offered testimony to the effect that the notice requirements were incorporated into the AAs in order to "cure" the Respondents' "ignorance, if any", *vis-à-vis* the existence of qualified measures contested by the Claimants.³¹⁵ However, as defined in Section 1.01 of the Petrozuata AA and Article 14.1(b) of the Hamaca AA, measures *prima facie* falling under the purview of the relevant DA provision of both AAs included: "actions", "decisions", or "changes in law", adopted by "any Venezuelan national, state or municipal legislative or administrative authority (including any such action or decision resulting in a change in interpretation or application of Venezuelan law)".³¹⁶ By definition, these measures are public.
222. Presumably then, sophisticated as they are, the Parties would (or should) be aware of the passage of a law, of landmark changes in the interpretation or application of the law, or of the taking of other governmental or administrative actions akin to the Projects. Mr. van Wageningen himself recognized this point at the Hearing.³¹⁷ It is therefore unlikely that the notice requirements sought to inform the Respondents of the existence of already evident and public qualified measures—all of which, arguably, "would affect [the Parties'] interests in the Project[s]".³¹⁸ Overall, the Tribunal doubts the notice requirements were intended to serve what otherwise seems to be a self-fulfilling purpose.
223. The argument that the notice requirements sought to prompt the Respondents into "remedy[ing]" the "complained-of actions by the Government" fares no differently.³¹⁹ Having established that the Parties were expected to be aware of the existence of all qualified measures affecting the Projects, it is a *non sequitur* to submit that the notice requirements were adopted for the Respondents to assume a determined course of action with respect to the said measures. In any event, such an alleged purpose would be at odds with the text of the AAs.
224. Section 9.07(e) of the Petrozuata AA is silent as to the events preceding and following a notice by the Claimants that a DA has taken place. Article 14.3(a) of the Hamaca AA does state that, further to a Notice of Discriminatory Action, the Parties

³¹⁵ van Wageningen WS II, **CWS-5**, § 21; Tr. (Day 3), 715:15-716:1 (Mr. van Wageningen); Tr. (Day 2), 435:3-10 (Mr. Manning); Manning WS II, **CWS-6**, § 23.

³¹⁶ *Supra*, § 111.

³¹⁷ Tr. (Day 3), 716:13-717:18 (Mr. van Wageningen).

³¹⁸ van Wageningen WS II, **CWS-5**, § 22.

³¹⁹ *Supra*, fn. 313-314; van Wageningen WS II, **CWS-5**, §§ 21-22; Tr. (Day 2), 435:11-21 (Mr. Manning); Manning WS II, **CWS-6**, § 24.

were expected to “meet [and] discuss the formal legal remedies [...] appropriate to reverse or obtain relief from the [...] Discriminatory Action” at issue.³²⁰ Nevertheless, it was the Claimants, “independently”, that were required to “commence” and “pursue such remedies”.³²¹ The Respondents’ participation in this undertaking was conditioned to Corpoven Sub’s express “request”.³²² Put simply, it was on the Claimants, not the Respondents, to seek remedy for any harm resulting from a qualified measure deemed a DA. Moreover, as established elsewhere in this Award, the Respondents were under no particular obligation to initiate proceedings against qualified measures affecting the Projects, to oppose them, or to lobby for their non-adoption, removal or modification.³²³

225. The Tribunal is of the view that the issue regarding the purpose of the notice requirements is simpler. It is reasonable to assume that every governmental or legislative measure regarding the oil industry would somehow impact the Parties’ interests in each AA. Yet, not every qualified measure germane to the Venezuelan oil sector brought about the Respondents’ compliance with their contractual indemnity obligations. Accordingly, the Claimants’ general objections to the applicability of the Income Tax Increase and the Expropriation are, to some extent, irrelevant in the present context.
226. When it comes to the scope of the Respondents’ obligations, they contractually assumed the commitment to compensate the Claimants for the harm arising out of DAs, as defined in each AA. As already established, DAs are configured by way of the effects caused to the Claimants.³²⁴ It follows that the Claimants were in the better position to assess whether the harm suffered from a qualified measure amounted to discriminatory and unjust treatment (i.e. the two constitute elements of DAs). Accordingly, the information provided by the Claimants to the Respondents was in principle necessary for the Respondents to be mindful, not of the existence of a determined qualified measure, but of how the impact of the said measure triggered their contractual obligations under the DA provisions of each AA. In this context, the

³²⁰ Hamaca AA, **C-3**, Article 14.3(a).

³²¹ Hamaca AA, **C-3**, Article 14.3(a).

³²² Hamaca AA, **C-3**, Article 14.3(a).

³²³ *Infra*, §§ 382-388.

³²⁴ *Supra*, §§ 132, 144, 162, 194-201.

Claimants' duty (by way of a specific notice) to "indicate" their "believe" that a DA had taken place,³²⁵ gains significance.

227. The obvious flip-side is the following: were it to be established that the Respondents were cognizant that a particular qualified measure triggered their indemnity obligations, then any information that the Claimants may have provided (by way of notice or otherwise) would have been unnecessary.
228. The Tribunal's view does not build-up on the notion of futility. As discussed below, the Claimants' arguments on futility are immaterial.³²⁶ Rather, the Tribunal is of the opinion that, upon the Respondents' awareness to discharge their indemnity obligations, the purpose of the notice requirements must be deemed fulfilled.
229. Indeed, it may be the case that the Respondents' awareness of a DA would have been primarily prompted by a notice served by the Claimants. However, that should not be taken as precluding the possibility that the necessary information to that effect could have also been attained by other means. In fact, the content of a particular qualified measure in question could be sufficient: for instance, the treatment accorded by a measure could be so blatantly discriminatory and unjust (as defined in each AA), that its characterization as a DA would be a foregone conclusion.
230. This appears to be the case of the Expropriation. By and large, the Expropriation is the quintessential DA under either AA. It was only applicable to private corporations in the oil industry. Further, given the magnitude and expected duration of the Projects, it is evident that its application caused SED/MAE to the Claimants. It is thus unsurprising that the Respondents were fully aware, not only of the Expropriation's existence as a qualified measure, but of their indemnity obligations with regards to it pursuant to the DA provisions. As explained by Mr. Mommer during the Hearing:

Q. Now, you've testified in the ICSID proceedings that your role in administering the migration process involved participating in meetings with the Claimants relation to compensation for the forced nationalization; yes?

A. For forced migration, yes. I participated in quite a few meetings, but not in all of them; but in important meetings I participated at that time.

Q. And you may recall, Dr. Mommer, that, when you testified here in August, you testified that Mr. Del Pino of PdVSA also participated actively in those meetings; yes?

³²⁵ *Supra*, § 211.

³²⁶ *Infra*, §§ 238-241.

A. Of course. It was to them to take over the operations so they had to be there, and it was--yes. Yes. That was it, yes.

Q. And you remember describing yourself and Mr. Del Pino working as a team in these discussions?

A. We worked as a team, indeed. He had his role to play, and I had my role to play.

Q. And you described him having a particular role in the **compensation calculations** that were being developed **in relation to the nationalization**; yes?

A. Given the **Association Agreements**, PdV was heavily involved in the compensation discussion. They were **obliged** by the Agreements to **pay compensation in the first place**, so logically they were not out of this discussion. They were part of it.

Q. They were aware that they had this obligation, and, therefore, they participated in the discussions?

A. They were **aware** that there were **contractual indemnities programmed up to a certain Threshold Price and so on**.³²⁷

231. In light of the above, the Tribunal has no hesitation to hold that: (i) the purpose of the notice requirements with respect to the Expropriation was fulfilled; and/or (ii) the Claimants' objection to the Expropriation, and the reservations of their right to take legal action pursuant to, *inter alia*, the AAs, could hardly acquire another meaning, exclusively or not, than a reference to the DA provisions.³²⁸ Accordingly, the Tribunal determines that, as far as the Expropriation is concerned, the notice requirements of the AAs were discharged since the very outset (i.e. the year 2007).
232. A finding to the contrary would require the Claimants to unreasonably comply with a formality devoid of all effect. It would counterintuitively call for the Claimants to notify the Respondents of something that, as the evidence shows, they already knew. Pretending otherwise is spurious.
233. Notwithstanding the foregoing, the same conclusion cannot be extended to the Income Tax Increase. First, there is no evidence on the record clearly accounting for the Respondents' awareness of the discriminatory and unjust treatment resulting from the Income Tax Increase. Similarly, there is no document clearly evidencing the Claimants' own awareness or belief that the Income Tax Increase constituted a DA.

³²⁷ Tr. (Day 6), 1560:17-1561:22 (Dr. Mommer) (emphasis added).

³²⁸ *Supra*, § 215.

This is so despite the Claimants' general awareness since the very outset that expropriatory or similar public measures endangering their interest were plausible.³²⁹

234. Second and more specifically, the Claimants' letter of 29 November 2006 (a document analyzed by both Parties) made no reference to the AAs.³³⁰ This letter only contends that the Income Tax Increase (and the Extraction Tax) negatively affected their "investments" and "legitimate expectations". Subsequently, the letter reserves all rights under "Venezuelan and International law". These statements are overly broad and can imply a variety of courses of action, the main one being, as it came to pass, recourse to investment treaty arbitration.
235. Third, while the Claimants rightly point out that their letter of 31 January 2007 did consider the Income Tax Increase to be "without basis and inconsistent with the [AAs]",³³¹ such statement was not made in a vacuum. The letter was copied to Mr. Mommer, and addressed to Mr. Ramírez, President Maduro (in his then capacity of Minister of Foreign Affairs), and Ms. Gutiérrez, all acting in their capacity as public officials to the Venezuelan Government. Further, also referring to the Expropriation, the letter expressly puts Venezuela on notice of the existence of a dispute in accordance with the provisions of the Foreign Investment Law and the Venezuela-Netherlands BIT.³³²
236. In this respect, the Tribunal finds it telling that, in their submissions, the Claimants omitted giving context to their own evidence and, in particular, to their letter of 31 January 2007. It is clear that the aim of this communication was the notification of an investment treaty dispute between the Claimants and Venezuela. It certainly does not appear that it intended to notify, indicate, or otherwise inform the Respondents that the Income Tax Increase was, in the Claimants' view, a DA. The supervening events, namely, the filing of the ICSID request for arbitration without resort to the contractual remedies, are also indices of what the Claimants intended with that communication, and how the Respondents were to understand it. In light of this context, the fact that in their communication the Claimants also mentioned, in passing, inconsistency between the Income Tax Increase and the AAs is therefore of limited relevance for

³²⁹ Confidential Offering Circular, 17 June 1997, **C-61**, p. 38 ("[...] the Project is subject to political, economic and other uncertainties, including the risks of war, expropriation, nationalization, renegotiation or nullification of existing contracts [...] There can be no assurance that future developments in Venezuela will not have a material adverse effect on the Project's operations and the Company's revenues")

³³⁰ *Supra*, § 214.i; C-PHB, § 130; R-PHB, § 536, fn. 532, 535.

³³¹ *Supra*, § 214.ii; C-PHB, § 132.

³³² Letter from Claimants to Minister Ramírez and others, 31 January 2007, **C-162**, paras. 2, 15.

determining the issues presently at stake. Indeed, as evidenced by the so-called two categories of claims advanced by the Claimants in this arbitration, on the Claimants' own case there are various types of conduct that would allegedly be "inconsistent" with the AAs. There is thus no basis for the Tribunal to construe the statement in the Claimants' letter of 31 January 2007 as constituting a notification of the Claimants' belief that a DA claim has arisen.

237. Besides the letters of 29 November 2006 and 31 January 2007, the Claimants have not pointed to any other attempt to inform the Respondents of the discriminatory and unjust character of the Income Tax Increase. Hence, the Tribunal has come to the conclusion that it was only with the commencement of this arbitration that the Respondents gained (in accordance with the purpose of the contractual provisions) cognizance of the potential characterization of the Income Tax Increase as a DA. In sum, the notice requirement in the AAs in relation to the Income Tax Increase was fulfilled in 2014.
238. The Claimants' arguments on futility are of no avail to their position on this matter. The Claimants' main contention is that the "new PDVSA" showed no reason "to expect that the Respondents could or would [remedy the situation or] act independently to assist in opposing [either the Expropriation or the Income Tax Increase]".³³³ However, as established: (i) the Respondents were under no particular obligation to take any steps to that effect,³³⁴ and (ii) the purpose behind the notice requirements appears to be informing the Respondents of the possible characterization of a qualified measure as a DA,³³⁵ not curing their ignorance as to the existence of a qualified measure, or having the Respondents remedy the complained-of actions by the Government.³³⁶
239. Moreover, futility is frequently argued in the commercial context to avoid compliance with certain procedural requirements intended to amicably settle a dispute before resolving it through arbitration (i.e. multi-tiered proceedings beginning with negotiation, mediation, and/or conciliation). If successful, this allows for the dispute to be resolved or settled at the outset. Save perhaps for a requirement to exhaust local remedies (discussed below),³³⁷ it follows that procedural requirements sometimes

³³³ C-PHB, § 145.

³³⁴ *Supra*, fn. 323.

³³⁵ *Supra*, §§ 225-226.

³³⁶ *Supra*, §§ 221-224.

³³⁷ *Infra*, § 259 ss.

serve as a platform for disposing of the issue by way of the parties' agreement. Hence, if evident that no such agreement could be attained, then bypassing procedural requirements precisely aimed at securing said agreement is sensible. In the present case, however, whether or not a DA is adopted and continues to generate effects has never been contingent on the Parties' actions or agreement. This is so because, strictly speaking, neither Party can issue or adopt a qualified measure as defined in the Petrozuata and Hamaca AAs.³³⁸

240. Once the Claimants had informed the Respondents that a DA may have taken place, the Parties could have certainly disagreed on whether the qualified measure in question should be deemed a DA.³³⁹ Nevertheless, unless one assumes that the Respondents already knew of the discriminatory and unjust nature of a measure, an appropriate notice is the only means of informing the Respondents of the same (be it through a separate letter or a RfA). Therefore there is nothing "futile" about issuing the required notice in the first place.
241. In any event, the Claimants have failed to establish that "Venezuelan law recognizes the principle of futility [excusing them] from otherwise applicable contract provisions".³⁴⁰ The only authority invoked by the Claimants to ground their contention is the ICC Mobil Award.³⁴¹ This can hardly be considered sufficient to assert that a principle of law is extant in a determined domestic jurisdiction.

iii. What are the consequences of the Claimants' non-compliance with the notice requirement?

242. The Tribunal turns next to the discussion of the legal consequences, if any, of the Claimants' belated compliance with the notice requirement *vis-à-vis* the Income Tax Increase. The Respondents' position on this point varies considerably depending on whether the issue falls under the Petrozuata AA or the Hamaca AA. For the sake of consistency, the Tribunal will once more undertake its analysis under each AA separately.

- *Under the Petrozuata AA*

³³⁸ *Infra*, §§ 475-487.

³³⁹ Petrozuata AA, **C-1**, Section 9.07(f); Hamaca AA, **C-3**, Articles 14.3(c), 14.4(a). Articles 14.3(c) and 14.4(a) of the Hamaca AA are discussed in the Counterclaims section below (*infra*, §§ 523-524, 532-534, fns. 775, 784).

³⁴⁰ Reply, § 210; C-PHB, § 148.

³⁴¹ SoC, fn. 521; Mobil ICC Award, ICC Case No.15416/JRF/CA, Final Award dated 23 December 2011, **CLA-16**, § 404.

243. Section 9.07(e) of the Petrozuata AA clearly states that the Claimants’ “right to compensation” in a DA claim “shall be limited to those damages actually suffered [...] beginning with the fiscal year previous to the year in which [the notice requirement is satisfied]”.³⁴²
244. The Claimants argue that Section 9.07(e) does not “purport to impose a notification pre-condition for pursuit of a DA indemnification claim”.³⁴³ However, the issue is not whether the Claimants are outright barred from raising a DA claim: they are not. Section 9.07(e) does not cater to standing or to the possibility of seeking compensation for the harm suffered as a result of a discriminatory and unjust qualified measure. That being said, it does limit and/or condition the right to the compensation sought. In the Respondents’ words, Section 9.07(e) “excludes compensation for all cash flows lost [as a result of a DA] prior to the year [...] in which [the AA’s notice requirements are deemed satisfied]”.³⁴⁴ The Parties’ experts agree on this point.³⁴⁵
245. In light of the above, the Tribunal determines that, in accordance with Section 9.07(e), the Claimants are only entitled to receive compensation under the Petrozuata AA for the harm caused by: (i) the Expropriation, as from 2007;³⁴⁶ and (ii) the Income Tax Increase, as from 2013 (i.e. the fiscal year before the initiation of this arbitration).

- Under the Hamaca AA

246. The Hamaca AA lacks a provision akin to Section 9.07(e) of the Petrozuata AA. Yet, the Hamaca AA does state that, “[i]n the event that a Foreign Party considers that a Discriminatory Action has occurred, it **promptly** shall give notice thereof (a “Notice of Discriminatory Action”).³⁴⁷ The Respondents primarily rely on the term “promptly” in Article 14.3 of the Hamaca AA to argue that, in accordance with Venezuelan law, the legal consequence for failing to meet the notice requirement is *caducidad* (forfeiture) of the entire DA claim.³⁴⁸

³⁴² Petrozuata AA, **C-1**, Section 9.07(e).

³⁴³ C-PHB, § 119.

³⁴⁴ R-PHB, § 526.

³⁴⁵ Tr. (Day 7), 1918:15-1920:1 (Prof. Mata Borjas); Tr. (Day 8), 2211:8-2113:19 (Prof. García Montoya).

³⁴⁶ *Supra*, §§ 225-231.

³⁴⁷ Hamaca AA, **C-3**, Article 14.3(a) (emphasis added).

³⁴⁸ R-PHB, §§ 528-529; García Montoya ER II, **RER-5**, § 64.

247. In turn, the Claimants argue that *caducidad* entails “the entire loss of a right when that right has not been claimed within a predetermined period of time established by law or by the parties in their contract.”³⁴⁹ Thus, the purported failure to comply with the notice requirements does not result in a forfeiture of their right to assert the DA Claim. *Caducidad* is to be “interpreted restrictively and cannot be applied unless the parties clearly intended this result”.³⁵⁰ In particular, “parties must clearly define the specific right that is to be forfeited, the specific conduct whose absence would result in the forfeiture, and the relevant time period beginning with a specified start time” before *caducidad* can occur.³⁵¹ According to the Claimants, none of these criteria are satisfied in the instant case. The Tribunal agrees.
248. The Respondents’ legal expert, Prof. García Montoya, states that “Venezuelan doctrine confirms that it is not necessary to refer specifically to *caducidad* in a contract in order for that result to arise”.³⁵² However, that is not the issue at hand. The Claimants’ contention is not that *caducidad* must explicitly appear in the text of a contract for it to take place. Rather, it is that (in the absence of an express reference to *caducidad*) a contract must leave no room for interpretation that the parties intended for the non-compliance with a requirement to result in the forfeiture of a right.³⁵³ It is in this context that the Claimants submit that a clear indication of the right to be forfeited, the conduct necessary to avoid forfeiture, and the timeframe to undertake the necessary conduct, are optimal proxies to assess the parties’ intentions regarding *caducidad*.³⁵⁴ In fact, the doctrinal authorities referred to by Prof. García Montoya himself appear to generally support the Claimants’ position. For instance, one recognized authority states:

Caducidad (from the Latin: caducus: that has fallen) means: the forfeiture of an active subjective situation (of a right, in a broad sense) that occurs due to the failure to comply **with a certain conduct imposed** by a norm for the conservation of that situation when one already enjoys it [and that]

³⁴⁹ C-PHB, § 104; Mata Borjas ER II, **CER-4**, § 55

³⁵⁰ C-PHB, § 102.

³⁵¹ C-PHB, §104; Mata Borjas ER II, **CER-4**, § 55.

³⁵² García Montoya ER II, **RER-5**, § 68.

³⁵³ Mata Borjas ER II, **CER-4**, § 56-57.

³⁵⁴ C-PHB, § 106-107, referring to Section 5.02 of the Petrozuata AA (“If the costs and expenses set forth in the Control Estimate exceed the costs and expenses set forth in the Definitive Cost Estimate by more than 8% or, if mutually acceptable financing is not available, then each Shareholder shall have the option to proceed or terminate its participation in the Project. *Within 40 Business Days after receipt of the Control Estimate*, each Shareholder *shall notify the company in writing*, with a copy to the other Shareholder, of its decision to proceed with the Project or to terminate its participation in the Project, unless the Shareholders agree to do otherwise within this period of time. *Failure to so notify shall be deemed an election not to proceed...*”) (emphasis added by the Claimants)

presupposes the non-compliance with a specific conduct provided for during the precise term fixed by a norm.³⁵⁵

[...]

As a result, the holder of the right (in the broad sense), **whose specified inactivity** in such lapse produces the loss of the enjoyment or the expectation to take advantage of the established active subjective situation, has an interest . . . [not a duty] to comply with the act or to exercise the contemplated act **within the established preemptory term**, but merely has the burden (*carga*) to do so, but even though he is free to execute such act or exercise such action; if he does not do so, he will not avoid the *caducidad*.³⁵⁶

249. Another one explains:

Caducidad means the irreparable **loss of the right that one had to exercise an action**, or to effectuate any other legal act, **because the time available** within which that action could have been brought or that act performed **expired** [C]*aducidad* . . . may be established not only by law, but also by contract . . . Thus, there is *caducidad* when the exercise of a right or the performance of an act is dependent on the fact that it be **done within a fixed period**, in such a way that, as very well expressed by Count Mirabelli, “the term is so identified with the right that, **the expiration [of the term] produces the extinction of [the right]**.”³⁵⁷

250. A third one states:

5.4.2 Contractually established forfeiture of the action. All of the general terms of guaranties (*fianzas*) establish in two (2) different articles the *caducidad* of the action:

a) “The creditor must notify the company in writing of the occurrence of any fact which may give rise to a claim covered by this guaranty, within fifteen (15) business days after acquiring knowledge of such occurrence.” This provision does not address the *caducidad*, but it is obvious that if the creditor, who is aware of the act that may give rise to a claim, **does not notify the insurer within the set term**, it would forfeit the right to indemnification, given its noncompliance with the foregoing clause.³⁵⁸

251. It is therefore clear that, under Venezuelan law, forfeiture of an identified right can indeed be the contractually agreed effect for not performing a determined action within the pre-established timeframe to do so. The same view has been upheld by Venezuelan courts.³⁵⁹ It is thus evident that Article 14.3 of the Hamaca AA does not

³⁵⁵ García Montoya ER I, **RER-1**, § 127 (edition by Prof. García Montoya); José Mélich-Orsini, STATUTE OF LIMITATIONS AND CADUCIDAD (2002), García Montoya ER I, **RER-1 App. GM-117**, pp. 159-160 (emphasis added).

³⁵⁶ García Montoya ER I, **RER-1**, § 132 (edition by Prof. García Montoya); José Mélich-Orsini, STATUTE OF LIMITATIONS AND CADUCIDAD (2002), García Montoya ER I, **RER-1 App. GM-117**, pp. 161-162 (emphasis added).

³⁵⁷ García Montoya ER I, **RER-1**, § 129 (edition by Prof. García Montoya); Arminio Borjas, COMMENTARIES TO THE VENEZUELAN CODE OF CIVIL PROCEDURE, VOL. III (3rd ed., 1964), García Montoya ER I, **RER-1 App. GM-118**, pp. 115-116 (emphasis added).

³⁵⁸ García Montoya ER II, **RER-5**, § 68; Luis Ávila Merino, COMMERCIAL SURETY (2nd ed., 2005), García Montoya ER II, **RER-5 App. GM-160**, p. 103 (emphasis added).

³⁵⁹ *Aldo Caruso v. la Junta Directiva del Hipódromo Nacional y la Nación*, Federal and Cassation Court (Special Federal Chamber), Judgment dated March 6, 1951, 2(6) GACETA FORENSE 109 (April 1951), García Montoya

encompass a concession by the Claimants to forfeit their right to seek compensation for the damages caused by a DA.

252. First, unlike Section 9.07(e) of the Petrozuata AA for instance,³⁶⁰ nowhere does the Hamaca AA refer to the Claimants' right or entitlement to receive compensation for the harm caused by a DA. Article 14.3(a) of the Hamaca AA simply states that the Claimants were to "promptly [...] give notice" to the Respondents in the event the Claimants considered that a DA had occurred.³⁶¹
253. Second (even accepting that the right at stake is the one underlying a particular notice requirement, in this case, the right to compensation),³⁶² the term "promptly" in Article 14.3(a) is insufficient to constitute a peremptory interval further to which the right in question must be deemed forfeited. The Tribunal is aware that, relying on the opinion of Prof. García Montoya, the Respondents argue that, "according to the Supreme Tribunal of Justice, this type of timing requirement could not mean a delay of nearly ten years".³⁶³ Still, the Tribunal notes that the only decision by the Venezuelan Supreme Court invoked by Prof. García Montoya does not fully support his assertion.
254. In the *TICAPSA* case the Supreme Court held as follows:

In this regard, the Chamber notes that the word 'immediately' in the context used by the rule and according to the Dictionary of the Royal Academy of the Spanish Language, is a synonym of 'without delay,' so the expression 'immediately,' is understood as something that had to be done directly thereafter, without any type of delay.

[...]

Therefore, the interpretation by the petitioning company, according to which this provision meant that the registration of the debt could be sought "at any time," is erroneous.

Therefore, given that the credit contract at stake was executed on December 17, 1982, it is evident that the application for registration on February 23, 1983,

ER II, **RER-1 App. GM-119**, p. 141 ("It is *doctrina* that there is *caducidad* when the **exercise of a right** or the performance of an act are dependent on the fact that they are done within a period of time **predetermined** by a legal provision or by the **agreement** of the interested parties; that is, "that the **term** is in this manner so **identified with the right** so that [the term] having passed it produces the extinction of the right," therefore, **it would be sufficient to demonstrate such passing to establish that the holder of the right who did not act waived his right if he did not act when it was mandatory for him to do so**") (emphasis added); García Montoya ER I, **RER-1**, § 130.

³⁶⁰ Petrozuata, **C-1**, Section 9.07(e) ("**The right to compensation** of the Injured Shareholder under this Section 9.07 shall be limited to [...]") (emphasis added).

³⁶¹ Hamaca, **C-3**, Article 14.3(a).

³⁶² *Supra*, § 250.

³⁶³ García Montoya ER II, **RER-5**, § 64; R-PHB, § 547.

i.e., more than two months later, is untimely according to Article 62 of Decree No. 2.442 published in the Official Gazette No. 2.100, Extraordinary, of November 15, 1977 [sic], because it was not carried out “immediately” after the contract was executed.³⁶⁴

255. Notwithstanding the foregoing, the Supreme Court’s rationale in *TICAPSA* contains a series of caveats that questions its direct applicability to the case at hand:

- i. When promulgated (i.e. before the currency exchange control implemented in Venezuela in 1983), article 62 of Decree No. 2.442 of 1977 (“Article 62”) allowed domestic corporations to conclude foreign contracts and lines of credit for a period of 180 days (automatically renewable until revoked).
- ii. The authorization of Article 62 was subject to the “immediat[e]” registration of the foreign contracts or lines of credit after their conclusion.³⁶⁵
- iii. The 180-day authorization granted by Article 62 was revoked by Resolution No. 1.610 of 1983 (“Resolution 1610”). In turn, Resolution 1610 provided that the unregistered foreign contracts and lines of credit that had been concluded within last 180 days (under Article 62) had to be registered within the 5 days following to the promulgation of Resolution 1610.³⁶⁶
- iv. By the time Resolution 1610 was promulgated, the plaintiff’s foreign contract had not been certified as registered. Accordingly, the onus was on the plaintiff to make sure that its foreign contract was properly registered before the expiration of the 5-day peremptory term accorded by Resolution 1610. Nonetheless, the plaintiff failed to act accordingly.³⁶⁷

³⁶⁴ *Tierras Carreteras y Puentes, S.A. (TICAPSA) v. el Ministro de Hacienda*, Supreme Tribunal of Justice (Political-Administrative Chamber), Case No. 4.523, 13 December 2006, García Montoya ER II, **RER-5 App. GM-159**, p. 11 (hereinafter “TICAPSA”).

³⁶⁵ Decree No. 2.442, Regulation of the Common Regime for Treatment of Foreign Capital and Trademarks, Patents, Licenses and Royalties Approved by Decisions Nos. 24, 37, 37A, 70 and 103 of the Commission of the Cartagena Agreement, Official Gazette No. 2.100 (Extraordinary), published 15 November 1977, García Montoya ER II, **RER-5 App. GM-158**, Article 62 (“The entities shall register **immediately** with the Superintendent of Foreign Investments the [foreign] contracts and lines of credit entered into”) (emphasis added).

³⁶⁶ TICAPSA, García Montoya ER II, **RER-5 App. GM-159**, p. 7, quoting Article 2 of Resolution 1610 (“*Los contratos o líneas de crédito externo a plazos de hasta ciento ochenta (180) días o sus renovaciones, que hayan celebrado las empresas dentro de los ciento ochenta (180) días continuos anteriores a la presente fecha y que no hayan sido aún registrados, deberán ser presentados para su registro por ante la Superintendencia de Inversiones Extranjeras en un plazo no mayor de cinco (5) días hábiles, contados a partir de la fecha de la presente Resolución*”).

³⁶⁷ TICAPSA, García Montoya ER II, **RER-5 App. GM-159**, p. 12 (“*Ahora bien, conforme se evidencia de los autos, la solicitud de registro N° 117 de fecha 23 de febrero de 1983, no fue procesada por la Administración, por lo que aun cuando existía una solicitud, para la fecha en la que se publicó la Resolución N° 1.610 del Ministerio de Hacienda, antes citada, a saber, 1° de marzo de 1983, no se había verificado el registro del contrato, por lo que en todo caso la compañía recurrente podía haber solicitado nuevamente dentro de los cinco (5) días hábiles*”).

256. Thus the Supreme Court's *ratio decidendi* in *TICAPSA* was permeated by factual considerations not present in the current dispute between the Parties. On the one hand, the term "immediately" of Article 62 is distinct from the term "promptly" in Article 14.3(a) of the Hamaca AA. On the other hand, and more importantly, Resolution 1610 imposed a clear peremptory term that, in contrast, is lacking in the Hamaca AA. In addition, principles of efficiency and speed innate to the proper discharge of administrative functions also played an important role in the way the Supreme Court approached the case.³⁶⁸ It is not clear whether these principles, however, ought not be given nearly the same weight in a contractual setting.
257. The Tribunal therefore determines that the Claimants' belated compliance with the notice requirement *vis-à-vis* the Income Tax Increase does not entail, under Venezuelan law, the *caducidad* of their right to seek compensation for the harm caused by said DA. The Claimants' notice by way of their RfA is sufficient to comply with Article 14.3 of the Hamaca AA.
258. Accordingly, the Claimants are entitled to obtain compensation under the Hamaca AA for the harm caused both by the Expropriation and the Income Tax Increase as incurred, namely, from the year 2007 onwards.

e. *The alleged obligation to exhaust alternative remedies and the consequences thereof*

259. The Respondents argue that the AAs expressly obligated the Claimants to exhaust all domestic legal and administrative remedies as a pre-condition for obtaining compensation.³⁶⁹ To that effect, they rely on the Congressional Authorizations of the AA's, their negotiation history, the text of the AAs themselves, as well as on witness evidence. In short, the Respondents submit that such exhaustion requirement extended to remedies available to obtain "revocation", "reversal" or "relief [or remedy] from the application of" DAs, or actions that would "eliminate or lessen the impact" of the said DAs. In the Respondents' view, the Claimants' pursuit of ICSID proceedings

previstos a tal fin, el registro del contrato de crédito en cuestión, pues el artículo 2º de la referida Resolución aludía a las contrataciones que todavía no hubieran sido "registradas").

³⁶⁸ TICAPSA, García Montoya ER II, **RER-5 App. GM-159**, p. 12 ("*De esta forma, tomando en consideración que los términos y plazos previstos para la realización de trámites ante la Administración, atienden a los principios de eficacia y celeridad conforme a los cuales debe desarrollarse la actividad administrativa, de acuerdo con lo previsto en el artículo 30 de la Ley Orgánica de Procedimientos Administrativos, la Sala considera que la solicitud de registro de contrato de crédito externo, fue realizada por la actora extemporáneamente*").

³⁶⁹ R-PHB, § 558.

does not fulfil this requirement under the AAs, as it will not result in such a remedy.³⁷⁰ Accordingly, the Claimants' failure to comply with the "express" exhaustion requirement of both AAs "provides an additional ground for dismissal" of the DA claims in their entirety.³⁷¹

260. The Claimants do not regard the AAs as mandating exhaustion of alternate remedies. According to the Claimants, the pursuit of alternative remedies when faced with DAs "is not a pre-condition to bringing a claim for indemnification under the DA provisions".³⁷² In any event, the Claimants submit that ICSID arbitration was the only viable, practical and appropriate recourse available to them—a remedy that has been diligently pursued and must therefore be deemed exhausted.³⁷³
261. In this context, the Claimants stress that attempting to pursue local proceedings would have been futile.³⁷⁴ Relying on allegedly well documented deficiencies in the Venezuelan judicial system (burdened with systemic problems concerning the rule of law, separation of powers, and corruption), the Claimants submit that the "notion that [they], in 2007, could have achieved justice against the Chávez Administration in Venezuelan courts is absurd."³⁷⁵ On this basis, the Claimants argue that ICSID arbitration offered the only realistic chance of obtaining relief from the DAs at issue.³⁷⁶ In turn, the Respondents submit that "futility" is not a recognized defense under domestic law and further point to various remedies that the Claimants could have pursued to obtain remedies against the DAs.³⁷⁷
262. By and large, the Respondents' overall contention is premised on the following two assumptions:
- i. Before obtaining compensation for the damages caused by a DA, the Claimants were required to first exhaust local remedies intended to revoke or reverse the qualified measure at issue. In turn, this presupposes that the terms "revocation", "reversal", "relief from the application", "eliminate or lessen the impact", and "remedy from the application" (used either in the AAs and/or

³⁷⁰ R-PHB, §§ 557-559.

³⁷¹ R-PHB, § 565.

³⁷² C-PHB, § 161.

³⁷³ C-PHB, §§ 166-168.

³⁷⁴ C-PHB, § 169.

³⁷⁵ C-PHB, § 174.

³⁷⁶ C-PHB, § 174.

³⁷⁷ R-PHB, § 563.

their negotiating history), are all synonymous and distinct from legal actions claiming for damages (such as resorting to ICSID arbitration).³⁷⁸

- ii. Any remedy seeking to revoke, reverse, or obtain relief from the application of a DA was to be sought through domestic judicial and/or administrative proceedings. As such, ICSID arbitration was not the appropriate forum for the Claimants to have pursued compensation for any harm caused by DAs.³⁷⁹

263. As discussed further under each AA separately, the Respondents' position is untenable.

i. Under the Hamaca AA

264. Article 14.3(a) of the Hamaca AA states that, “[i]n the event that a Foreign Party considers that a Discriminatory Action has occurred, it promptly shall give notice thereof (a “Notice of Discriminatory Act”) to Corpoven Sub and shall indicate whether it believe[s] that such Discriminatory Action will result in Material Adverse Effect. Promptly following receipt of such a notice, Corpoven Sub shall inform the notifying Party of whether or not Corpoven Sub agrees that the notified action is a Discriminatory Action which may lead to a Material Adverse Effect. Following Corpoven Sub’s response, the claiming Party (the “Claiming Party”) [i.e. CPH] and Corpoven Sub shall promptly meet to **discuss any available legal remedies, such as court or administrative proceedings, that may be appropriate to reverse or obtain relief from the alleged Discriminatory Action**”.³⁸⁰

265. The Hamaca Congressional Authorization (“HCA”) established that the Claimants were to “exhaus[t] **all** remedies conferred upon [them] by the law to obtain the **revocation** of the discriminatory measures [in question]” before obtaining some form of compensation.³⁸¹ Materially identical language was suggested by the National Executive in the draft of the Conditions for the Hamaca Project,³⁸² and by the Congressional Bicameral Commission of Energy and Mines.³⁸³ That being said, the wording finally incorporated into the Hamaca AA is different. Article 14.3(a) of the Hamaca AA disposes of the “all remedies” requirement in the HCA. Instead it refers to

³⁷⁸ R-PHB, §§ 557, 562, fn. 1122.

³⁷⁹ R-PHB, § 558.

³⁸⁰ Hamaca AA, **C-3**, Article 14.3(a) (emphasis in the original, bold added); *supra* § 109.

³⁸¹ Hamaca Congressional Authorization, **R-011**, Twenty-First Condition (emphasis added); R-PHB, § 522.

³⁸² National Executive Report for Hamaca, **R-213**, p. 43; R-PHB, § 522.

³⁸³ Hamaca Bicameral Commission Report, **R-214**, p. 29; R-PHB, § 522.

“any available legal remedies”.³⁸⁴ From the term “cualesquiera” in the original Spanish version of the Hamaca AA,³⁸⁵ “any” is tantamount to “either” or even “whichever”.

266. The Hamaca AA also broadens the scope of the HCA by including other legal remedies that can be pursued in the interest of redressing the harm caused by a DA. Rather than limiting itself to remedies attaining the “revocation” of the DA,³⁸⁶ Article 14.3(a) of the Hamaca AA refers to legal remedies that “may be appropriate to **reverse** or **obtain relief** from the [application of the] alleged [DA]”.³⁸⁷ Contrary to the Respondents’ main assumption,³⁸⁸ it cannot be that the terms “revocation”, “rever[sal]” and “obtain relief from the [application]” are indistinguishable (i.e. all requiring to “annul[l] the “administrative act or the law that created the specific Discriminatory Actions”).³⁸⁹
267. First, failure to differentiate between the aforementioned terms would lead to the conclusion that the Parties sought to accord the same significance and meaning to different terms. This is even more so considering that Article 14.3(a) itself refers to the term “reverse” alternatively to the term “obtain relief” — the provision does not require a legal remedy to obtain both “revers[al]” of a DA and “relief” from the application of a DA.³⁹⁰ Conversely, had the Parties intended to exclude legal remedies whose primary objective is to secure the payment of compensation (such as ICSID arbitration), the “revocation” standard contained in the HCA would have been maintained.
268. Second, while Article 14.3(a) of the Hamaca AA somewhat departs from the Twenty-First Condition of the HCA,³⁹¹ it does not mean that both instruments are in conflict.

³⁸⁴ The Tribunal notes that, in its relevant part, the Spanish version of Article 14.3(a) of the Hamaca AA, reads as follows: “[...] **cualesquiera recursos legales disponibles** [...]” (Hamaca AA, **C-3** (original in Spanish), Article 14.3(a), p. 542). In this regard, the Tribunal is aware that the official English translation of the Hamaca AA translates the terms “*cualesquiera recursos legales disponibles*” as “formal legal remedies” (Hamaca AA, **C-3**, Article 14.3(a)). Nevertheless, the Tribunal agrees with the Respondents’ submission that, in this part, the original Spanish version of the Hamaca AA is better translated as “any available legal remedies” (Rejoinder, fn. 678; R-PHB, fn. 382). In this context, the Tribunal wishes to emphasize that the Hamaca AA was originally executed in Spanish and that, “[i]n the event of any conflict between the Spanish language document and its respective translation, the executed document shall prevail for all purposes” (Hamaca AA, **C-3**, p. 99). Incidentally, the Tribunal notes that the Petrozuata AA was also executed in a “single original in the Spanish language” (Petrozuata AA, **C-1**, Section 13.17).

³⁸⁵ Hamaca AA, **C-3** (original in Spanish), Article 14.3(a), p. 542 (“*cualesquiera recursos legales disponibles*”).

³⁸⁶ *Supra*, § 264.

³⁸⁷ Hamaca AA, **C-3**, Article 14.3(a) (emphasis added).

³⁸⁸ *Supra*, § 264.

³⁸⁹ Tr. (Day 7), 2014:13-2015:4 (Prof. García Montoya); R-PHB, fn. 1122.

³⁹⁰ I.e., reference is made to legal remedies that “may be appropriate to **reverse or obtain relief** from the [application of the] alleged [DA]” (emphasis added).

³⁹¹ *Supra*, §§ 265, 266.

The Twenty-Seventh Condition of the HCA provides that the Hamaca AA, “in its final version, before it is signed, shall be sent to the Ministry of Energy and Mines so that, prior to its approval by the President of the Republic in Council of the Ministers, it can be sent to the Legislative Chambers of Congress, so that they, by agreement, may verify that it meets these conditions”.³⁹² It is common ground that the process in the Twenty-Seventh Condition of the HCA was carried out.³⁹³ Consequently, the final version of the Hamaca AA was deemed HCA-compliant.³⁹⁴ The same is acknowledged by the Hamaca AA itself.³⁹⁵ As such, it is reasonable to accept that, in the event of “any inconsistencies between [the Congressional Authorization of April 1997]” and the [Authorization of the final Hamaca AA of June 1997], which is the [Hamaca AA] itself, the [Hamaca AA] controls”.³⁹⁶

269. Third, the record allows distinctions to be drawn between “revocation”, “rever[sal]”, and “obtain relief from the [application]” of a DA. “Revocation” is generally carried out by the same institution vested with the authority to issue the disputed measure in the first place. This coincides with the understanding of Prof. García Montoya that, pursuant to a “*recurso de reconsideración*”, the entity issuing a measure may be called upon to modify or revoke it.³⁹⁷ In turn, “rever[sal]” is arguably similar to a

³⁹² Hamaca Congressional Authorization, **R-11**, Twenty-Seventh Condition.

³⁹³ C-PHB, § 4(a); R-PHB, fn. 32.

³⁹⁴ Authorization of the final Hamaca AA, **C-62**; Tr. (Day 5), 1374:13-15 (Dr. Mommer).

³⁹⁵ Hamaca AA, **C-3**, Preamble (“Each of the above-named Parties has been authorized to enter into an association in accordance with the conditions authorized by the Congress of the Republic of Venezuela by Congressional Resolution (*Acuerdo*) dated April 24, 1997, published in the Official Gazette of the Republic of Venezuela No. 36,209, dated May 20, 1997 (the “Conditions”) and **specifically to enter into this Association Agreement** and agreements in the forms attached as Exhibits hereto pursuant to Congressional Resolution (*Acuerdo*) of the Congress of the Republic of Venezuela, dated June 11, 1997, published in the Official Gazette of the Republic of Venezuela No. 36,235 dated June 26, 1997”) (emphasis added). Evidently then, the Preamble of the Hamaca AA was concluded in accordance with the Congressional Authorization of 24 April 1997 and, in particular, pursuant to the Authorization of the final Hamaca AA of 11 June 1997. The Tribunal is aware that the Respondents also refer to Article 2.1(c) of the Hamaca AA in order to argue that the Hamaca Project was to be “carried out in accordance with the requirements set forth...in the Conditions” (Rejoinder, fn. 678; R-PHB, fn. 1114). With this the Respondents seem to suggest that the Congressional Authorization should somehow prevail over the text of the Hamaca AA. However, the Tribunal notes that Article 2.1(c) refers to the “activities contemplated in [the Hamaca AA]” (Hamaca AA, **C-3**, Article 2.1(c)). To wit, “all the vertically integrated activities necessary for the exploration, development, production, exploitation, blending, industrialization, transportation, refining, upgrading, and commercialization of Extra-Heavy Oil [...] and the transportation and use or disposal of By-Products in the Project Area” (Hamaca AA, **C-3**, Preamble, Article 2.1(a)). Although it could have, Article 2.1(c) does not touch upon the DA provisions of the Hamaca AA.

³⁹⁶ Tr. (Day 2), 295:7-14 (Mr. Manning). The Tribunal is aware that the Respondents refer to the May 1996 Hamaca Preliminary Term Sheet (**C-41**, p. 21; Rejoinder, § 352; R-PHB, §§ 186, 553). The Preliminary Term Sheet contains wording similar to both the draft (*infra*, fn. 399) and final HCA (*supra*, § 264). However, given the difference in drafting between the Preliminary Term Sheet and the final text of the Hamaca AA, the Tribunal considers that the former is of no real assistance to interpret the latter.

³⁹⁷ García Montoya ER I (original in Spanish), **RER-1**, § 137 (“*En primer lugar, las Demandantes tenían a su disposición el recurso de reconsideración administrativa para obtener la modificación o revocación de cualquier acto administrativo de carácter particular*”) (emphasis added). The Tribunal notes that the translated version of Prof. García Montoya’s First Legal Expert Report employs the term “withdrawal” rather than “revocation” (García Montoya ER I, **RER-1**, § 137), but considers that such a variation has no impact on the Tribunal’s view; Organic

revocation in that it may cause the challenged measure to cease to exist and generate effects. However, generally speaking, a measure tends to be reversed by an entity (judicial or administrative) different from the one issuing it in the first place. Regardless, it is not a foregone conclusion that one can exclusively “obtain relief from the [application]” of a DA by way of legal actions formally invalidating/terminating the DA at issue. First, ICSID arbitration would be an example in point whether it qualifies in the present context as one of the available remedies under Article 14.3(a) of the Hamaca AA. Second, in fact, nothing prevents “obtain[ing] relief from the [application]” of a DA through the payment of monetary compensation. Indeed, the Tribunal notes that the original Spanish version of the Hamaca AA does not even allude to “relief”. Rather it speaks in terms of “eliminating the **effects** of the [alleged DA]”.³⁹⁸ Naturally, such drafting is not necessarily concerned with the formal existence or nullity of the disputed DA. It mostly caters to redressing the harm suffered as a result of a discriminatory and unjust qualified measure. In this context, a decision awarding damages is apposite. Overall, the Respondents appear to confuse the phrase “obtain[ing] relief from the [application]” in the official translation of Article 14.3(a), with the phrase “released [or exempted] from the application” in the draft HCA.³⁹⁹ When contrasted, the latter may, to some extent, support the Respondents’ position. However, the wording of current Article 14.3(a) of the Hamaca AA does not.

270. Fourth, construing the terms “revocation”, “rever[sal]” and “relief from the [application]” as synonyms is problematic in light of the remainder of Article 14.3(a) of the Hamaca AA. In its relevant part, Article 14.3(a) states:

[A]ny net **proceeds** received by [CPH] as a result of [legal remedies appropriate to reverse or obtain relief from the alleged DAs], net of legal fees and costs, shall **be applied against any amounts** ultimately determined to be owing by Corporven Sub to [CPH] or **reimbursed** to Corporven Sub if Corporven Sub has previously made **payments** to [CPH] in respect of such DA.⁴⁰⁰

Law on Administrative Procedures, Official Gazette No. 2.818 (Extraordinary), 1 July 1981, García Montoya ER I, **RER-1 App. GM-123**, Articles 91, 93, 94; *infra*, § 284 ss.

³⁹⁸ Translation and emphasis added; Hamaca AA, **C-3** (original in Spanish), Article 14.3(a) (“*eliminar los efectos de la Accion Discriminatoria alegada*”).

³⁹⁹ Draft Hamaca Congressional Authorization, **R-144**, Twenty-First Condition (translation added); R-PHB, §§ 553-556. The Tribunal is aware that the Respondents translate the draft Twenty-First Condition as “relieve it from the application” of DAs. However, the original Spanish version reads “*liberarla de la aplicación de dichas actuaciones*”. In view of this, the Tribunal considers that the term “*liberar*” is better translated as “relieved” or even “exempted”. In any event, “relieve” (as translated by the Respondents) and “relief” (as in the official translation of Article 14.3(a) of the Hamaca AA) are not necessarily equivalent.

⁴⁰⁰ Hamaca AA, **C-3**, Article 14.3(a).

271. As argued by the Claimants, the foregoing envisages the eventuality “to offset” two different amounts.⁴⁰¹ On the one hand, any amounts received by the Claimants directly from the Respondents in accordance with the indemnity granted by the DA provisions. On the other hand, any amounts received by the Claimants from, in principle, the Government, as the result of a legal remedy obtaining relief from the application of a particular DA.⁴⁰² If the Hamaca AA is interpreted to preclude the Claimants from directly seeking an award on damages, then the right to offset would therefore be essentially devoid of meaning. The Tribunal cannot uphold such a construction.

272. In light of the above, the Tribunal determines that Article 14.3(a) of the Hamaca AA allowed the Claimants to make direct recourse to any legal remedy “appropriate to [...] obtain relief from the alleged [DA]”—including by way of seeking monetary compensation for the harm caused. The Tribunal’s conclusion is consistent with the relevant witness evidence relied upon by the Respondents. Contrary to the Respondents’ rather misleading portrayal of Mr. Manning’s testimony,⁴⁰³ Mr. Manning confirmed at the Hearing that Article 14.3(a) gave the Claimants two options when faced with a DA. On the one hand, seeking either the reversal (or the revocation) of the DA.⁴⁰⁴ On the other hand, attempting to obtain monetary relief directly from the Government.⁴⁰⁵

273. The issue now turns to whether ICSID arbitration was an appropriate forum for the Claimants to obtain the aforesaid compensation or monetary relief. In this regard, the Respondents submit:

[E]ven if the claim for damages asserted in the ICSID Arbitration could somehow be characterized as a remedy to obtain the “revocation,” “reversal” or “relief from” Discriminatory Actions, the Hamaca Congressional Authorization requires the foreign party to exhaust “all remedies conferred upon it by the

⁴⁰¹ C-PHB, §§ 161, 163(b); Tr. (Day 7), 2015:5-10 (Prof. García Montoya).

⁴⁰² Tr. (Day 2), 304:13-23 (Mr. Manning).

⁴⁰³ R-PHB, § 556. The Tribunal notes that the Respondents also refer to Mr. Appel’s testimony at the ICSID Hearing (R-PHB, § 555). Nevertheless, Mr. Appel simply confirmed that the Twenty-First Condition of the Congressional Authorization required the revocation of the DA at issue before the Claimants could obtain compensation. The Tribunal has already dealt with the differences between the Congressional Authorization and the Hamaca AA (*supra*, §§ 264-268).

⁴⁰⁴ Tr. (Day 2), 301:5-304:11 (Mr. Manning).

⁴⁰⁵ Tr. (Day 2), 307:3-25 (Mr. Manning) (“**Q.** Yeah. But if you can't get it reversed, what is your compensation? **A.** Well, under this--under this--under this provision, if we can't get it reversed, then Corpoven would reimburse us for that. **Q.** Right. **A.** But if--**in the same instance** we are asked or told, **specified in this Agreement that we need to pursue relief ourselves.** So, and then it goes on, that if we obtain relief from **another source--the Government, for example**--that any payment would be **offset** by Corpoven's obligation. **Q.** Right. **A.** Or if Corpoven had already paid us, for example-- **Q.** Right. **A.** --then they would be us. **Q.** Right. **A.** So, it's anticipating us going forward and getting **relief** and/or Corpoven paying us and getting **reimbursed**”) (emphasis added).

laws,” clearly referring to Venezuelan laws. Hamaca Association Agreement also required the foreign party to “diligently pursue” “any available legal remedies, such as administrative or judicial proceedings,” which again is not a reference to ICSID arbitration.⁴⁰⁶

274. The Tribunal notes that there is no material disagreement between the Parties as to arbitration being a valid legal remedy under Venezuelan law.⁴⁰⁷ Indeed, it would be difficult to argue otherwise. The 1999 Venezuelan Constitution expressly recognizes “alternative means of justice”, such as arbitration, as part of the Venezuelan justice system.⁴⁰⁸ Moreover, the Venezuelan Supreme Court has openly recognized the “**historical** [...] constitutionalization of arbitration as an alternative dispute resolution method, [...] this principle has been included in a number of **legislative texts**. [Accordingly, the Venezuelan Constitution] broadened the justice system to include alternative dispute resolution methods, including arbitration, **adding these mechanisms to the regular jurisdictional authority exercised by the Judicial Branch** [...]”.⁴⁰⁹
275. Against this backdrop there is no hesitation in finding that arbitration, and presumably, ICSID arbitration, can be considered either: (i) as a remedy conferred upon the Claimants “by the laws” of Venezuela, in accordance with the HCA;⁴¹⁰ and/or (ii) as an “available legal remed[y]”, in accordance with the Hamaca AA.⁴¹¹
276. Admittedly, the Hamaca AA speaks of “**any** available legal remedies, **such as administrative and judicial proceedings**”.⁴¹² As the Respondents argue, a reference to “administrative and judicial proceedings” is not a reference to ICSID arbitration.⁴¹³ However, it is not a definitive exclusion of ICSID arbitration either.

⁴⁰⁶ R-PHB, § 555.

⁴⁰⁷ C-PHB, § 23 (“Respondents do not deny that international arbitration is a valid remedy under Venezuelan law”); R-PHB, fn. 112 (“Professor Mata Borjas’ only comment on this point was his statement that “arbitration is a valid remedy under Venezuelan law.” [...] But the issue is **not** whether Venezuelan law permits the arbitration of disputes; **it is whether Claimants have met the requirements of exhaustion of “all” available remedies to obtain the “revocation,” “reversal” or “relief from” Discriminatory Actions by seeking a monetary award in the ICSID Arbitration.** As Professor García Montoya confirmed both in his Second Report and at the Hearing, the answer is clearly no”) (emphasis added). The Tribunal has already established that an award on damages (such as the one obtainable through ICSID proceedings) falls within the purview of Article 14.3(a) of the Hamaca AA (*supra*, §§ 264-272). Hence, all that remains standing in the Respondents’ contention is not taking issue with how arbitration (presumably including ICSID arbitration) is indeed a valid remedy under Venezuelan law.

⁴⁰⁸ 1999 Constitution, **CLA-36**, Articles 253, 258.

⁴⁰⁹ *Interpretation of the rule contained in the sole subsection of Article 258 of the Constitution of the Bolivarian Republic of Venezuela*, Supreme Tribunal of Justice, Constitutional Chamber, Decision No. 1.541, 17 October 2008, **CLA-39B**, pp. 14, 21-22.

⁴¹⁰ Hamaca Congressional Authorization, **R-011**, Twenty-First Condition; *supra*, § 264.

⁴¹¹ Hamaca AA, **C-3**, Article 14.3(a).

⁴¹² Hamaca AA, **C-3**, Article 14.3(a) (emphasis added).

⁴¹³ R-PHB, § 558.

Article 14.3(a) of the Hamaca AA is drafted in a non-exhaustive fashion. The term “such as” leads the Tribunal to believe that the reference to “administrative and judicial proceedings” constitutes an indication or suggestion — certainly not a limitation. Further, the term “any available legal remedies” certainly does not exclude ICSID arbitration either. Put simply, the Hamaca AA does not “anticipatorily define or delimit the alternative remedies that might be available or that the Claimants might choose to pursue”.⁴¹⁴ If it did, however, it would be questionable whether the Parties could be deemed to have waived “available legal remedies” (such as recourse to ICSID arbitration) before the existence of a dispute. Thus, Article 14.3(a) of the Hamaca, even more so than the HCA,⁴¹⁵ accommodates the possibility to resort to ICSID arbitration for the purposes of obtaining relief from the application of a particular DA. The Respondents’ argument that the Parties did not contemplate the possibility of ICSID arbitration when entering into the AAs changes nothing.⁴¹⁶ The caveated text of the Hamaca AA left the window open.⁴¹⁷ For the Tribunal this is sufficiently dispositive of the issue in favor of the Claimants.

277. For the reasons set out above, the Tribunal determines that, by resorting to ICSID arbitration, the Claimants have adequately discharged the requirement to pursue alternative legal remedies in accordance with Article 14.3(a) of the Hamaca AA. Consequently, the Tribunal need not address the Parties’ remaining arguments on the matter.

ii. Under the Petrozuata AA

278. Unlike with the Hamaca AA and the HCA,⁴¹⁸ the Petrozuata Congressional Authorization (“PCA”) contains no requirement of the exhaustion of alternative remedies with respect to DAs. The PCA’s Sixteenth Condition simply authorized the inclusion of provisions enabling the Respondents to compensate the Claimants when harmed by a DA.⁴¹⁹ The Petrozuata Bicameral Commission Report did contemplate

⁴¹⁴ C-PHB, § 167; Reply, § 227.

⁴¹⁵ In this context the Tribunal recalls its determination that, in the event of inconsistencies between the Congressional Authorization and the Hamaca AA, the latter must be deemed controlling (*Supra*, § 268).

⁴¹⁶ SoD, § 319; R-PHB, fn. 1121.

⁴¹⁷ Furthermore, the Tribunal notes that, albeit in a different context, the possibility of ICSID arbitration was contemplated in Article 17.8 of the Hamaca AA (**C-3**).

⁴¹⁸ *Supra*, §§ 259-264.

⁴¹⁹ Petrozuata Congressional Authorization, **C-25**, Sixteenth Condition (“Provisions shall be included in the Association Agreement that enable Maraven to compensate the other parties, on equitable terms, for significant adverse economic consequences directly resulting from decisions made by national, state or municipal administrative agencies or any changes in the law that, because of their content or purpose, result in an unjust discriminatory treatment of the Company or such other parties, always understood in their Capacity as such and

that, “in the event [a discriminatory and unjust qualified measure] takes place, the affected partner must exhaust the legal remedies that are available to it to **eliminate or lessen** the impact of such measures”.⁴²⁰ However, there is no mention of any exhaustion requirement in the actual draft Sixteenth Condition proposed by the Bicameral Commission for Congress’ consideration.⁴²¹ This explains why the PCA fails to require the exhaustion of alternative remedies in order for the Claimants to obtain indemnity against the Respondents.

279. Notwithstanding the foregoing, Section 9.07(d) of the Petrozuata AA does state that, “to the fullest extent practicable, [the Claimants were required to] commence and exhaust **all available legal and administrative actions** which may provide a **remedy from the application of such [DAs]**”.⁴²² In view of Section 9.07(d), the Respondents raise two main arguments. First, they argue that the requirement to pursue a “remedy from the application” of a DA in Section 9.07(d) concerns the standard set forth in the Petrozuata Bicameral Commission Report, namely, to pursue actions that would “eliminate or lessen the impact” of that DA. Accordingly, a claim for damages (as could be obtained by the Claimants in the ICSID Arbitration) does not meet that requirement—the requirement can only be satisfied by seeking the nullity of the DA.⁴²³ Second, the Respondents contend that, in any event, the Petrozuata AA requires the Claimants to exhaust “all” remedies, not just the one deemed “appropriate” by the Claimants.⁴²⁴
280. The Respondents’ first argument is tantamount to a *non-sequitur*. The requirement to seek a “remedy from the application” of a DA is akin to taking legal action to “eliminate or lessen the impact” of the said DA. Nevertheless, this does not mean that either standard precludes pursuing monetary compensation. Quite to the contrary, nothing points to the conclusion that one can only obtain “remedy from the application” of a DA through its invalidation or nullity. It is perfectly feasible to obtain such remedy through an award on damages (as through ICSID arbitration). It is telling

as parties to the Association Agreement, all without prejudice to the sovereign right to legislate inherent in the very existence of the national, state and municipal legislative branches”).

⁴²⁰ Petrozuata Bicameral Commission Report, Mommer WS II, **RWS-3 Mommer App. 36**, p. 25 (emphasis added).

⁴²¹ Petrozuata Bicameral Commission Report, Mommer WS II, **RWS-3 Mommer App. 36**, Annex A, p. 4.

⁴²² Petrozuata AA, **C-1**, Section 9.07(d) (emphasis added). Despite the disconnect between the PCA and the Petrozuata AA, the latter states that “The transactions contemplated in this Agreement have been approved by the Venezuelan Congress in accordance with Article 5 of the Organic Law as set forth in the Official Gazette Number 35.293 dated 9 September, 1993” (Petrozuata AA, **C-1**, Antecedents, § 11).

⁴²³ R-PHB, § 562.

⁴²⁴ R-PHB, § 562.

that the Respondents are unable to advance any substantive convincing argument to the contrary and basically only rely on the text of Section 9.07(d) to support their defense.

281. The Tribunal's view is further confirmed by the "offset" provision in Section 9.07(d). Similarly to the Hamaca AA,⁴²⁵ Section 9.07(d) of the Petrozuata AA contemplates that, should the Claimants be "ultimately successful in obtaining a remedy, or [otherwise obtain] **economic relief** intended to offset the [DA] as a result of another legislative or administrative action which was not generally applicable to most enterprises in Venezuela, then: (i) the [Claimants] shall refund [the Respondents] any discrimination compensation already payed which corresponds to the remedy or relief which has been obtained by the [Claimants]; and/or (ii) the damages shall be recalculated to take into consideration the remedy **or economic relief** obtained, as the case may be".⁴²⁶ Again,⁴²⁷ should it be understood that the Petrozuata AA precludes seeking remedy from the application of DAs through monetary compensation, then the "offset" provision of Section 9.07(d) would essentially be rendered without effect. Indeed, the explicit reference to "economic relief" by way of a distinct qualified measure suggests that, broadly, Section 9.07(d) is primarily concerned with the monetary consequence of a DA and not so much, if at all, with the formal validity of a DA within the Venezuelan legal system.
282. Overall, Article 14.3(a) of the Hamaca AA and Section 9.07(d) of the Petrozuata AA describe in similar terms the legal actions available to the Claimants to counter a DA. Accordingly, the considerations made by the Tribunal above with respect to the former are applicable, *mutatis mutandis*, to the latter.⁴²⁸ Nevertheless, Section 9.07(d) encompasses two particular elements distinguishing it from Article 14.3(a). First, Section 9.07(d) does not make any reference to remedies appropriate to "reverse" a DA.⁴²⁹ Second, lacking a requirement to exhaust alternative remedies before claiming indemnity from the Respondents, the PCA (as opposed to the HCA) does not call for the "revocation" of DAs.⁴³⁰ In fact, neither does the Bicameral Commission Report.⁴³¹ Put simply, nothing in the text of Section 9.07(d) or its negotiating history suggests

⁴²⁵ *Supra*, § 270; C-PHB, § 161; SoC, § 250.

⁴²⁶ Petrozuata AA, **C-1**, Section 9.07(d) (emphasis added); C-PHB, § 163(a).

⁴²⁷ *Supra*, § 271.

⁴²⁸ *Supra*, §§ 269-271.

⁴²⁹ *Supra*, fn. 387.

⁴³⁰ *Supra*, fn. 381.

⁴³¹ Petrozuata Bicameral Commission Report, Mommer WS II, **RWS-3 Mommer App. 36**, p. 25.

that the Claimants were expected to seek the annulment or invalidation of the DAs at issue. Therefore, taken as a whole, Section 9.07(d) appears to incentivize securing monetary compensation as an appropriate remedy from the application of a DA. Consequently, the Tribunal determines that any legal remedy resulting in an award on damages complies with the requirements set forth in Section 9.07(d) of the Petrozuata AA.

283. In this regard, the Tribunal notes that the Respondents have not explicitly raised the alternative argument regarding appropriate forum as in relation to the Hamaca AA.⁴³² For the sake of clarity and completeness, however, the Tribunal is of the view that such an argument would have in any event failed. In the context of the Petrozuata AA, the argument would hypothetically run as follows: assuming that an award on damages could somehow be characterized as a “remedy from the application” of a DA under Section 9.07(d), the Petrozuata AA required the Claimants to pursue such remedy in domestic proceedings—not in international investment arbitration. Yet, as already established, arbitration is a valid legal remedy under Venezuelan law.⁴³³ In turn, Section 9.07(d) of the Petrozuata AA requires the Claimants to pursue, *inter alia*, “legal [...] actions”. Notably, and contrary to the Hamaca AA,⁴³⁴ Article 9.07(d) does not even attempt indicating or suggesting, in a non-exhaustive fashion, which “legal actions” those might be.⁴³⁵ It follows that ICSID arbitration can be considered an appropriate forum to pursue compensation in accordance with 9.07(d) of the Petrozuata AA.

284. The Tribunal now turns to the Respondents’ second argument, namely, that recourse to ICSID arbitration would in any event be insufficient to satisfy the exhaustion requirement of Section 9.07(d), as Claimants were to exhaust “all” remedies — not just one.⁴³⁶ It is the Respondents’ contention that Venezuelan law accorded the Claimants three avenues to address each of the DAs at issue, namely: “(i) a petition for reconsideration (*recurso de reconsideración*), an administrative remedy to seek the modification or withdrawal of an administrative measure; (ii) an autonomous summary proceeding to guarantee constitutional rights (*acción de amparo constitucional autónomo*), an action to challenge the constitutionality of legislative,

⁴³² *Supra*, fn. 406.

⁴³³ *Supra*, §§ 273-275.

⁴³⁴ *Supra*, § 276.

⁴³⁵ C-PHB, § 167.

⁴³⁶ R-PHB, § 562.

administrative or judicial acts; and (iii) a petition for annulment (*recurso de nulidad*) to have declared null any act of the Government in conflict with the Constitution or laws”.⁴³⁷ Given that the claimants did not pursue any of these remedies, “[f]ailure to do so is failure to comply with the express requirements for obtaining compensation under the [DA] provisions of the [Petrozuata AA]. That failure precludes the assertion of [the Claimants’ DA claims]”.⁴³⁸

285. The Respondents’ position is unpersuasive. First, the Tribunal finds the Respondents’ emphasis on the literal meaning of the Petrozuata AA to be somewhat inconsistent. When making its argument on the matter in the context of the Hamaca AA, the Respondents heavily relied on the HCA to bring the “revocation” standard therein into the Hamaca AA.⁴³⁹ This, despite the fact that the Hamaca AA makes no reference to the “revocation” of a DA.⁴⁴⁰ Nevertheless, the Respondents have conveniently ignored that, as seen, the PCA contains no exhaustion requirement whatsoever.⁴⁴¹ To the same extent, the Bicameral Commission Report that the Respondents rely upon⁴⁴² simply states the following: “the affected partner shall exhaust the legal remedies within its reach to eliminate or lessen the impact of the [DAs]”.⁴⁴³ Once more, there is no indication that the Claimants were expected to exhaust each and every relevant remedy under Venezuelan law. Hence, if the Bicameral Commission Report (or any other pre-contractual document) is to be given interpretative value, as the Respondents submit should be the case,⁴⁴⁴ then the term “all” in Section 9.07(d) should be construed as equivalent to “any” (as in the Hamaca AA).⁴⁴⁵

286. Second, the term “all” in Section 9.07(d) is qualified by the term “to the fullest practicable” in the same provision.⁴⁴⁶ It may be the case that “practicable” constitutes

⁴³⁷ SoD, § 324.

⁴³⁸ SoD, § 324.

⁴³⁹ R-PHB, §§ 552, 554-557.

⁴⁴⁰ *Supra*, fn. 384-387.

⁴⁴¹ *Supra*, § 278.

⁴⁴² R-PHB, fn. 1125; *supra*, fn. 420-421.

⁴⁴³ Petrozuata Bicameral Commission Report, Mommer WS II, **RWS-3 Mommer App. 36**, p. 25 (translation by the Tribunal).

⁴⁴⁴ R-PHB, § 552-554, 559.

⁴⁴⁵ *Supra*, § 264.

⁴⁴⁶ Petrozuata AA, **C-1**, Section 9.07(d)(“The Injured Shareholder shall, to the fullest extent **practicable**, commence and exhaust **all** available legal and administrative actions which may provide a remedy from the application of such Discriminatory Actions”) (emphasis added).

a higher threshold than, for instance, “reasonable under the circumstances”.⁴⁴⁷ Notwithstanding the foregoing, “practicable” does suggest that the term “all” cannot be construed as an unfettered reference to “every” available legal remedy against the application of a DA. In the Tribunal’s view, context matters.

287. The Tribunal has already established that Section 9.07(d) primarily endorses the Claimants’ view on exhaustion of remedies whereby the Claimants could obtain monetary compensation for the harm caused by a DA (such as through ICSID arbitration).⁴⁴⁸ This is consistent with the Bicameral Commission Report. The Report contemplated that, should the Claimants fail to succeed in their legal remedies to “eliminate or lessen the impact” of a DA, they could: “request a renegotiation of the terms of the AA and/or of its complementary agreements with the aim of compensating the economic damage caused by the discriminatory measure, in the sense that [they] would be placed in a position that, from an economic point of view, would be equivalent to the one [they] would find [themselves] under had the measure not taken place”.⁴⁴⁹ Evidently, legal remedies only attaining the invalidity of a DA would have resulted in the Claimants (always) being unsuccessful in obtaining redress for the economic damage caused by the DA. In other words, the mere invalidity of a DA (i.e. its exclusion as an existant qualified measure generating effects) would have (always) required either the renegotiation of the Petrozuata AA or further proceedings.
288. In turn, the Tribunal notes that, according to the Claimants, neither the “*recurso de reconsideración*”,⁴⁵⁰ the “*acción de amparo*”, the “*recurso constitucional autónomo*”, nor the “*recurso de nulidad*”,⁴⁵¹ “would have resulted in compensation to the Claimants”.⁴⁵² The Respondents indeed submit that the foregoing actions should have been nonetheless initiated.⁴⁵³ Yet, they do not seem to contest the Claimants’

⁴⁴⁷ Letter from Mr. van Wagenigen to Mr. Carillo, 16 September 1993, § 58:14-16 (“[...] we nevertheless note that mitigating actions should be actions that are ‘reasonable under the circumstances’ not those that are ‘practicable’, which is a higher standard”).

⁴⁴⁸ *Supra*, §§ 280-282; SoC, § 251

⁴⁴⁹ Petrozuata Bicameral Commission Report, Mommer WS II, **RWS-3 Mommer App. 36**, p. 25 (translation by the Tribunal).

⁴⁵⁰ The Tribunal notes that the Parties’ experts agree that the *recurso de reconsideración* is only applicable to administrative acts, strictly speaking. Therefore, it is not at all relevant in the context of either the Expropriation or the Income Tax Increase (Brewer-Carías ER, **CER-5**, § 81; García Montoya ER II, **RER-5** § 127).

⁴⁵¹ *Supra*, § 284.

⁴⁵² R-PHB, § 173(b); Brewer-Carías ER, **CER-5**, § 82.

⁴⁵³ R-PHB, fn. 1134.

assertion that, had they done so, compensation would not have been obtained.⁴⁵⁴ As argued by the Claimants, ICSID proceedings appear to have constituted the only “viable alternative available”⁴⁵⁵ potentially resulting in actual compensation.⁴⁵⁶

289. For the reasons set out above, the Tribunal determines that, by resorting to ICSID arbitration, the Claimants have adequately discharged the requirement to pursue “practicable” alternative legal remedies in accordance with Section 9.07(d) of the Petrozuata AA. Consequently, the Tribunal need not address the Parties’ remaining arguments on the matter, including the Claimants’ position on the futility of any local remedies.

f. The Congressional Authorizations

290. The Tribunal notes that the Twenty-First Condition of the HCA states as follows:

In no case will it be understood that the application of [the DA provisions in the Hamaca AA] affects or restricts in any way the power of the governmental bodies (“*Órganos del Poder Público*”) to adopt measures pursuant to the Constitution and applicable Laws.⁴⁵⁷

291. In turn, the Sixteenth Condition of the PCA reads as follows:

[The DA provisions in the Petrozuata AA shall be included] without prejudice to the sovereign right to legislate inherent in the very existence of the national, state and municipal legislative branches.⁴⁵⁸

292. It is clear to the Tribunal that, in principle, the exercise of sovereign power cannot be limited by way of private agreement. That being said, nothing prevents contractual parties from envisaging the possible impact of State action in their undertaking and therefore providing for the contractual consequences in case of such eventuality.

293. Accordingly, Venezuela’s legislative, governmental, and regulatory power is by no means hindered by the AAs in general, and by the DA provisions therein in particular, nor by the Tribunal’s determinations pursuant to the latter. The Tribunal’s conclusions (summarized below)⁴⁵⁹ should not be construed as questioning the validity or the legitimacy of the Royalty Measure, the Extraction Tax, the Income Tax Increase, or

⁴⁵⁴ García Montoya ER II, **RER-5**, §§ 127-128;

⁴⁵⁵ C-PHB, § 169.

⁴⁵⁶ C-PHB, § 173(b)

⁴⁵⁷ Hamaca Congressional Authorization, **R-011**, Twenty-First Condition.

⁴⁵⁸ Petrozuata Congressional Authorization, **C-25**, Sixteenth Condition.

⁴⁵⁹ *Infra*, § IIIB.293.

the Expropriation. Indeed, the Tribunal makes no pronouncement on Venezuela's sovereign prerogative to adopt these measures. Rather, the Tribunal's findings simply ascertain whether the aforementioned measures qualify as DAs in accordance with the corresponding definition provided in the AAs and, if so, whether and to what extent the Respondents (not Venezuela) must indemnify the Claimants pursuant to the said mutually agreed contractual mechanisms: in line with the HCA and the PCA, Venezuela's sovereign rights remain intact.

g. Conclusion

294. In light of the above analysis, the Tribunal finds that:

- i. For a qualified measure to be characterized as a DA under the Petrozuata or the Hamaca AA, the said measure must be both: (i) "discriminatory"; and (ii) "unjust" as a result of causing SED or MAE.
- ii. The Expropriation constitutes a "discriminatory" qualified measure under both AAs. Therefore, it meets the first prong for being deemed a DA.
- iii. The Royalty Measure and/or the Extraction Tax cannot be considered "discriminatory" under either AA. Therefore, they do not meet the first prong for being deemed DAs.
- iv. The Claimants have failed to substantiate why the Royalty Measure, the Extraction Tax, and the Expropriation, are – when assessed cumulatively (i.e. the Overall Expropriation) - "discriminatory" pursuant to the DA provisions of either AA. Consequently, the Overall Expropriation cannot be considered "discriminatory". As such, it fails to meet the first prong for being deemed a DA.
- v. The Income Tax Increase constitutes a "discriminatory" measure under both AAs. Therefore, it meets the first prong for being deemed a DA.
- vi. Both the Expropriation and the Income Tax Increase are "unjust" for having caused either SED or MAE to the Claimants. Therefore, they both meet the second prong for being deemed DAs.
- vii. Thus the Expropriation and the Income Tax Increase meet both prongs for being deemed DAs. As such, the Expropriation and the Income Tax are the

only qualified measures at issue that can be characterized as DAs under either the Petrozuata AA or the Hamaca AA.

- viii. The AAs contain provisions requiring the Claimants to notify the Respondents should they consider that a DA has taken place. This requirement must be assessed in light of its object and purpose, namely, to inform the Respondents of how a particular qualified measure could trigger their contractual obligations under the DA provisions of each AA.
- ix. The record shows that, upon the occurrence of the Expropriation in 2007, the Respondents were aware of their indemnity obligations towards the Claimants in accordance with the DA provisions of the AAs. Accordingly, as far as the Expropriation is concerned, the notice requirements of the AAs were discharged in 2007.
- x. There is no evidence on the record clearly accounting for the Respondents' awareness of the "discriminatory" and "unjust" treatment resulting from the Income Tax Increase. None of the communications sent by the Claimants after the adoption of the Income Tax Increase can be considered as an attempt to inform the Respondents of how, in the Claimants' view, the Income Tax Increase constituted a DA. It was with the commencement of this arbitration that the Respondents gained (in accordance with the AA's provisions) cognizance of the potential characterization of the Income Tax Increase as a DA. Accordingly, the notice requirements in the AAs in relation to the Income Tax Increase were only discharged in 2014.
- xi. Section 9.07(e) of the Petrozuata AA precludes the Claimants from seeking compensation for all cash flows lost as a result of DAs prior to the year in which the AA's notice requirements are deemed satisfied. The Claimants are only entitled to receive compensation under the Petrozuata AA for the harm caused by: (i) the Expropriation, as from 2007; and (ii) the Income Tax Increase, as from 2013 (i.e. the fiscal year before the initiation of this arbitration).
- xii. The Hamaca AA lacks a provision akin to Section 9.07(e) of the Petrozuata AA. Further, the Respondents have failed to demonstrate that the Claimants' belated compliance with the notice requirement *vis-à-vis* the Income Tax Increase entails forfeiture of their right under the Hamaca AA to seek compensation for the harm caused by the said DA. The Claimants are

therefore entitled to obtain compensation under the Hamaca AA for the harm caused both by the Expropriation and the Income Tax Increase as incurred, namely, from the year 2007 onwards.

xiii. By resorting to ICSID arbitration, the Claimants have adequately discharged the requirement to pursue alternative legal remedies in accordance with Article 14.3(a) of the Hamaca AA and Section 9.07(d) of the Petrozuata AA.

C. THE WILLFUL BREACH CLAIMS

1. The Claimants' position

295. The Claimants submit that Articles 1264 and 1271 of the VCC⁴⁶⁰ impose an obligation to perform contracts, such that the “total non-performance of [the] contract” and/or the “intentional destruction of a contract” constitutes a “willful breach”, giving rise to an entitlement to damages.⁴⁶¹ The Claimants allege that the following two broad sets of actions constitute a “willful breach” of the Respondents’ contractual obligations, and engage their civil liability under Venezuelan law:

- (i) Failure to use “reasonable commercial efforts”: According to the Claimants, the Respondents were obligated to exercise “reasonable commercial efforts” with a view to ensuring the success of the Projects. They contend that the Respondents’ “reasonable commercial efforts” obligation arises from express provisions of the AAs,⁴⁶² and is informed by the context in which these contracts were entered into; as well as the duty of good faith set forth in Article 1160 of the VCC.⁴⁶³ In this context, the Claimants argue that the Respondents’ allegedly active role in

⁴⁶⁰ VCC, **CLA-2**, Article 1264 (“Obligations shall be performed exactly as they were undertaken. The debtor is liable for damages in the event of breach.”); Article 1271 (“The debtor shall be ordered to pay damages, both for the non-performance of the obligation as well as for the delay in the performance thereof, unless he proves that the non-performance or delay arises from an external cause not attributable to him, even though there has been no bad faith on his part.”)

⁴⁶¹ C-PHB, §§ 2, 26, 179; SoC, §§ 164-213; Tr. (Day 1), 69-91 (Claimant’s Opening Statement) (**Counsel**: “[...] A Party to a contract who acts in such a way as to disable itself from living up to its promises breaches that contract [...] and if such actions are carried out intentionally, the willfulness of the breach makes it indispensable, as a matter of principle, to have aggravated sanctions in order to discourage intentional conscious breach.”)

⁴⁶² The relevant provisions relied upon by the Claimants are Sections 2.04(a), 9.01(b) and Preambular Clauses 6 and 10 of the Petrozuata AA along with Articles 2.1(b), 10.4(a) and 10.5(a) of the Hamaca AA, which are set out in relevant part at §§ 335-337, *infra*.

⁴⁶³ C-PHB, §§ 187, 198-206; VCC, **CLA-2**, Article 1160 (“Contracts must be performed in good faith, and are binding not only with respect to what is expressed therein, but also with regard to all the consequences arising therefrom, according to equity, custom, or the Law.”).

collaborating with the Government and bringing about the destruction of the AAs constitutes a breach of this particular contractual obligation;⁴⁶⁴

- (ii) The non-performance of the AAs and the Guarantees: The Claimants submit that under the above provisions of the VCC, the Respondents were obligated to perform the AAs and the Guarantees. They argue that the Respondents' total non-performance of these contracts "from 2007 onwards"⁴⁶⁵ constitutes "the most fundamental breach" under Venezuelan law.⁴⁶⁶

296. Turning to the facts, the Claimants allege that the following acts/omissions by the Respondents constitute willful breaches of the above two broad obligations identified in the preceding paragraph:

(a) public statements by Messers. Ramírez and Del Pino, and Dr. Mommer, and others, in 2005, 2006, and 2007 calling for "nationalization", "migration", the dismantling of the *Apertura*, and the subjugation of PDVSA to the State;

(b) the roles played by Messers. Ramírez and Del Pino and Dr. Mommer from 2002 onwards regarding the transformation of the technocratic "old PDVSA" into the politicized "new PDVSA";

(c) the dual roles of Mr. Ramírez and Dr. Mommer at the Ministry and PDVSA from 2004/2005 onwards;

(d) PDVSA's desperate need for additional funds to meet its new social spending obligations in the lead-up to the final dispossession;

(e) PDVSA's genesis and development of *Plan Siembra Petrolera*...from 2005 onwards...[and the] confirmation that '[t]his plan came out of the PDVSA, the plan was developed in PDVSA.'

[...]

(h) Dr. Mommer's admitted role as the architect of the fiscal measures preceding the final taking (the Royalty Measure, the Extraction Tax, and the Income Tax Increase), including at times when he was employed solely by PDVSA;

⁴⁶⁴ The Tribunal also notes that the Willful Breach Claim has evolved since the beginning of this arbitration. In the Request, the Claimants alleged that the Respondents had willfully breached the AAs and the duty of good faith under Article 1160 of the VCC without any further substantiation. In their SoC and their Opening Statement during the Hearing, the Claimants appear to have clarified the Willful Breach Claims as a breach of various provisions of the AAs (as will be elaborated upon *infra*, §§ 335-337) which obligated the Respondents to exercise "reasonable commercial efforts" *vis-à-vis* the Projects. The final phase of this evolution was achieved in the C-PHB, where in addition to maintaining their argument regarding breach of various contractual provisions and the duty of good faith, the Claimants argued for the first time that the very non-performance of the AAs also constituted "the most fundamental of breaches" (C-PHB, § 26).

⁴⁶⁵ C-PHB, § 2(b).

⁴⁶⁶ The above two acts collectively constitute the Claimants' "Willful Breach Claims" and are respectively referred to as the "First Willful Breach Claim" and the "Second Willful Breach Claim."

[...]

(k) PDVSA's role in implementing the Nationalization Decree, and the fiscal benefits it reaped therefrom; and

(l) PDVSA and its subsidiaries' total non-performance of the AAs and the Guarantees during the course of 2007 and thereafter.⁴⁶⁷

297. In opposition to the Respondents' arguments, the Claimants submit that (i) the Willful Breach Claims are arbitrable as they arise out of a series of contractual breaches and do not seek to challenge the validity of a sovereign act by the Government, namely the promulgation of the 2007 Nationalization Decree;⁴⁶⁸ (ii) the Respondents cannot escape liability for their breaches by arguing that their actions/omissions were "in compliance with law" (i.e. the 2007 Nationalization Decree) because although this ground may be validly invoked in the event the law is external to the Respondents, the same does not hold true in the present case, where the Respondents were instrumental in both "*securing and implementing* the Nationalization Decree";⁴⁶⁹ (iii) in any event, the Respondents' active role in securing and implementing the 2007 Nationalization Decree also means that this Decree was attributable to the Respondents and they are therefore the "cause" of the Claimants' loss;⁴⁷⁰ and, finally, (iv) the Respondents' argument that the 10 year delay in asserting the Willful Breach Claims constitutes a "disloyal delay" under Venezuelan law is untenable, as the claims have been brought within the applicable statutory limitation period (i.e., 10 years) and, in any event, there was no obligation upon the Claimants to provide any notice of their Willful Breach Claims.⁴⁷¹

2. The Respondents' position

298. First and foremost, the Respondents challenge the foundation of the Willful Breach Claims on the ground that they are not arbitrable. The Respondents submit that "the only identifiable conduct of Respondents alleged by Claimants [as constituting willful breach,] consists of compliance with law in implementing the concededly sovereign

⁴⁶⁷ C-PHB, § 23. The Tribunal notes right from the start that out of the above statements, only the latter relates to the Respondents' alleged non-performance obligation, while the Claimants' focus is clearly on the Respondents' alleged breach of its "best efforts" obligation.

⁴⁶⁸ SoD, §§ 206-215.

⁴⁶⁹ Reply, § 5; SoC, §§ 202, 209.

⁴⁷⁰ C-PHB, §§ 28-30.

⁴⁷¹ C-PHB, §§ 417-430.

acts of the Government”, which is not arbitrable under Venezuelan law, as it is equivalent to challenging the validity of the sovereign act itself.⁴⁷²

299. Turning to the substance of the claims, the Respondents take the position that the Willful Breach Claims are “facially absurd” because none of the conditions for establishing civil liability (i.e., existence of an obligation, breach of the obligation, fault, damages and causal link) have been met.⁴⁷³ In that regard, they emphasize that throughout the proceedings the Claimants have struggled, and ultimately failed, to identify any express contractual obligations that would have been breached by the Respondents. At best, the Claimants have come up with an assorted cluster of provisions to support their theory of the existence of “best efforts” obligations. However, these arguments are unsustainable, as they have the effect of requiring the Respondents to defy the law and the Government. The Respondents thus emphasize that there are no express contractual obligations at the heart of the Claimants’ claim, and that, in any event, the Respondents have not breached any such purported contractual obligations.
300. The Respondents further submit that (i) the actions and omissions relied upon by the Claimants in support of the Willful Breach Claims were undertaken in compliance with the 2007 Nationalization Decree, and this precludes any fault and/or ensuing liability (i.e., the “compliance with law” defense);⁴⁷⁴ (ii) the Claimants have failed to establish a causal link between the purported breaches and their loss, which is indispensable for proving civil liability under Venezuelan law;⁴⁷⁵ and (iii) the fact that the Claimants failed to assert the Willful Breach Claims for a period of 10 years until the initiation of the present arbitration, constitutes a “disloyal delay” under Venezuelan law which precludes their right to assert such claims.⁴⁷⁶

3. Analysis

301. In light of the Parties’ positions set out above, the Tribunal considers the following issues to be the most essential for its decision on the Willful Breach Claims:

⁴⁷² R-PHB, § 353.

⁴⁷³ R-PHB, § 336.

⁴⁷⁴ SoD, §§ 250-259; R-PHB, §§ 427-460.

⁴⁷⁵ SoD, §§ 260-271; R-PHB, §§ 461-474. The Tribunal notes that while the Respondents have treated the question of their alleged fault and the requirement of a causal link as two separate elements/arguments concerning civil liability, the Claimants appear to have merged the two elements. The Tribunal’s treatment of these issues is elaborated upon at *infra*, §§ 443-487.

⁴⁷⁶ SoD, §§ 272-279.

- a. Are the Willful Breach Claims arbitrable?
- b. Have the Respondents breached their contractual obligations under the AAs and the Guarantees? If so, have they done this willfully?
 - i. Do the Respondents have an obligation to exercise “reasonable commercial efforts” under the specific provisions of the AAs relied upon by the Claimants? Has this obligation been breached?
 - ii. Do the Respondents have an obligation to perform the contracts, and has this obligation been breached?
- c. Is the Respondents’ liability precluded on account of their acts/omissions being “in compliance with law”?
- d. Is the Respondents’ liability precluded due to the absence of a causal link between the Claimants’ losses and the conduct purportedly constituting a breach of any obligation?
- e. Does the Claimants alleged failure to assert the Willful Breach Claims for a period of around 10 years preclude them from bringing the claims by reason of their “disloyal delay”?

302. The Tribunal now turns to the discussion of each of these issues in turn.

a. *Are the Willful Breach Claims arbitrable?*

303. As a threshold issue, the Respondents have challenged the arbitrability of the Willful Breach Claims.

304. The Respondents submit that the Willful Breach Claims at their core only challenge the implementation of the 2007 Nationalization Decree by virtue of the fact that the Claimants have only sought damages for the implementation of the 2007 Nationalization Decree and have specifically resisted claiming damages for the impact of any of the other qualified measures, such as the Royalty Measure, the Extraction Tax and the Income Tax Increase.⁴⁷⁷ In the Respondents’ view,

⁴⁷⁷ SoD, §§ 203-204; SoC, fn 467 (“Claimants have adopted a conservative position on damages in relation to the Willful Breach Claim. In particular, Claimants in this ICC arbitration limit damages for Willful Breach to losses arising from Respondents’ role in the 2007 dispossession, and do not claim damages for willful breach in relation to the fiscal measures that preceded the Respondents’ role in the dispossession.”); SoC, fn 616 (“Although it is likely that Respondents were directly involved in the implementation of those fiscal measures, Claimants are not pressing those damages under the Willful Breach Claim.”). The Tribunal also notes that according to the Respondents, the failure to claim damages for the other qualified measures in and of itself demonstrates the

challenging the “implementation” of the 2007 Nationalization Decree is effectively the same as challenging the Decree itself. Considering that the latter is an exercise of “sovereign authority”, any related claim falls within the exclusive jurisdiction of the Venezuelan courts and is therefore not arbitrable.

305. Placing the above facts within legal context, the Respondents rely on Article 151 of the Venezuelan Constitution, which stipulates that public interest contracts (such as the AAs) cannot contain clauses providing for the resolution of disputes in foreign jurisdictions (such as international arbitration) unless this is necessary due to the nature of the contract.⁴⁷⁸ The Respondents’ expert, Prof. García Montoya, explains that the question of arbitrability of a dispute arising out a public interest contract rests on the *nature of actions underlying the claim* being asserted, namely, it is only if the actions forming the basis of the claim are *iure gestionis* (as opposed to *iure imperii*), that the claim will be arbitrable.⁴⁷⁹
306. The Respondents also submit that in line with Article 151, the Venezuelan Congress approved the arbitration clause in the AAs for the purpose of enforcing claims brought on the basis of the contractual obligations arising pursuant to the DA provisions and *only* pursuant to the DA provisions. The arbitration clause was never intended to, nor could it, cover resolution of any and all claims, including those based on “the implementation of the very laws that Congress reserved the right to enact”⁴⁸⁰ as this would amount to challenging an *actum iure imperii*. According to the Respondents, such prohibition against arbitration also extends to the actions of a State company which is charged with implementing specific acts of the State. The Respondents thus contend that, as the only actions for which the Willful Breach Claims seek relief is the implemetation of the 2007 Nationalization Decree, it is squarely based on an *actum iure imperii*, and is therefore not arbitrable.⁴⁸¹

Claimants’ own lack of conviction in the merits of their Willful Breach Claims and should lead to their automatic dismissal (SoD, §§ 203-204; Rejoinder, §§ 214).

⁴⁷⁸ 1999 Constitution, **R-208**, Article 151 (*infra*, § 315). See also, Code of Civil Procedure, Official Gazette No. 4.209 (Extraordinary), published 18 September 1990, García Montoya ER I, **RER-1 App. GM-8**, Article 608 of the VCC (“Disputes may be submitted to one or more arbitrators, of odd number, before or during a trial, as long as they do not involve issues concerning the status, divorce or the separation of spouses, or any other subject-matter where a settlement is impermissible.”); Commercial Arbitration Law, Official Gazette No. 36.430, published 7 April 1998, García Montoya ER I, **RER-1 App. GM-9**, Article 3° of the Venezuelan Commercial Arbitration Law (“Disputes that are susceptible to a settlement, arising among persons capable of settling, may be submitted to arbitration. The following disputes are excluded: [...] (b) Those that directly concern sovereign attributions or functions of the State or of persons or entities of public law”).

⁴⁷⁹ García Montoya ER II, **RER-5**, §§ 87-90.

⁴⁸⁰ R-PHB, § 338; Tr. (Day 1), 161:12-162:16 (Respondents’ Opening Submissions).

⁴⁸¹ R-PHB, § 339.

307. For this reason, although the Respondents accept that the Venezuelan Congress may have authorized the arbitration clauses in the AAs and the Venezuelan Supreme Court may have affirmed their constitutional validity, they maintain that it is wrong for the Claimants to interpret these decisions to the effect that they end up “constitut[ing] a blank check to arbitrate non-commercial disputes and effectively write the prohibition [against arbitrating claims pertaining to acts *iure imperii*] [...] out of the Constitution.”⁴⁸²
308. In support of their argument, the Respondents also rely on the jurisprudence of the Venezuelan Supreme Court which has consistently held that arbitration clauses in public interest contracts must be narrowly construed.⁴⁸³ On this basis, they submit that regardless of the broad terms in which the arbitration clauses in the AAs have been drafted, they must be read narrowly so as to exclude the Willful Breach Claims.⁴⁸⁴
309. In response to the Respondents’ arguments, the Claimants submit that the Respondents’ position lacks any merit and that they merely seek to distort the Willful Breach Claims in order to escape liability. The Claimants oppose the Respondents’ characterization of both the factual basis of the Willful Breach Claims as well as their interpretation of Article 151 of the Venezuelan Constitution pertaining to arbitrability of disputes arising out of public interest contracts.
310. Negating the allegation that the only action forming the basis of the Willful Breach Claims is the “implementation of the Nationalization Decree”,⁴⁸⁵ the Claimants first clarify that:

[The] Willful Breach Claim is based on Respondents’ **failure to perform their commercial obligations under the AAs and to promote the joint venture**. Chief among the breaches was Respondents’ involvement in procuring the Nationalization Decree, but what is at issue in these proceedings is not the

⁴⁸² R-PHB, § 349.

⁴⁸³ SoD, § 212-214 (emphasis added); *Minera Las Cristinas, C.A. (MINCA) v. Corporación Venezolana de Guayana (CVG)*, Supreme Tribunal of Justice (Political-Administrative Chamber) (Venezuela), Case No. 2002-0464, Judgment dated 15 July 2004, García Montoya ER I, **RER-1 App. GM-5**, p. 39 (A mining contract was cancelled by a sovereign act. The Court held that the arbitration clause in the contract had to be construed narrowly); *Elettronica Industriale S.P.A. v. Compañía Anónima Venezolana de Televisión (C.A.V.T.V.)*, Supreme Tribunal of Justice (Political-Administrative Chamber), Case No. 2001-100, Judgment dated 5 April 2006, García Montoya ER I, **RER-1 App. GM-6**, p. 99. See *contra* Brewer-Carías ER, **CER-5**, § 43 (Prof. Brewer Carías distinguishes the case cited by the Respondents on the basis that it involved the declaration of nullity of the sovereign act and not only the contract). See *also*, García Montoya ER II, **RER-5**, § 93; Brewer-Carías ER, **CER-5**, § 43.

⁴⁸⁴ SoD, § 212; García Montoya ER I, **RER-1**, § 22

⁴⁸⁵ SoC, §§ 65-66.

validity of that government act, **but rather Respondents' liability for their own unlawful conduct.**

[...]

[They] do not ask the Tribunal to evaluate the constitutionality or validity of sovereign powers of the Venezuelan State, nor to opine on the "implementation of sovereign decisions".⁴⁸⁶

311. As regards the Respondents' interpretation of Article 151, the Claimants contend that instead of focusing on the actions underlying individual claims and characterizing these as *iure gestionis* or *iure imperii* as the Respondents have done, regard must be had to the commercial nature of the contract as a whole. Should this interpretation hold true, then disputes arising out of public interest contracts can be submitted to arbitration as long as such public interest contracts are commercial in nature.⁴⁸⁷
312. Tying together the aforementioned factual premise and legal interpretation, the Claimants' expert Prof. Brewer Carías explained during his cross-examination that, while "arbitration cannot refer to matters that are related to the possibility of the State to adopt *imperii* acts", such as imposing a tax or enacting a law, a party can "make a claim...for damages based on an act *iure imperii*". This is because the subject matter of the challenge is not "the act of the State [or] the power of the State to adopt the decision".⁴⁸⁸ Rather what is sought to be challenged are the actions undertaken by the Respondents in a separate and independent commercial capacity (as the Claimants contractual partner under the AAs), even if these actions are based on or arise out of the exercise by the State of its separate sovereign power to enact laws. Accordingly, the Claimants conclude that they seek to challenge PDVSA's violations of its own contractual obligations under the AAs – which are commercial in nature – and therefore the Willful Breach Claims are clearly arbitrable.
313. To add weight to this interpretation, the Claimants underline that the arbitration clauses in the AAs were expressly authorized by the Venezuelan Congress⁴⁸⁹ for resolving "**[a]ny dispute or claim arising in connection with, [or] relating in any way to [...]** the Association Agreement and/or the Project activity".⁴⁹⁰ Accordingly, they argue that the Tribunal's jurisdiction over the Willful Breach Claims is properly

⁴⁸⁶ C-PHB, § 452.

⁴⁸⁷ C-PHB, § 493.

⁴⁸⁸ Tr. (Day 6), 1688:21-1699:13 (Prof. Brewer-Carías).

⁴⁸⁹ As discussed at *infra*, §§ 321-322.

⁴⁹⁰ Hamaca AA, **C-3**, Article 17.2; Petrozuata AA, **C-1**, Section 13.16; Petrozuata Guaranty, **C-2**, Section 4; Hamaca Guarantee, **C-4**, Section 13.

founded upon the very terms of the arbitration clauses, which are capacious, and therefore should be interpreted as such.⁴⁹¹

314. In view of the above, it appears to the Tribunal that the arbitrability of the Willful Breach Claims hinges on the resolution of the following two issues, to which the Tribunal turns next: (i) what is the correct legal test for determining arbitrability of disputes arising out of public interest contracts such as the AAs; and (ii) do the claims that allegedly give rise to a willful breach in this case satisfy such legal test.

i. What is the legal test for determining arbitrability of disputes arising out of public interest contracts?

315. In light of the submissions traversed above, it seems to the Tribunal that the Parties agree that the AAs are public interest contracts and that the issue of arbitrability has to be decided in light of Article 151 of the Venezuelan Constitution,⁴⁹² which provides as follows:

In public interest contracts, **unless inapplicable by reason of the nature of such contracts**, a clause shall be deemed included even if not expressed, whereby any doubts and controversies which may arise concerning such contracts and which cannot be resolved amicably by the contracting parties, shall be decided by the competent courts of the Republic, in accordance with its laws and shall not on any grounds or for any reason give rise to foreign claims.⁴⁹³

316. Thus, the general rule under Article 151 appears to be that all disputes arising out of public interest contracts are subject to the exclusive jurisdiction of the local courts. However – and as both Parties seem to agree – where the contract is commercial or industrial in nature, the Congress can grant its authorization for disputes arising out of such a contract to be submitted to arbitration.⁴⁹⁴

317. In a nutshell, the disagreement between the Parties boils down to the legal test that needs to be applied in order to determine the arbitrability of a particular claim that has been raised under the AAs, which are admittedly public interest contracts. As opposed to the Claimants which rely on the *nature of the contract as a whole* as being determinative of the arbitrability of the claim, the Respondents focus instead on the *nature of the actions underlying each claim* and assert that if the claim challenges actions undertaken in sovereign as opposed to commercial capacity, it is not

⁴⁹¹ C-PHB, § 440.

⁴⁹² SoD, § 207; C-PHB, § 436.

⁴⁹³ 1999 Constitution, **R-208**, Article 151 (emphasis added).

⁴⁹⁴ C-PHB, § 436; Tr. (Day 6), 1691:9-1691:24 (Prof. Brewer-Carías); Garcia Montoya ER II, **RER-5**, §§ 87-90.

arbitrable. The Respondents maintain that the Willful Breach Claims do not assert any actions apart from the “implementation of the Nationalization Decree”, which, being an act *iure imperii*, is not arbitrable. The Claimants, on the other hand, dispute such characterization of their claims and underline that they have challenged several breaches by the Respondents of their own contractual obligations, the implementation of the 2007 Nationalization Decree being only one of such breaches.

318. The Tribunal is not persuaded by the Respondents’ interpretation of arbitrability under Article 151 of the Venezuelan Constitution. As the Claimants have rightly pointed out, arbitrability under Article 151 relates to the nature of the contract as a whole. The Tribunal notes that an exception to the default rule of exclusive jurisdiction over public interest contracts vesting in the domestic courts is made when the *nature of the contract* is commercial. Nothing in the language of Article 151 suggests that regard must be had to the nature of the actions that underlie the specific claim. For that matter, by the Respondents’ own admission, Article 151 captures the well known distinction between acts *iure imperii* and acts *iure gestionis* that exists in the law of sovereign immunity and the resultant principle of restricted jurisdictional immunity.⁴⁹⁵ Under this principle, when States behave as commercial actors and enter into contracts with private entities, they are not entitled to jurisdictional immunity for disputes arising out of such contracts *if the nature of the underlying contract* is commercial.⁴⁹⁶
319. Accordingly, in the Tribunal’s view, in order to establish the arbitrability of the Willful Breach Claims it is sufficient that first, the *contract* is commercial in nature; and second, that the disputes giving rise to a willful breach arise out of such commercial contractual obligations, regardless of the nature of actions that underlie each claim.

⁴⁹⁵ SoD, §§ 210-211.

⁴⁹⁶ Ian Brownlie, PRINCIPLES OF PUBLIC INTERNATIONAL LAW (2008), **RLA-149**, p. 332 (Prof. Brownlie writes on the modalities of restrictive immunity as follows: “In any event the courts and governments of a number of states apply the principle of restrictive immunity and therefore it is necessary to examine the modalities of its application. The method most commonly referred to is the distinction between acts *jure imperii* (acts of sovereign authority) and acts *jure gestionis* (acts of a private law character), and the merits of this distinction must be examined. The basic criterion appears to be whether the key transaction was accomplished on the basis of a private law relationship, such as a contract”), p. 335 (“The following criteria are indicative of the competence *ratione materiae* of the legal system of the forum state, but are not conclusive of the question of competence either individually or collectively: (a) In the absence of agreement to the contrary, the legal system of the forum state is competent in respect of proceedings relating to a commercial transaction to which a foreign state (or its agent) is a party; (b) The legal system of the forum state is competent in respect of proceedings concerning legal disputes arising from relationships of a private law character to which a foreign state (or its agent) is a party; the class of relationships referred to includes (but is not confined to) the following legal categories: commercial contracts; contracts for the supply of services; loans and financing arrangements; guarantees or indemnities in respect of financial obligations; ownership, possession, and use of property; the protection of industrial and intellectual property...”). See also ILC Draft Articles on Jurisdictional Immunities of States and their Property with Commentaries, **RLA-152**, p. 13; Benedetto Conforti, INTERNATIONAL LAW (2014), **RLA-150**, p. 272.

The Tribunal thus proceeds to assess whether the facts alleged to give rise to the Willful Breach Claims satisfy the test set out herein.

ii. Do the Willful Breach Claims satisfy the legal test?

320. In making this assessment, the Tribunal needs to consider (i) the nature of the contract and (ii) the facts giving rise to the Willful Breach Claims.

First prong of the legal test: the nature of the contract

321. Turning to the first requirement of arbitrability of the contract, it is undisputed that the AAs are commercial in nature.⁴⁹⁷ In this context, the Tribunal attaches particular weight to the fact that the Venezuelan Congress specifically authorized the AAs for both projects – along with the ICC arbitration clauses contained therein – on three separate occasions:

- On 10 August 1993, the Venezuelan Congress approved the conditions for the Petrozuata Project, including the ICC arbitration clause by way of the Petrozuata Congressional Authorization;⁴⁹⁸
- On 8 April 1997, the Venezuelan Congress similarly approved the conditions for the Hamaca Project, including the arbitration clause by way of the First Hamaca Congressional Authorization; and⁴⁹⁹
- On 11 June 1997, the Venezuelan Congress approved the final text of the Hamaca AA itself including the ICC arbitration clause in its present form.⁵⁰⁰

322. Moreover, in each case, the approved arbitration clauses were worded in the widest possible terms, covering the resolution of “[a]ny dispute or claim arising in connection with,” or “relating to,” the Association Agreement and/or the Project activity.⁵⁰¹ The text of these arbitration clauses attests to the fact that any commercial dispute anchored in AAs and the Guarantees is arbitrable. The Tribunal has noted the Respondents’ argument – and the Supreme Court’s jurisprudence – that disputes pertaining to sovereign actions and decisions should not be rendered arbitrable and pulled into the ambit of the arbitration clause even if the arbitration clause uses broad

⁴⁹⁷ C-PHB, § 437; R-PHB, § 349.

⁴⁹⁸ Petrozuata Congressional Authorization, **C-25**, Twenty Third Condition.

⁴⁹⁹ First Hamaca Congressional Authorization, **C-59**, Twenty Second Condition.

⁵⁰⁰ Second Hamaca Congressional Authorization, **C-62**.

⁵⁰¹ *Supra*, §§ 80-84.

language.⁵⁰² But this argument is contingent on the Tribunal making a finding that the Claimants are in fact challenging a sovereign decision as opposed to breaches of various provisions of the AAs. Therefore this argument relates to the factual scope of the Willful Breach Claims, namely, the second prong of the test set forth by the Tribunal above, and will be examined subsequently.⁵⁰³ The argument does not, *in abstracto*, limit the scope of application of an arbitration clause, devoid of the factual context.

323. Furthermore, the Tribunal has also noted the Respondents' argument that the Congress' approvals were limited to disputes pertaining to the DA provisions alone and were intended for enforcing the commercial remedies that were expressly made available under the AAs against the Governments' DAs. However, such interpretation is not borne out by the language of the arbitration clause or that of the HCA or PCA. Nor can it be reconciled with the Respondents' position on the criteria to determine arbitrability, which contradicts their own admission of arbitrability of the DA Claims. Like the Willful Breach Claims, the DA Claims are also based on the Respondents' contractual obligations arising pursuant to purported discriminatory actions by the Government in relation to the Projects. Therefore, both the DA Claims and the Willful Breach Claims seek damages for the after-effects of a sovereign decision – in this case the qualified measures and the Expropriation – without challenging the validity of the Governments' decisions. Thus, to use the Claimants' words, which the Tribunal finds relevant, "[i]f the DA Claim is arbitrable, as Respondents concede, then so too must be the Willful Breach Claim, for the latter claim is no more 'sovereign' in nature than the former."⁵⁰⁴

324. In sum, the Tribunal concludes that the AAs and Guarantees are commercial contracts and that commercial disputes which may arise in connection with or relating to contractual obligations under the AAs and the Guarantees are arbitrable. The Tribunal's conclusion is reinforced by the fact that the Venezuelan Supreme Court has also upheld the constitutional validity of analogous arbitration clauses in other association agreements on the premise that the *underlying contract* (and not the claim) was commercial in nature.⁵⁰⁵ Once again, the Tribunal has noted the Respondents' caveat that the Supreme Court's decision cannot be treated as a blank

⁵⁰² *Supra*, fn 483.

⁵⁰³ *Supra*, § 314.

⁵⁰⁴ C-PHB, § 449; Reply, § 153.

⁵⁰⁵ *Appeal for Nullity filed by Simón Muñoz Armas and others*, Supreme Court of Justice (Temporary Plenary Session), Exp. No. 812-829, Judgment dated 17 August 1999, **CLA-3**.

check to arbitrate non-commercial disputes. However, this argument too implicates the second prong of the test set out by the Tribunal, i.e. the factual scope of the Willful Breach Claims, to which the Tribunal turns next.

Second prong of the legal test: facts giving rise to the Willful Breach Claims

325. The Tribunal needs to determine which actions form the basis of the Willful Breach Claims and whether they give ground to breaches of contractual obligations under the AAs, or as the Respondents seem to believe, actually constitute a veiled challenge to a sovereign decision. The Tribunal recalls that the Respondents' key argument in this respect is that the only identifiable conduct (of the Respondents) forming the basis of the Willful Breach Claims is their action of implementing the Government's sovereign decisions, namely the 2007 Nationalization Decree, and this renders the claims non-arbitrable.
326. Contrary to the Respondents' position, the Tribunal finds that the Willful Breach Claim is more broadly based. The factual premise of the Willful Breach Claims comprises a chain of inter-connected events that led to the ultimate Expropriation.⁵⁰⁶ The implementation of the 2007 Nationalization Decree by the Respondents is but one act that the Claimants complain about.
327. Thus, as will be elaborated in greater detail below,⁵⁰⁷ the Claimants have argued that the Respondents were obligated under the AAs and the Guarantees to exercise reasonable commercial efforts to ensure the success of the Projects and to not act in a manner that would jeopardize the Claimants' interest therein as their joint venture partner. These obligations, according to the Claimants, included the duty to lobby the Government to ensure that the most favorable tax and royalty regime applied to the Parties and the Projects and to take decisions that would further the business of the Project and ensure its continuity. Instead, in the Claimants view, the Respondents actively collaborated with the Government of Venezuela, they became its "mouthpiece" and assisted in the development and implementation of the various steps that brought about the destruction of the AAs and the ultimate expropriation of the Claimants' interest in the Projects. According to the Claimants, such active

⁵⁰⁶ C-PHB, Appendix A, Answers to Tribunals' Questions, Question No.3.

⁵⁰⁷ *Supra*, §§ 331-417.

involvement on the part of the Respondents constitutes a direct violation of their best efforts obligations under the AAs and their general obligation to act in good faith.⁵⁰⁸

328. In the circumstances, the Tribunal is satisfied that the Willful Breach Claims comprise allegations of multiple breaches of the Respondents' obligations under the AAs and the Guarantees (and not merely the implementation of the 2007 Nationalization Decree) and are thus squarely arbitrable. Article 151 of the Venezuelan Constitution does not limit the arbitrability of claims like the one in the case at hand in any way.

b. *The legal test for establishing the Respondent's alleged liability as a result of the Claimants' Willful Breach Claims*

329. In order to establish the Respondents' contractual liability for which compensation is payable, pursuant to Articles 1264 and 1271 of the VCC, the Claimants need to show that all of the following elements for establishing civil liability are satisfied: (i) existence of a contractual obligation; (ii) breach of the obligation; (iii) culpable character of the breach or fault, which is not excused by the intervention of a "non-attributable external cause"⁵⁰⁹; (iv) resulting damages and (v) a causal link between the breach and the damages.⁵¹⁰ The Parties appear to agree on the legal test for establishing civil liability and have addressed each of these elements in their submissions at length.

330. With due regard to the legal test for civil liability set out above, the Tribunal will begin its analysis by first assessing the Parties' positions with respect to the existence and the breach of any obligation, i.e., elements (i) and (ii) of the civil liability test mentioned above. These two elements will first be assessed in the context of the Claimants' First Willful Breach Claim, which is based on the Respondents' alleged breach of the "reasonable commercial efforts" obligation (Section III.C.3.c of the Award) and subsequently in the context of the Claimants' Second Willful Breach Claim, which is based on the Respondents' alleged non-performance of the AAs (Section III.C.3.d of the Award). Thereafter, Section III.C.3.e will address the defenses raised by the Respondents to preclude their liability for any purported breaches, which are based on elements (iii) and (v) of the civil liability test. In this

⁵⁰⁸ *Supra*, §§ 296.

⁵⁰⁹ The Tribunal notes that the Parties have taken different positions on which aspect of the civil liability test "non-attributable external cause" relates to. For the Claimants, it relates to the element of fault (i.e., element (iii) of the test). For the Respondents, it relates to the element of causation (i.e., element (v) of the test). The Tribunal addresses these arguments at *infra*, §§ 443-454.

⁵¹⁰ Garcia Montoya ER I, RER-1, App. GM-30; RLA-135, 133.

regard, the Tribunal will address the Parties' arguments as to whether the Respondents are exonerated from liability due to the 2007 Nationalization Decree – on the basis of which the Expropriation took place –being external to the Respondents and therefore not constituting either the factually or the legally sufficient cause for the Claimants' loss. Lastly, in light of the Tribunal's assessment of the above four elements, the Tribunal will make its determination on damages, if any (element (iv) of the civil liability test).

c. *First Willful Breach Claim: the existence and breach, if any, of the Respondents' "reasonable commercial efforts" obligation (i.e., elements (i) and (ii) of the civil liability test)*

i. The Claimants' Position

The relevant contractual provisions

331. As to the first two elements of civil liability, i.e. the existence of an obligation and its breach, the Claimants argue that the Respondents were expressly obligated to use "all reasonable commercial efforts" to "assure the success of the Projects" pursuant to Sections 2.04(a), 9.01(b) and Preambular clauses 6 and 10 of the Petrozuata AA, as well as Articles 2.1(a), 10.4(a) and 10.5(a) of the Hamaca AA. As will be elaborated in greater detail below, the Claimants contend that the Respondents have breached this contractual obligation because the "Respondents themselves played a key role in the campaign of destruction of the Association Agreements from which they – above all – benefitted".⁵¹¹
332. The Tribunal recalls that according to the Claimants the scope of the Respondents' "reasonable commercial efforts" obligation is informed by (i) the text of the AAs and the Guarantees; (ii) the context in which these contracts were entered into; and (iii) the duty of good faith set forth in Article 1160 of the VCC.⁵¹²
333. The Tribunal will examine each of the Claimants' above assertions in more detail.
334. First, the Claimants submit that the plain text of the AAs and Guarantees obligated the Respondents to promote the success of the Projects through the use of "best efforts" or "reasonable commercial efforts".

⁵¹¹ Tr. (Day 1), 36:9-43:10 (Claimants' Opening Submissions); SoC, §§ 177-212.

⁵¹² C-PHB, § 187.

335. With respect to the Petrozuata AA, they rely on Sections 2 and 9, which state in the relevant parts as follows:

Section 2.04(a)

In order to accomplish and give effect to this Agreement, each Party covenants and agrees to vote, or cause to be voted, the Shares owned by it in accordance with the terms and provisions of this Agreement. Each Party **also covenants and agrees that it will at all times act, take all such steps as may be reasonably within its power and use reasonable commercial efforts to cause [Petrozuata C.A.] to act in accordance with the provisions of this Agreement and the other Business Contracts.** Accordingly, the Parties hereby commit themselves to contribute their Ownership Percentage shares of the investments necessary to construct the upgrading facility and to produce and transport the Extra-Heavy Oil needed to supply said upgrading facility as set forth in the description of the Project attached as Exhibit “F” and made a part hereof, and any modification thereto duly agreed by the Parties.⁵¹³

Section 9.01(b)

The Parties will cause [Petrozuata C.A.] to conduct its operations in accordance with its Charter, in order to implement the Business Contracts, the Investment and Business Plan and the Annual Work Program and Budget for [Petrozuata C.A.] as in effect from time to time. **Each of the Parties also agrees that at all times it will vote, act, take all steps reasonably necessary and use all reasonable commercial efforts to carry out and assure the success of the Project.** The operations of [Petrozuata C.A.] shall be carried out in accordance with, and subject to all laws applicable thereto and be so conducted as to avoid the application of any penalty, sanction or loss thereunder to [Petrozuata C.A.]. **None of the Parties will take any action not contemplated herein that may adversely affect the performance by [Petrozuata C.A.] of its obligations under its Charter or under any Business Contract.**⁵¹⁴

336. The Claimants submit that these obligations are reinforced by the covenants in the Preamble of the Petrozuata AA, which reads in the relevant parts as follows:

Clause 6

The Parties wish to enter into this Association Agreement for the purpose of (i) establishing, operating and owning [Petrozuata C.A.] in Venezuela, (ii) carrying out the transactions contemplated in the Business Contracts and (iii) [taking all other steps] [carrying out all other activities]⁵¹⁵ reasonably necessary to implement and develop the Project.

Clause 10

Each of [PDVSA Petróleo] and [Conoco] is committed to the development of the Assigned Area, the production and upgrading of Extra Heavy Oil and the sale of

⁵¹³ Petrozuata AA, C-1, Section 2.04(a) (emphasis added)

⁵¹⁴ Petrozuata AA, C-1, Section 9.01(b) (emphasis added).

⁵¹⁵ Two alternative translations provided by the Parties. For avoidance of doubt, the Tribunal notes that it does not find the differences to be vital in the assessment of the issues at stake.

Upgraded Crude Oil and by-products, in accordance with the said Investment and Business Plan.⁵¹⁶

337. Turning to the Hamaca AA, the Claimants rely on the following provisions:

Article 2.1(b)

It is the intention and plan of the Parties to this Agreement that all Project activities be conducted in a safe manner preserving the environment in accordance with applicable law and **so as to make the best economic utilization of Project resources and assets to achieve the maximum benefit for the Project and the Parties in their capacity as participants in the Association.**⁵¹⁷

Article 10.4(a)

The Parties shall use their best efforts, in accordance with Venezuelan law, to obtain, within sixty (60) days of the date of this Agreement, a favorable royalty regime for the Project and to have such regime, including (i) the Fiscalization Point, (ii) a mechanism for determining the royalty rate payable on Extra-Heavy Oil produced by the Parties in their capacity as participants in the Association and (iii) a mechanism for determining the value of Extra-Heavy Oil at the Fiscalization Point, evidenced in an agreement with the relevant governmental authorities. **The Parties shall use their best efforts to maintain at all times application to the Parties, in their capacity as participants in the Association, of the most favorable royalty regime permitted by law,** taking into account the existing legal regime and the economics of the Project, as such factors may change from time to time. **All formal approaches to, and meetings with, Venezuelan governmental authorities to establish such items shall be directed by the [Corpoguanipa],** provided that [Corpoguanipa] shall provide timely prior notice of each such approach or meeting to each Foreign Party and any Foreign Party, upon its request, may participate in such approach or meeting.⁵¹⁸

Article 10.5(a)

The Parties are undertaking the Project on the basis that, in accordance with the Conditions, (i) all activities conducted by the Parties in their capacity as participants in the Association, and all Project activities conducted by the Association Entities, shall receive the treatment provided for in the sole paragraph of Article 9 of the Venezuelan Income Tax Law and (ii) the Project activities, as conducted by the Parties and the Association Entities, shall not be subject to taxation by municipalities (patente de industria y comercio) or states. **The Parties shall use their best efforts such that there will be applicable to the Parties at all times, in their capacity as participants in the Association, the most favorable tax regime permitted by law,** taking into account the existing legal regime and the economics of the Project, as such factors may change from time to time.⁵¹⁹

338. Similarly under the Guarantees, the Claimants submit that PDVSA unconditionally guaranteed that it will “perform, or cause to be performed, each and every one of”,

⁵¹⁶ Petrozuata AA, C-1, Preamble Clauses 6 and 10.

⁵¹⁷ Hamaca AA, C-3, Article 2.1(b) (emphasis added)

⁵¹⁸ Hamaca AA, C-3, Article 10.4(a) (emphasis added).

⁵¹⁹ Hamaca AA, C-3, Article 10.5(a) (emphasis added).

the obligations and duties of the PDVSA Subsidiaries under the AAs.⁵²⁰ Therefore, according to the Claimants, PDVSA was equally obligated to ensure performance of the aforementioned obligations under the AAs.

339. Second, the Claimants submit that the abovementioned contractual obligations must be understood in light of the long term commitments made by the Respondents as part of the *Apertura Petrolera*. In particular, the *Apertura Petrolera* sought to attract foreign investment in the EHCO projects, *first* by reassuring investors that their investments would not be subjected to sudden nationalization as had occurred in 1975, pursuant to the 1975 Nationalization Law;⁵²¹ and *second*, by providing key incentives and protections against technical and commercial risks. Given this backdrop, the Claimants emphasize that it was incumbent upon the Respondents to act as “any co-venturers would have...in an undertaking of the size, risk, and length of the Associations”⁵²² and to protect the Projects against detrimental Government measures.⁵²³
340. The Claimants thus submit that the cumulative effect of the above express contractual obligations, along with the context in which the AAs and Guarantees were entered into, is to impose upon the Respondents an obligation “to promote and protect these long-term Projects, as well as [a] duty of performance under Articles 1264 and 1271 of the VCC.”⁵²⁴
341. Third, the Claimants submit that the contours of the Respondents’ obligations are clarified by Article 1160 of the VCC which stipulates that “[c]ontracts must be performed in good faith, and are binding [on the parties] not only with respect to what is expressed therein, but also with regard to all the consequences arising therefrom,

⁵²⁰ Petrozuata Guarantee, **C-2**, Sections 2 and 3; Hamaca Guarantee, **C-4**, Clauses 2, 3 and 4.

⁵²¹ The 1975 Nationalization Law was enacted on 29 August 1975 under a constitutional mandate which permitted the State to reserve certain industries, exploitations for reasons of national interest. Pursuant thereto, all activities related to the exploration and exploitation of oil were “reserved to the State”. PDVSA was created pursuant to this law. Article 5 provided for limited private participation in the oil industry through association agreements between PDVSA and private entities. The Claimants contend that the 1975 Nationalization Law immediately cancelled all existing oil concessions in Venezuela and reserved to the State all activities relating to exploration, exploitation, manufacturing, refining, and marketing of petroleum and petroleum by-products. Moreover the Government provided only partial compensation to the private international oil companies whose projects and rights were expropriated. According to the Claimants, this reduced faith amongst investors. Consequently, when Venezuela sought to attract investors to invest in the EHCO projects, PDVSA allegedly provided reassurances against the possibility of sudden and under-compensated nationalization. See SoC, pp 15 – 38; Organic Law that Reserves to the State the Industry and Trade of Hydrocarbons, Extraordinary Official Gazette No.1.769, published on 29 August 1975, **R-278**.

⁵²² Reply, § 72.

⁵²³ C-PHB, §§ 195-197.

⁵²⁴ C-PHB, § 187.

according to equity, custom, or the Law.”⁵²⁵ The Claimants’ expert, Prof. Mata Borjas explained during the Hearing that “the commitments and the duty of good faith [in the context of] a [long-term and collaborative] joint venture between two Parties for a very specific purpose [such as the Projects] [...] is different⁵²⁶ in that it “entails loyalty, cooperation and an honest behaviour that ensures that the other party’s legitimate expectations will be satisfied”.⁵²⁷ It also implies a duty to refrain from conduct that impedes or frustrates the contractual interest of and/or results in a disadvantage or detriment to the counter-party.⁵²⁸ On this basis, the Claimants submit that:

The obligation of good faith under Venezuelan law requir[ed] Respondents to honor the objective expectations of Claimants as their contracting partners and to cooperate with Claimants to accomplish the long-term purposes of the AAs and Guarantees [...] Indeed, various provisions of the AAs expressly refer to “good faith,” and this basic principle of Venezuelan law served as the backdrop against which Claimants and Respondents made the agreements that they did.⁵²⁹

The Respondents’ actions that allegedly breach the “reasonable commercial efforts” obligation under the AAs and the Guarantees

342. Turning to the facts, the Claimants submit that through the following actions and/or chain of events, the Respondents played a key role in the destruction of the AAs and the Projects, thereby breaching their contractual obligation to exercise “reasonable commercial efforts”:

- 1) The transformation of the “old PDVSA” into the “new PDVSA” and the role played by key officials of the PDVSA in the Overall Expropriation;
- 2) The Respondents’ failure to object to the qualified public measures i.e. the Royalty Increase, the Extraction Tax and the Income Tax Increase;
- 3) The Respondents’ role in confiscating the Claimants’ Project interests; and
- 4) Links between the Respondents and the Government.

343. Elaborating upon each of the above elements, the Claimants make the following submissions.

⁵²⁵ VCC, **CLA-2**, Article 1160, *supra*, fn 463.

⁵²⁶ Tr. (Day 7), 1943:18-1944:6 (Prof. Mata Borjas).

⁵²⁷ Mata Borjas ER I, **CER-2**, §§ 58-60.

⁵²⁸ Mata Borjas ER I, **CER-2**, fn 46.

⁵²⁹ C-PHB, § 206; Petrozuata AA, **C-1**, Section 6.08(c), Section 11.04(b)(i), Section 13.14; Hamaca AA, **C-3**, Article 11.5(b), 14.1(a).

(1) *The transformation of the “old PDVSA” into the “new PDVSA” and the role played by key PDVSA officials*

344. According to the Claimants, the first step in the Respondents’ campaign of destruction was the transformation of Respondent PDVSA. As noted by the Claimants’ expert, Prof. Mares, in 2003 the technocratic and autonomous “old PDVSA” underwent a fundamental transformation. Around 18,000 PDVSA employees were removed and replaced with managers and directors that sympathized and complied with the policies and programs of the Chávez administration. Thus, a political and subservient “new PDVSA” emerged, which functioned simultaneously “as an operating company, development agency, political tool and government cash cow”.⁵³⁰
345. The Claimants allege that the new PDVSA not only *complied with* the State measures/policy that led to the Expropriation, but played a critical role in *creating* such policy. The focus of this ‘new PDVSA’ was to “get working...as an operating, auxiliary arm of... the Ministry”,⁵³¹ dismantling the *Apertura Petrolera* and restoring “Full Oil Sovereignty”.⁵³²
346. The complicity of the “new PDVSA” was allegedly channeled through PDVSA officials such as Messrs. Ramírez, Rodríguez and Del Pino and Dr. Mommer. According to the Claimants, by virtue of their roles as President and/or Directors of PDVSA these individuals were legally bound to promote and protect the Projects. However, the Claimants submit that

All of these individuals, who led the Respondents during the relevant period (2004 to 2007), were ideologically opposed to the *Apertura*, the AAs and the Guarantees, and they set about – and indeed succeeded in – destroying them. These individuals refused to protect the Projects from the measures that deprived Claimants of the royalty and tax regime that had been adopted to induce their vast investment in the Orinoco Oil Belt. And once the Projects were at a stage where PDVSA was theoretically able to take over operations on its own, Respondents, for reasons of politics and money, actively promoted their nationalization.⁵³³

347. Turning to the role played by each of the above named officials, the Claimants make the following allegations:

⁵³⁰ C-PHB, § 213; Mares ER, **CER-1**, §§ 64-73.

⁵³¹ Ramirez 2005 Speech, **C-205**, p.10.

⁵³² C-PHB, § 216; Rondón de Sansó, THE LEGAL FRAMEWORK OF HYDROCARBONS THE IMPACT OF OIL IN VENEZUELA (2008), **CLA-8**, pp. 383-384.

⁵³³ C-PHB, §§ 240-241.

- Mr. Ramírez was the personification of the “new PDVSA”. From November 2004, he acted as both President of PDVSA as well as Minister of Energy and Mines. Crucially, the Articles of Incorporation and By-laws of PDVSA – which had previously stipulated a separation between the Government and the management of PDVSA – were specially amended to allow Mr. Ramírez to serve in both of these capacities.⁵³⁴ This unique “dual role” allowed Mr. Ramírez to implement the objective of giving PDVSA control over the AAs: He “[...] (as PDVSA President) submit[ted] decisions to *himself* (as energy minister) for shareholder approval” and was heavily relied on by President Chávez to both formulate and carry out oil policy.⁵³⁵ According to the Claimants it is inconceivable that Mr. Ramírez would have been able to maintain the division in his mind between the “dual hats” he wore.
- In addition, Mr. Ramírez was personally involved in the drafting and promulgation of the 2007 Nationalization Decree. The Claimants’ expert, Prof. Brewer Carías, attested to the fact that “as a matter of Venezuelan law and practice, Mr. Ramírez would have been legally obligated to present, endorse, and promote the Nationalization Decree to secure its enactment.”⁵³⁶ Moreover, the Respondents’ expert, Prof. García Montoya, also confirmed that “the one that formulates the policy in a given field is the Ministry, in this case Minister Ramírez – [which] he has to provide to the President in the Council of Ministers, and there is where it is

⁵³⁴ Decree No. 3,299, Partial Amendment of Decree No. 2184 of 10 December 2002, Including the Act of Incorporation/By-laws of Petróleos de Venezuela S.A., Official Gazette No. 38,081, published on 7 December 2004, **C-112**, Article 2; Decree No. 3,264 (reprint), Appointing Mr. Rafael Darío Ramírez Carreño as Chairman of the Empresa Estatal Petróleo de Venezuela S.A. (PDVSA), Official Gazette 38,081, published on 7 December 2004, **C-113**.

⁵³⁵ C-PHB, §§ 226-227.

⁵³⁶ Brewer Carías ER, **CER-5**, § 72; Tr. (Day 6), 1611:12-1612:13 (**Q.** Does the Organic Law of Public Administration, the second text which has been quoted from here, add anything with respect to the responsibilities of Ministers? **A.** Yes. The Organic Law on Public Administration is precise, assigning to the Ministers, Article 60, as the “organs of the National Executive in charge of the formulation, adoption, monitoring, evaluation of policies, strategies, general plans, programs and projects on the matters of their respective competence, over which points of law they exercise authority.” **I must say that the word in Spanish is—they exercise “rectoría,” the full authority on the matters of their own competency. In that character, the Ministers are the responsible of the National Executive in the definition of the policies and the execution of the policies of the Government. They have to present the matters before the President. They have to present the matters before the Council of Ministers, and ... according to Article 86 of the Law, the procedure for preparing this draft legislation, as it’s said in this Article, “will begin in the competent Ministry or Ministries preparing the corresponding draft.” The Ministers are the ones, therefore, that have to draft the draft legislation. They have to propose it before the Council of Ministers. “The Head of the Ministry proposing the draft,” as it says in the Article, “must submit to the Council of Ministers the matter,” and then, according to what the Council of Ministers could decide, they have to follow up the decisions and resubmit the matter to the Council of Ministers in order for it to be adopted as a Decree-Law if it is the case of the legislation or be sent to the National Assembly for the sanctioning by the National Assembly. So, the Ministers are the key persons responsible of the drafting and the defending these acts before the Council of Ministers.)** (emphasis added)

approved.”⁵³⁷ Thus, according to the Claimants, the Government could not have issued the 2007 Nationalization Decree without Mr. Ramírez’s active participation.

- Mr. Rodríguez, Mr. Ramírez’s predecessor as PDVSA’s president, co-authored the 2001 Hydrocarbons Law which formed the basis of the qualified public measures that were enacted against the Projects. The Claimants’ expert, Prof. Mares, notes that the decision to abrogate the Royalty Reduction Agreement (pursuant to which the royalty rate applicable to the EHCO Projects had been reduced from the ordinarily applicable 16.66% to 1%) was linked to Mr. Rodríguez’s criticisms of the *Apertura Petrolera* and his staunch support for “full oil sovereignty”.⁵³⁸
- Mr. Del Pino played an instrumental role in the forced “migration” of the Projects from private ownership to PDVSA pursuant to the 2007 Nationalization Decree. He subsequently represented PDVSA in the negotiations between Conoco and the Government in 2007 in relation to the Expropriation. He eventually succeeded Mr. Ramírez in the dual role of PDVSA President and the Minister of Energy and Mines.⁵³⁹
- Dr. Mommer was another oil nationalist who worked closely with Mr. Ramírez and Mr. Rodríguez, and also held dual positions – as Vice Minister of Hydrocarbons and as a Director on the Board of PDVSA. Moreover, as he confirmed at the Hearing, he was an outspoken critic of the *Apertura Petrolera* and the Association Agreements,⁵⁴⁰ and played a personal role in “conceptualiz[ing] and promot[ing] each of the fiscal measures preceeding the final dispossession of the Claimants’ interests in the Projects” namely, the qualified measures.⁵⁴¹

(2) *The Respondents’ failure to use “best efforts” to resist the qualified measures*

348. The Claimants submit that the Respondents breached their contractual obligations by failing to resist the changes being made by the Government to the fiscal regime applicable to the Projects. The Claimants maintain that the Respondents had assumed the obligation to use “reasonable commercial efforts” to ensure that the

⁵³⁷ Tr. (Day 8), 2078:10-12, 15-20 (Prof. García Montoya).

⁵³⁸ C-PHB, §§ 230-231; Mares ER, **CER-1**, § 68(e).

⁵³⁹ C-PHB, § 232.

⁵⁴⁰ “*The MUD seeks to rescue the Apertura Petrolera from the rubble of the Fourth Republic*”, Interview with Dr. Mommer of 17 September 2012, **C-219**, p.4.

⁵⁴¹ Tr. (Day 5), 1437:5-1438:21; Tr. (Day 6), 1498:23-1499:21, 1505:5-10, 1507:17-24, 1519:1-1520:3 (Dr. Mommer).

most favorable fiscal regimes applied to the Projects, only because they were purportedly in a position to influence the Government in relation to its policies.⁵⁴² Consequently, it fell upon the Respondents to act in good faith and protest and/or lobby against measures such as the Income Tax Increase, the Royalty Measure and the Extraction Tax. Instead, the PDVSA officials not only eschewed any attempts to engage with the Government, but they in fact “played a significant role in developing and promoting these measures.”⁵⁴³

349. For instance, the Claimants draw attention to Dr. Mommer’s affirmation during the Hearing that he “conceptualized and promoted” each of the qualified measures;⁵⁴⁴ and that he did so when he was not even part of the Government, but employed solely as a Managing Director of a PDVSA subsidiary. Moreover, during the Hearing, Dr. Mommer went so far as to say that “it would be absolutely absurd [for the Claimants] to go to PdV” to seek protection from the qualified measures or the Expropriation.⁵⁴⁵ This, they say, goes to show that Dr. Mommer was acting in clear breach of his duty of good faith and loyalty towards PDVSA’s joint venture partners under the AAs.⁵⁴⁶ Similarly, Mr. Ramírez, acting in his capacity as the Minister, was responsible for imposing the Royalty Measure upon the AAs.⁵⁴⁷ Finally, the Claimants also contend that the same PDVSA officials were equally responsible for getting the Board of Directors of the Projects to approve each of the qualified measures when they were enacted.⁵⁴⁸

(3) The Respondents’ role in the confiscation of the Claimants’ interest in the Projects

350. The Claimants assert that the Respondents played an active and integral role in the destruction of the Projects and a decisive role in the Expropriation.

⁵⁴² Manning Statement WS I, **CWS-2**, § 28; Mata Borjas ER I, **CER-2**, § 45.

⁵⁴³ SoC, §§ 109-125.

⁵⁴⁴ Tr. (Day 6), 1498:23-1499:21, 1505:5-10, 1507:17-24, 1519:1-1520:3 (Dr. Mommer).

⁵⁴⁵ Tr. (Day 6), 1517:19-21 (Dr. Mommer).

⁵⁴⁶ C-PHB, §§ 250-251.

⁵⁴⁷ Letter from Minister Ramírez to PDVSA President Del Pino, 11 February 2005, **R-114**, pp. 1-2.

⁵⁴⁸ The Petrozuata C.A. Board of Directors approved the application/implementation of the Royalty Measure at a Board Meeting held in November 2004 (Minutes of the Special Meeting of the Board of Directors of Petrolera Zuata, Petrozuata C.A., 30 November 2004, **C-110**) and the Hamaca Board of Directors followed suit in a meeting held in December 2004 (Hamaca Board of Directors Slideshow Presentation, 2 December 2004, **C-111**, Slide 5). Similarly, the Extraction Tax was approved by the Hamaca Board of Directors at their meeting in December 2006 (Minutes of Special Meeting Board of Directors of Petrolera Hamaca S.A., 18 December 2006, **C-153**, p. 4); Heinrich WS I, CWS-3, §§ 14, 18.

351. They submit that contrary to the Respondents' insistence that the Expropriation was solely President Chávez's "brainchild", public speeches by PDVSA officials in 2005 and 2006 clearly show that the Respondents were equally responsible for its conceptualization. The Claimants cite the following instances, among others:

- In May 2005, Mr. Ramírez presented a complaint against purported irregularities in the various association agreements that had been concluded with foreign investors pursuant to the *Apertura Petrolera*, to the relevant Government authorities established for this purpose. Therein he described the policy of Full Oil Sovereignty which included "the nationalization of the oil industry".⁵⁴⁹
- Around the same time, Mr. Ramírez delivered a speech before the Venezuelan National Assembly wherein he severely criticized the *Apertura Petrolera* as a "veritable assault on Venezuelan oil" and the 'old PDVSA' as "quintessentially anti-national".⁵⁵⁰ Importantly, these ideas were being articulated at a time when Mr. Ramírez had taken up his role as President of the "new PDVSA".
- On 18 August 2005, in a speech "to the nation and [...] the world", President Chávez announced that the Government and PDVSA were "reversing the [*Apertura Petrolera*] through the *Plan Siembra Petrolera*"⁵⁵¹ namely, the plan to recover control over oil through the nationalization of the association agreements. In the same speech, President Chávez attested to the fact that this *Plan* "came out of PDVSA [and] was developed in PDVSA."⁵⁵²
- On 19 August 2005, Mr. Ramírez delivered his own speech regarding the *Plan Siembra Petrolera*, affirming that its objective was to "recover and renationalize the oil production."⁵⁵³
- On 20 October 2005, in a public statement at an OPEC conference, Mr. Ramírez stated that "[W]e are willing to use all the strength of the new PDVSA and the Venezuelan State to capture the oil rent for the benefit of our people [...] Our task

⁵⁴⁹ Report submitted by Rafael Ramírez, Minister of Energy and Oil to the Special Commission to Investigate Irregularities in the Drafting, Conclusion and Implementation of the Operating Agreements, Strategic Partnerships and Internationalization Business of the National Assembly of Venezuela on 25 May 2005, Mares ER, **CER-1 CM-31**, pp. 5-6.

⁵⁵⁰ *A National, Popular and Revolutionary Oil Policy*, issued by Corporate Public Affairs Management Unit Petróleos de Venezuela, S.A. in May 2005 ("Ramírez May 2005 Speech"), **C-132**, pp. 9 – 10.

⁵⁵¹ President Chávez's Presentation on PDVSA's "Strategic Planning", 18 August 2005, **C-264**, pp. 1, 8, 19.

⁵⁵² *Id.*, p.1

⁵⁵³ Rafael Ramírez, "We are going to renationalize oil production", PDVSA Website, 19 August 2005, **C-265**, p. 1.

at the head of PDVSA and at the head of the Ministry of Energy and Petroleum, is to [...] place [oil] in the hands of the Venezuelan State.”⁵⁵⁴

- In March 2006, in a televised interview, Mr. Ramírez declared that “[T]he defeat of the oil sabotage [...] has allowed us to control [PDVSA]. Now, it is directed by the Venezuelan State and now, it will allow us to dismantle the [*Apertura Petrolera*]”.⁵⁵⁵
- In August 2006, Dr. Mommer informed the Claimants that they would have to accept the conversion/migration of the associations into *empresas mixtas* (mixed companies) with the Government’s participation at 51%.⁵⁵⁶

352. In sum, the Claimants maintain that the above evidence unequivocally attests to the Respondents’ integral involvement in the process leading up to the promulgation of the 2007 Nationalization Decree, their role in the development of the *Plan Siembra Petrolera* and their open hostility to the *Apertura Petrolera* and the AAs.⁵⁵⁷

353. Furthermore, the Claimants submit that in the aftermath of the 2007 Nationalization Decree, the Respondents played a key role in ensuring that the Claimants were dispossessed of their interest in the Projects. PDVSA officials, specifically Mr. Del Pino, allegedly “threatened” the Claimants to accept migration to the mixed enterprises regime (*empresas mixtas*), failing which full operation and control over the Projects would be transferred to PDVSA. Consistent with these threats, at midnight on 1 May 2007, PDVSA took control of the Projects. Following such dispossession, throughout June – July 2007, Mr. Ramírez and President Chávez publicly acknowledged the role that PDVSA had played in the migration process and in acquiring control over the hydrocarbon production business in the Orinoco Oil Belt.⁵⁵⁸ Pertinently, Mr. Ramírez acknowledged that “only by getting PDVSA to work as a

⁵⁵⁴ Rafael Ramírez, “*Full Oil Sovereignty: A popular, national and revolutionary policy*”, PDVSA Speech Series #2, 20 October 2005, **C-269**, p. 6.

⁵⁵⁵ “*Illegality of operating agreements*”, VTV interview of Minister Rafael Ramírez (transcript of interview), 29 March 2006, **C-274**.

⁵⁵⁶ Tr. (Day 6), 1541:21-22 (Dr Mommer).

⁵⁵⁷ C-PHB, § 277.

⁵⁵⁸ “*PDVSA controls 78% of shares in Orinoco Oil Belt businesses*”, PDVSA Press Release, 26 June 2007, **C-194**; *Signing of the Memoranda of Understanding of the Succession Agreements for Mixed Companies*, Transcript of Speech by Rafael Ramírez, **C-195**; Chávez 2007 Speech, **C-197**.

subordinate to the State and for the State, [did] the Bolivarian Government manage [...] to dismantle the *Apertura Petrolera*⁵⁵⁹ of which the AAs were a part.

354. According to the Claimants, the Respondents' actions were motivated by pure profiteering considerations as they derived extraordinary benefits from destroying the AAs. The revenues that the Respondents derived from the qualified measures helped PDVSA to defray its financial obligations towards the Government's new political/social programs. After the Respondents acquired the Projects in 2007, all of the revenues from the Projects were deployed to discharge their financial obligations towards Government spending.⁵⁶⁰

(4) *Additional links between the Ministry and the 'new PDVSA'*

355. Lastly, the Claimants mention four additional links between the Ministry and the 'new PDVSA', which they submit show the 'new PDVSA's' involvement in procuring the Expropriation: first, as admitted by Dr. Mommer during the Hearing, the salaries of "all directors of the Ministry were paid by PdVSA"⁵⁶¹ implying that both entities had access to the same pool of resources; second, again as Dr. Mommer confirmed during the Hearing, the Respondents and the Government (namely, the Ministry) were being advised by the same legal counsel in relation to the Expropriation;⁵⁶² third, PDVSA and the Government worked together to value the Projects both before and after the Expropriation. In fact, Mr. Del Pino was heavily involved in the post-Expropriation compensation negotiations with the Claimants even though at the time, he had no ministerial role; and fourth, at the time of the Expropriation, the Ministry and PDVSA occupied the same office complex.⁵⁶³

356. The Claimants consider it rather surprising that there are next to no records documenting the above interactions between the Respondents and the Government. They conclude that this can only mean that the documents are missing or that the Respondents are refusing to produce them. Accordingly, they have also asked the Tribunal to draw adverse inferences against the Respondents.⁵⁶⁴

⁵⁵⁹ Alfredo Carquez Saavedra, "*Rafael Ramírez: Our Future Lies in the Belt*", PDVSA "Orinoco Magna Reserva" Publication, **Exhibit C-247**, p. 2.

⁵⁶⁰ C-PHB, §§ 286 ff.

⁵⁶¹ Tr. (Day 6), 1582:17-1583:7 (Dr. Mommer)

⁵⁶² C-PHB, §§ 303-304; Tr. (Day 5), 1440:12, 22-24 (Dr. Mommer).

⁵⁶³ C-PHB, §§ 305-310.

⁵⁶⁴ C-PHB, §§ 328.

ii. The Respondents' Position

357. The Respondents consider the claims asserted on the basis of the above express contractual provisions⁵⁶⁵ “difficult to decipher” and “a colossal waste of everyone’s time”.⁵⁶⁶ They point out that the “Claimants have been making [up the Willful Breach Claims] on the fly”.⁵⁶⁷ Insofar as the Claimants now allege a willful breach of the abovementioned “potpourri” of contractual provisions, they point out that the Claimants invented these claims for the first time in their SoC.⁵⁶⁸ Up until that point, the Claimants were only asserting a rather nebulous and grossly exaggerated claim for “violation of the general [contractual] obligation of good faith” and for “tortious interference” with the AAs.⁵⁶⁹ The Respondents take this “confusion in Claimants’ case” as proof of the fact that the contractual provisions relied upon are completely irrelevant and consequently that the Willful Breach Claims are entirely devoid of any substance.⁵⁷⁰ As far as the duty to act in good faith under Article 1160 of the VCC is concerned, the Respondents contend that the Claimants misapply the principle and attempt to create new contractual obligations that do not exist under the AAs.
358. Thus, the Respondents first argue that the contractual provisions relied upon by the Claimants are incapable of giving rise to any obligations at all, such that the question of breach does not even arise. Second, in the event any obligations do arise, the Respondents refute the Claimants’ factual allegations in order to establish that there is no breach.

⁵⁶⁵ *Supra*, §§ 325 *et. seq.*

⁵⁶⁶ SoD, §§ 202-203.

⁵⁶⁷ R-PHB, § 4.

⁵⁶⁸ R-PHB, § 6; Tr. (First Session), 28:4-18 (Respondents’ Statement) (**Respondents’ Counsel**: “Now, one would normally think that, if the Parties to an agreement anticipate the possibility of certain events occurring and carefully negotiate what is to happen, exactly what is to happen when those events occurred, there is no reason or room for resorting to creative theories such as good faith or tortious interference. In other words, the very existence of this second category of claims is a good indication of how silly the first category is. So, the question is--and I’m sure you must be asking yourself this question--why did it take them seven years to claim compensation [for willful breach]? By seven years now, I’m measuring from the nationalization in 2007, not from the first event, which was 2004. That’s over ten years. Why did it take them so long to claim compensation of the compensation provisions of the Association Agreements?”); Tr. (First Session), 15:17-16:7 (Claimants’ Statement) (**Claimants’ Counsel**: “But the role of the Respondents themselves in the Measures takes us beyond the passive no-fault partial indemnification mechanism of the Discriminatory Action Provisions. We thus focus on the active conduct of the Respondents in participating in the destruction of the Association Agreements, and we see two things: First, a willful breach of their obligations under the Association Agreements, which include the duty of good faith and fair dealing; or putting it in the alternative way, (2) interference by the Respondents in the performance of the Association Agreements, interference that, under Venezuelan law, constitutes an “*hecho ilícito*,” which in French might be rendered as “*délits*” or in English, perhaps, as “tortious interference.” These breaches entitled the Claimants to compensation for their actual damages suffered amounting to tens of billions of dollars.”)

⁵⁶⁹ R-PHB, § 4.

⁵⁷⁰ R-PHB, §§ 354-357.

The Respondents' position on whether the provisions of the AAs entail an obligation to exercise "reasonable commercial efforts"

359. The Respondents start by pointing out that throughout these proceedings, neither the Claimants nor their experts have had a clear idea as to the specific contractual obligations that have been breached. They state that it was only in the SoC that the Claimants first identified an "odd assortment of irrelevant recitals and clauses of the [AAs]" which they claimed were purportedly breached.⁵⁷¹
360. Turning to this "odd assortment of [...] recitals and clauses", the Respondents argue that under Articles 1264 and 1271 of the VCC, a fundamental requirement for civil liability to arise is the existence of an "obligation" which has been breached.⁵⁷² Their expert, Prof. García Montoya, explained during the Hearing that under Venezuelan law in order to support a claim for breach of contract it was necessary to prove specific acts, demonstrate how these acts violated contractual obligations and establish the causal link between the said acts and any incurred damage. In his view, the "type of general allegations made by Claimants" and the "odd assortment of [...] recitals and clauses" did not meet these requirements.⁵⁷³
361. The Respondents then proceed to analyze each provision of the AAs relied upon by the Claimants⁵⁷⁴ and demonstrate how these do not give rise to any specific obligations that can support the Willful Breach Claims:
- With regard to Clauses 6 and 10 of the Preamble to the Petrozuata AA⁵⁷⁵, the Respondents contend that the Claimants have not "explained what obligation they thought was created by the[se] preambular clause[s]...nor explain[ed] how such a purported obligation could have been breached."⁵⁷⁶
 - With regard to Clause 2.04(a) of the Petrozuata AA⁵⁷⁷, the Respondents contend that the clause is irrelevant, first because the voting patterns it seeks to regulate is

⁵⁷¹ See R-PHB, §§ 354-362.

⁵⁷² VCC, **RLA-148**, Article 1264 ("*Obligations* must be complied with exactly as they have been subscribed. The debtor is liable for damages in case of breach." (emphasis added by Respondents)); Article 1271 ("The debtor shall be ordered to pay damages for non-performance *of the obligation* or for delay in performance, unless he proves that the non-performance or the delay arises from a non-imputable external cause, even if he did not act in bad faith." (emphasis added)).

⁵⁷³ García Montoya ER II, **RER-5**, §§ 59-60.

⁵⁷⁴ See § 334-337 *supra*.

⁵⁷⁵ See § 336 *supra*.

⁵⁷⁶ R-PHB, §§ 369-371.

⁵⁷⁷ See § 335 *supra*.

not under dispute and second because in line with the clause, the Respondents have never caused the Petrozuata C.A. to not act in accordance with the provisions of the Petrozuata AA or other contracts.

- With regard to Clause 9.01(b) of the Petrozuata AA⁵⁷⁸, the Respondents argue that while this clause undoubtedly calls upon both shareholders to “take all steps necessary and use all reasonable commercial efforts to carry out and assure the success of the Project”, it does not imply that the Respondents may violate the law or overthrow the Government in the process. To further support their argument they point to the fact that Clause 9.01(b) itself stipulates that the “operations of the [Petrozuata C.A.] shall be carried out in accordance with, and subject to all laws applicable.”⁵⁷⁹
- With regard to Article 2.1(b) of the Hamaca AA⁵⁸⁰, the Respondents point out that this clause is entirely irrelevant and does not translate into the sweeping obligations the Claimants posit as the basis for their claims. In particular, the dispute does not concern the Parties’ intention to conduct the Project activities “in a safe manner preserving the environment” or “[ensuring] best economic utilisation of Project resources and assets.”⁵⁸¹
- With regard to Article 10.4(a) and 10.5(a) of the Hamaca AA⁵⁸², which require the use of best efforts to maintain the application of the most favorable royalty and tax regimes respectively, the Respondents argue that to start with, the Claimants have disavowed making any claim for willful breach on the basis of the Royalty Measure or the Extraction Tax, and that in any event, both clauses subjected the use of “best efforts” to the existing legal regime which would undoubtedly change from time to time.⁵⁸³

362. In sum, the Respondents conclude that the specific clauses of the AAs relied upon by the Claimants are not in the nature of stabilization clauses and most certainly do not and could not guarantee that the *Apertura Petrolera* would last forever. By the same token, these clauses do not curb the Government’s abilities to enact measures that

⁵⁷⁸ See § 335 *supra*.

⁵⁷⁹ Petrozuata AA, C-1, Section 9.01(b).

⁵⁸⁰ See § 337 *supra*.

⁵⁸¹ R-PHB, § 379.

⁵⁸² See § 337 *supra*.

⁵⁸³ R-PHB, §§ 381-382

will affect the Projects or require the Respondents to disregard such measures. As such, in the Respondents' view, the Claimants have failed to discharge their burden to prove the existence of any express contractual obligations under the AAs and Venezuelan law.⁵⁸⁴

363. The Respondents further contend that, in any event, Venezuelan law does not sustain the conclusions that the Claimants seek to posit because all of the so-called obligations cited by the Claimants are at best "obligations of means" and not "obligations of result". The Respondents' expert, Prof. García Montoya, explains that "[o]bligations of result are those where the performance promised by the debtor is a specific, precise and concrete effect of the obligor's activity; *the performance is an end in itself, since the debtor agrees to obtain a specific result.*"⁵⁸⁵ On the other hand, due to the non-predictable nature of the desired result, obligations of means involve at best a promise to act with diligence and to behave prudently so as to *try* to achieve the desired result.⁵⁸⁶
364. The Respondents emphasize that the above distinction is significant from the point of view of Venezuelan law, inasmuch as Article 1271 of the VCC – which has been relied upon by the Claimants as giving rise to the Respondents' liability – only applies to an obligation of result and raises a presumption of breach. However, in case of obligations of means, there is no such presumption and the Claimants have the burden to establish the Respondents' breach.⁵⁸⁷ In this respect, the Respondents underline that all the obligations cited by the Claimants are "best efforts" obligations and thus clearly obligations of means; that it is thus for the Claimants to prove that the Respondents have failed to discharge their obligations; and that the Claimants have failed to discharge this burden.

⁵⁸⁴ R-PHB, § 384; *See also* Question 3, Tribunal's Questions.

⁵⁸⁵ García Montoya ER II, **RER-5**, n. 106 (emphasis added).

⁵⁸⁶ José Mélich-Orsini, *GENERAL DOCTRINE OF CONTRACTS* (5th edn., 2012), **RLA-132**, 487-489, n. 45 ("[T]here are certain cases in which the debtor when assuming his obligation, promises a 'result'... This occurs when the debtor promises to transport something from one place to another, to deliver something, to perform a work contract, etc... In contrast with this type of 'obligations of result', there are other obligations in which given the randomness of the desired result, the debtor promises only his diligence, a vigorous, attentive conduct to anticipate possible obstacles and to try to overcome them, but there the only thing that the debtor can really promise is this prudent and careful behavior. This is the case of the obligation of a doctor to cure the patient, or the lawyer to assist his client in a trial, etc"); Oscar E. Ochoa G., *GENERAL THEORY OF OBLIGATIONS, CIVIL LAW III, VOL. I* (2009), **RLA-135**, p. 141 ("This classification rests on the following: sometimes the debtor is bound to achieve a certain event; the obligation, then, is strictly precise, the debtor must achieve a result, a certain event. Sometimes, on the contrary, the debtor is only bound to act with diligence, to behave prudently to try to achieve a desired result. While the carrier is obliged to deliver the goods at the date and place agreed, the physician is only obliged to behave with care and diligence with the objective of obtaining the healing of the patient").

⁵⁸⁷ García Montoya ER II, **RER-5**, § 49; Tr. (Day 7), 1956:16-1957:2 (García Montoya).

365. Regarding the Claimants' allegations on the context in which the AAs were executed, the Respondents' counterargument is that the Claimants fully understood at the time of making the investment that Government policies were subject to change and that the Government was free to enact measures that would affect the economics of the Projects. In fact, far from expecting a stable legal and political environment, the Claimants fully foresaw, understood and expected changes, especially in the event of exceptionally high oil prices. It is for this reason, the Respondents assert, that the Claimants insisted on negotiating very precise remedies – the indemnity against DAs – to mitigate these risks.⁵⁸⁸ In the Respondents' view, this is the true context in which the AAs were negotiated and not under some false belief that the *Apertura Petrolera* would be resistant to any change.
366. As to the Claimants' reliance on good faith under Article 1160 of the VCC, the Respondents first submit that the contours of the duty to perform contracts in good faith under Venezuelan law clearly indicate that this duty is of very limited scope: it only allows the judge to sanction the disloyal use of a contractual prerogative and not to impair the very substance of the rights and obligations agreed upon by the parties.⁵⁸⁹ Relying on legal scholarship, the Respondents explain that while an implied covenant of good faith and fair dealing is recognized in most contracts, "the principle of sanctity of contracts means that the parties cannot avoid their duty to perform the contract exactly as it was subscribed."⁵⁹⁰ Put differently, any purported duty of good faith cannot be used like a "magic wand"⁵⁹¹ to conjure contractual obligations where none previously existed, in an attempt to re-write a contract.⁵⁹²
367. In light of the above, the Respondents submit that the Willful Breach Claims are without basis, because (i) the Claimants have not identified any relevant express contractual obligations that the Respondents have breached, much less performed in bad faith; and (ii) Respondents do not have an obligation to prevent the Government

⁵⁸⁸ R-PHB, §§ 398-400.

⁵⁸⁹ R-PHB, § 418; *M. Gérard X v. M. Bernard Z et al.*, Court of Cassation (Commercial Chamber) (France), Case No. 06-14.768, Judgment No. 966 dated 10 July 2007, **RLA-4**, p. 1.

⁵⁹⁰ José Mélich-Orsini, *GENERAL DOCTRINE OF CONTRACTS* (5th edn., 2012), **RLA-132**, p. 430 (The principle of sanctity of contracts means that the parties cannot avoid their duty to perform the contract exactly as it was subscribed, both as a whole and in each of its clauses.); *La société Pompei, société civile immobilière v. la société HDC and M. X*, Court of Cassation (Third Civil Chamber) (France), Case No. 04-19923, Judgment dated 9 December 2009, **RLA-10**, p. 2; Court of Cassation (Third Civil Chamber) (France), Case No. 11-27904, Judgment dated 25 June 2013, **RLA-12**, p. 1.

⁵⁹¹ SoD, § 8; Tr. (First Session), 26:11 (Respondents' Submissions).

⁵⁹² *J.P. Morgan Chase Bank, N.A. v. IDW Group, LLC*, U.S.D.C. (S.D.N.Y.), 2009 U.S. Dist. LEXIS 9207, Memorandum Opinion and Order dated 9 February 2009, **RLA-13**, pp. 13, 24-25; *Granite Partners, L.P. v. Bear, Stearns & Co.*, U.S.D.C. (S.D.N.Y.), 17 F.Supp.2d 275, Opinion and Order dated 25 August 1998, **RLA-14**, p. 306.

from rightfully exercising sovereign powers. Instead, turning the Claimants' argument against them, the Respondents argue that the Claimants' Willful Breach Claims are an exercise of bad faith as they circumvent the compensation provisions of the AAs which were specifically negotiated to provide relief against acts like the Expropriation.⁵⁹³

The Respondents' position on whether the Claimants' factual allegations demonstrate any breach of the "reasonable commercial efforts" obligation under the AAs

368. Turning to the Claimants' factual allegations, the Respondents dismiss these as "unfocused and inaccurate".⁵⁹⁴
369. The Respondents state that the Claimants' attempts to distinguish between so called "old" and "new" PDVSA and their allegation that it functioned as a political tool and government cash cow, disregards reality. From its very formation in 1975, PDVSA was "obligated to comply with and implement policy in matters of hydrocarbons that the National Executive establish[ed] through the Ministry of Energy and Mines";⁵⁹⁵ it was governed by the provisions adopted by the National Executive,⁵⁹⁶ and in carrying out its corporate functions, PDVSA was required to abide by the guidelines and policies established by the National Executive and the Ministry of Energy and Mines.⁵⁹⁷
370. The Respondents further submit that although the Claimants have emphasized the alleged "dual hat" worn by key PDVSA officials and the implications this has for the Respondents' purported role in the Claimants' dispossession, the fact remains that such allegations have no legal basis. The Respondents emphasize that (i) each of PDVSA and the PDVSA Subsidiaries are separate legal entities from the

⁵⁹³ R-PHB, §§ 421-423.

⁵⁹⁴ R-PHB, p. 316

⁵⁹⁵ R-PHB, §§ 401, 407, 410; Decree No. 1.123, Creating the Company Petróleos de Venezuela and Enacting its Articles of Association and By-laws in Accordance with the Provisions Therein ("PDVSA Original Articles of Incorporation and By-Laws"), Extraordinary Official Gazette No. 1.770, published on 30 August 1975, **R-70**, Article 1.

⁵⁹⁶ PDVSA Original Articles of Incorporation and By-laws, **R-70**, Clause 3.

⁵⁹⁷ Decree No. 855, Revised Articles of Incorporation and By-laws of PDVSA, Official Gazette No. 33.321, published on 3 October 1985, **R-71**, Clause 2 (The carrying out of the corporate purpose shall be done by the company **under the guidelines and policies that the National Executive, through the Ministry of Energy and Mines, establishes or decides in accordance with the powers conferred upon it** by law. The activities that the State company carries out to that end shall be subject to the norms of control that said Ministry establishes in the exercise of the competence conferred to it by Article 7 of the Organic Law that Reserves to the State the Industry and Trade of Hydrocarbons. (emphasis added)).

Government; and (ii) there is no legal principle that allows the Claimants to attribute to the Respondents (State-entities), liability for the actions of the Government merely because one or more government officials also serve as an officer or director of the State entity.⁵⁹⁸ They argue that in fact the presence of government officials on the board of national oil companies (“NOC”) is far from unusual and there is no reason to single out PDVSA.⁵⁹⁹ More importantly, merely because a State official also sits on the board of a NOC does not mean that his actions in State capacity are transformed into those of the NOC. To this the Respondents add that the “entire story of the dual roles of Mr. Ramirez and Dr. Mommer is nothing more than an irrelevant distraction”,⁶⁰⁰ because the course of events would have remained the same (i.e. the Overall Expropriation would have occurred and PDVSA would have to implement the decisions of the Government) even if other individuals – and completely independent individuals – had been at the helm of PDVSA.

371. Next, as regards the allegation that they played a key role in the campaign that destroyed the AAs through the development of the *Plan Siembra Petrolera*, the Respondents deem these statements “ridiculous”.⁶⁰¹ The Respondents contend that the *Plan Siembra Petrolera* is not a “timeline expressly referring to the qualified measures and the migration as integrated steps” for the ultimate objective of destroying the AAs.⁶⁰² Much to the contrary, this Plan had nothing to do with the AAs and is an actual corporate plan to contribute to national socio-economic development, to leverage the Government’s social policies, develop the Orinoco Oil Belt, and achieve other objectives that will contribute to the integrated development of oil production and the Venezuelan society.⁶⁰³ Thus, while the *Plan* is undoubtedly aligned with national policy, it is otherwise entirely unrelated to the AAs and therefore not a subject matter in dispute in the current proceedings.

372. Having thus elaborated the Parties’ positions on law and facts, the Tribunal commences its analysis of these submissions below.

iii. The Tribunal’s analysis

⁵⁹⁸ R-PHB, §§ 280-281.

⁵⁹⁹ Tr. (Day 12), pp 3076:10-3077:7 (Respondents’ Closing Statement), R-261 to R-268.

⁶⁰⁰ R-PHB, §§ 284-286.

⁶⁰¹ R-PHB, § 412.

⁶⁰² Reply, § 76; R-PHB, § 412.

⁶⁰³ R-PHB, § 413. See also, PDVSA’s “Oil Sowing” Timeline, C-373, and Oil Sowing Plan 2005-2030, R-206.

3.1. Do the express contractual provisions relied upon by the Claimants give rise to any obligations and what is the nature of such obligations (element (i) of the civil liability test)?

373. In light of the Parties' submissions, the starting point of the Tribunal's analysis is to determine whether the express contractual provisions cited by the Claimants indeed give rise to any obligations, and if so, to determine the nature of such obligations.

Provisions under the Petrozuata AA

374. With respect to the Petrozuata AA, the Claimants rely on certain clauses of the Preamble and two provisions i.e. Section 2.04(a) and 9.01(b).

375. Preambular Clauses: In the Tribunal's view, these clauses are merely descriptive of the reasons why the Parties have entered into the Petrozuata AA and reflect their general commitment to develop the Project. The Tribunal agrees with the Respondents that the Claimants have provided insufficient explanation as to the content of the obligations that these clauses purportedly generate. Merely stringing together various tranches of the provisions and stating that the provisions "speak for themselves" is not enough.⁶⁰⁴ At best, as the Claimants themselves acknowledge, the language of these Preambular clauses can inform the content of the obligations under Section 2.04(a) and 9.01(b), if any.⁶⁰⁵ Accordingly the Preambular clauses of the Petrozuata AA are of no assistance to the Claimants' case insofar as they do not give rise to any independent contractual obligations.

376. Section 2.04(a): The Claimants emphasize that this provision obligates the Respondents to "act or to take all steps, as may be reasonably within its power and use reasonable commercial efforts to cause the [Petrozuata C.A.] to act in accordance with the provisions of the [Petrozuata AA]." The Tribunal is equally at a loss as to the relevance of this provision. The Claimants cannot pick and choose parts of the provision that suit their needs: the provision must be read as a whole. Doing so reveals that this provision addresses how each Party – in their capacity as shareholders and "co venturers" in Petrozuata C.A. – will vote to ensure that Petrozuata C.A. acts in accordance with the Petrozuata AA. The Claimants' witness, Mr. van Wageningen admitted as much at the Hearing. He described the abovementioned provision as "[His] Governance Provisions" through which he wanted to make sure that [PDVSA Petroleo] would "behave as a partner within the

⁶⁰⁴ C-PHB, §§ 192-194.

⁶⁰⁵ C-PHB, § 192(a).

joint venture and not just simply a representative of the State oil company.⁶⁰⁶ The Respondents have rightly pointed out that the dispute in this case does not concern the manner in which Parties exercise their voting rights *vis-à-vis* Petrozuata C.A. Moreover, nothing in the Claimants' allegations suggests that the Respondents have caused Petrozuata C.A. to act contrary to the Petrozuata AA, much less that they would have used their voting rights in a contrary manner. In the circumstances, the Tribunal remains unconvinced that this provision creates the broad obligations that the Claimants attribute to it.

377. Section 9.01(b): The Claimants submit that pursuant to this provision, the Respondents are required to “vote, act, take all steps reasonably necessary and use all reasonable commercial efforts to carry out and assure the success of the Projects” and to refrain from “tak[ing] any action not contemplated [in the Petrozuata AA] that may adversely affect the performance by [Petrozuata C.A.] of its obligations under its Charter or under any Business Contract.” These prescriptions are contained in the set of provisions that address the manner in which the business and operations of Petrozuata C.A. are to be undertaken.⁶⁰⁷ Within that context, the Tribunal considers that these prescriptions do indeed obligate the Respondent to *use all reasonable commercial efforts* to carry out and assure the success of the Project, and to refrain from taking any actions that will adversely affect the performance of Petrozuata C.A.'s obligations.

378. Arguably, this provision generates mirror obligations, first, that the Respondents shall use “all reasonable commercial efforts” to ensure the success of the Project; and, second, that the Respondents should not act in a manner that will impede or place obstacles in the performance of the Project or prevent Petrozuata C.A. from carrying out its operations.⁶⁰⁸ The Respondents' expert, Prof. García Montoya, conceded at the Hearing that a unilateral taking of the Projects by the Respondents (without authority of law) would be sufficient to breach this provision:

Q. [...] [T]his is the Petrozuata Association Agreement, and I want to direct your attention to 9.01(b). In this situation--in this situation would Respondents have breached their obligation to “take all steps reasonably necessary and use all

⁶⁰⁶ Tr. (Day 3), 743:9 – 747:22 (Mr. van Wageningen).

⁶⁰⁷ Petrozuata AA, C-1, Section IX. For the sake of good order, the Tribunal notes that here and elsewhere whenever reference is made to the Claimant/s and/or Respondent/s, it should be construed as reference to the relevant Claimant and/or Respondent in the given circumstances.

⁶⁰⁸ C-PHB, § 192(a); Petrozuata AA, C-1, Section 9.01(b).

reasonable commercial efforts to carry out and assure the success of the Project”?

A. I think I would make reference to the other section that you've highlighted at the end here, and it says, “None of the Parties will take any action not contemplated herein that may adversely affect the performance by the Company of its obligations under its Charter or any Business Contract.”

And it is more important impeding the performance of the Contract, in and of itself, so this would impair the operation of the company if this were done unilaterally and not backed by a law that would support the actions by Respondents.

Q. And would there be a breach of the duty of good faith in this situation?

A. Yes, assuming that the actions were carried out without a legal power established for PdVSA, and that there was no decree-law or another act similar to [the 2007 Nationalization Decree].⁶⁰⁹

379. The Tribunal notes the Respondents’ contention that Section 9.01(b) requires the operations of Petrozuata C.A. to be conducted in accordance with all applicable laws, and that this would militate against any allegation that the qualified measures should not have been applied to Petrozuata C.A. However, the Claimants do not appear to challenge the measures themselves or that Petrozuata C.A. had to comply with them. Rather, they complain against the Respondents’ purportedly active role in procuring the qualified measures.

Provisions under the Hamaca AA

380. With respect to the Hamaca AA, the Claimants rely on Articles 2.1(b), 10.4(a) and 10.5(a).

381. Article 2.1(b): According to the Claimants, Article 2.1(b) obligates the Respondents to conduct the Project activities “so as to make the best economic utilization of Project resources and assets to achieve the maximum benefit for the Project and the Parties in their capacity as participants in the Association.” Article 2.1(b) is a part of the provisions that deal with the “Object of the Association”.⁶¹⁰ It states in relevant part that **“the intention and plan of the Parties [is] that all Project activities be conducted in a safe manner preserving the environment in accordance with applicable law and**

⁶⁰⁹ Tr. (Day 8), 2047:17-2048:17 (Prof. García Montoya).

⁶¹⁰ Hamaca AA, C-3, Article II.

so as to make the best economic utilization of Project resources and assets to achieve the maximum benefit for the Project and the Parties in their capacity as participants in the Association.”⁶¹¹ At best (for the Claimants’ case), it can be said that this provision contains a statement of the Parties’ intention or is descriptive of the motivations that shall inform the Parties’ conduct. In the Tribunal’s view, the Respondents are correct in asserting that the aforesaid statement “does not translate into the sweeping obligation Claimants posit as the basis for their [Willful Breach Claim]”.⁶¹² Put differently, this provision does not generate any specific “best efforts” obligations.

382. Articles 10.4(a) and 10.5(a): These provisions allegedly impose upon the Respondents an obligation to use their “best efforts to maintain at all times [the] application [...] of the most favorable royalty [and tax] regime permitted by law” to the Parties in their capacity as participants in the AAs.⁶¹³ According to the Claimants the maintenance of the most favorable royalty and tax regime was to be achieved through “formal approaches to, and meetings with, Venezuelan governmental authorities”.⁶¹⁴ On this basis, the Claimants have argued that the Respondents had an obligation to “resist changes to the fiscal regime for the Projects” and to “lobby” the Government against the qualified measures.

383. In the Tribunal’s view, the Claimants’ reading of the provision is not commensurate with its text. First, the Tribunal disagrees that the Respondents had an *unqualified* obligation to ensure the application of the most favorable fiscal regime to the Projects. As the Respondents rightly point out, the obligation to ensure that the “most favourable” royalty or tax regime applies to the Parties is not *in abstracto*. It is conditional upon “**taking into account** the existing legal regime and the economics of the Project, **as such factors may change from time to time**”.⁶¹⁵ Accordingly, the Tribunal considers that any potential obligation would only arise in the event that the qualified measures were not imposed by the prevailing legal regime and did not suitably reflect the attendant economic realities of the Projects. The Claimants have not contested or been able to explain that the qualified measures were contrary to the conditions indicated above.⁶¹⁶ The Respondents, on the other hand, have submitted

⁶¹¹ Hamaca AA, **C-3**, Article 2.1(b) (emphasis added).

⁶¹² R-PHB, § 379.

⁶¹³ Hamaca AA, **C-3**, Articles 10.4(a) and 10.5(a).

⁶¹⁴ C-PHB, § 192(b).

⁶¹⁵ Hamaca AA, **C-3**, Articles 10.4(a) and 10.5(a) (emphasis added).

⁶¹⁶ C-PHB, §§ 250-251.

that the qualified measures were indeed applied keeping in mind Project economics, in particular the rise in oil prices since the investment was made.⁶¹⁷ In the circumstances, the Tribunal finds it difficult to accept that the mere alteration of the royalty and tax rates resulted in a non-favorable fiscal regime, which in turn gave rise to a best efforts obligation.

384. Second, the Tribunal is unconvinced that the Respondents had an obligation to “lobby” the Government, as proposed by the Claimants. Contrary to how the Claimants phrase it, Articles 10.4(a) and 10.5(a) merely state that “[a]ll formal approaches to, and meetings with, Venezuelan governmental authorities to establish such items shall be directed by [Corpoguanipa]”.⁶¹⁸ The Tribunal reads this as a statement of who has the obligation to set up meetings with the Government, *in the event both Parties* decide to approach the Government. The language does not generate a unilateral duty on the part of the Respondents to “lobby” the Government against any and every fiscal measures that altered the previously applicable royalty and tax regime. Therefore, at best, the Respondents’ obligation to “formally approach” the Government would only materialize if a decision was made to approach the Government.
385. The Tribunal also notes that, in the context of the Hamaca AA, the Claimants did not inform the Respondents that they considered the qualified measures or the effects thereof to also constitute a violation of the Respondents’ contractual obligations. Nor for that matter did they ask the Respondents to formally approach the Government in connection with the qualified measures. This has been confirmed by the testimony of the Claimants’ own witness at the Hearing:⁶¹⁹

PRESIDENT LÉVY: [...] [D]id you ever personally make it known that you were dissatisfied with the conduct of your partner or your two partners? I'm talking about the Venezuelan partners. Did you ever tell them, “No, you're not conducting the way I expect you to do”?

THE WITNESS: No, not personally.

PRESIDENT LÉVY: Okay. Not personally.

THE WITNESS: Yes.

PRESIDENT LÉVY: Are you aware that someone did?

⁶¹⁷ R-PHB, § 381; Letter from Mr. Berry to Minister Ramírez, 14 January 2005, **R-14**, p.1.

⁶¹⁸ Hamaca AA, **C-3**, Articles 10.4(a) and 10.5(a) last sentence.

⁶¹⁹ Tr. (Day 2), 505:1-511:17 (Mr. Heinrich).

THE WITNESS: **I'm not aware that there were direct communications that we were dissatisfied with the partner**, but our partners were very much aware of our dissatisfaction with all of the activities and measures that were happening [...] With each measure. We it very made clear, our dissatisfaction.

[...]

PRESIDENT LÉVY: Very well. Incidentally, you were dissatisfied--again, **I'm not talking about the Government. I'm talking strictly about your partners and, in fact, the Parties to this arbitration now.** What was the subject of dissatisfaction, your subject of dissatisfaction? **You said they were very much aware that you were dissatisfied. I'm not going to ask you to give all your subjects of dissatisfaction, but what was--what did they know that you were dissatisfied with?** Measure by measure. 2004, you had the 1 percent royalty tax which went up. Then you had the Extraction Tax. Then you had the-- I never remember, it's not Income Tax, it's not corporate tax--sorry--Income Tax. So, thank you. Income Tax, et cetera. **So, you were always dissatisfied, and I can understand why. But there was clarity with your partners why you were dissatisfied with them?** I'm not talking about the Measure. I'm not talking about the Government. **I ask you if your partners were aware that you were dissatisfied with them**, not with the Government.

THE WITNESS: Yeah. It--well, primarily, it's around the cash flow impact. [...]

PRESIDENT LÉVY: [...] Of course, the cash flow would be affected [...] But do you say that it's because of them that the cash flow would be affected, or because of the Government measures?

THE WITNESS: Well, as we got further into the measures, it was--**we didn't really differentiate them versus the Government.**

PRESIDENT LÉVY: Why?

THE WITNESS: Because the--**we expected they were involved with the policies that were coming out in the public statements.** The oversight of the entity had changed. The new PdVSA was a different entity than the entity we had negotiated our Agreements with, and they acted that way [...] So, there was--**we fully assumed** that they were working in the process, and none of this was going to be a surprise.⁶²⁰

386. From the above testimony, the Tribunal understands that the Respondents may indeed have been aware that the Claimants had objections to the qualified measures. However, apart from this general awareness, it appears that the Claimants at no point expressly indicated to the Respondents that they had acted in breach of their contractual obligations, especially not with specific reference to what contractual obligations were breached and by which company. As already noted above,⁶²¹ the Claimants' objections pertained to the Government's obligations under international law and the Respondents' alleged breaches under the AAs find no mention therein. Moreover, the Claimants evidently never approached the Respondents to undertake their alleged contractual obligation to set up formal meetings with the Government.

⁶²⁰ Tr. (Day 3), 699:15-702:13 (Mr Heinrich).

⁶²¹ *Supra*, §§ 214-216.

Given these circumstances, it is inapposite for the Claimants to contend that an obligation to “lobby” the Government ever materialized, much less that it has been breached.

387. Be that as it may, to the Tribunal’s mind, there is another considerable flaw in the Claimants’ arguments regarding these provisions. In response to the Tribunal’s questions as to why they did not inform the Respondents of their grievances, the Claimants’ witness had the following to say:

PRESIDENT LÉVY: [...] What practically could [the Respondents] have done to support you after 2004? Practical terms. What could they have done?

THE WITNESS: They could have worked with us to help convince the Ministry of the importance of a stable fiscal environment and the benefits that brings to investment.

PRESIDENT LÉVY: But **do I understand correctly** from what you told me earlier **that you never practically requested anyone--not you personally this time, I'm talking about your team--you never requested any practical measure? You never told them, why don't you go meet Mr. X at the Ministry and discuss that point?** Did you?

THE WITNESS: **No.**

PRESIDENT LÉVY: No. Okay.

THE WITNESS: Because, again, the environment felt so different then that we didn't expect any results would come.⁶²²

388. When the Claimants themselves did not expect any results from “lobbying” the Government, their entire allegation that this obligation has been breached rings very hollow indeed.⁶²³

⁶²² Tr. (Day 3), 702:14-703:7 (Mr Heinrich).

⁶²³ For completeness, the Tribunal notes that the Respondents’ witness, Dr. Mommer, also testified that lobbying would have been futile as the decision to impose these measures has been made. See Tr. (Day 6), 1550:3-1552:18 (Dr. Mommer) (Q. Now, let’s imagine a situation here. Let’s imagine if, as Director of PdVSA, Mr. Ramírez is approached by ConocoPhillips, and he and you and PdVSA is asked to lobby to protect this Project from the nationalization. What do you think would have happened? A. Again, it is a hypothetical question, ConocoPhillips would not have talked to President of PdV to talk about that. It would have talked to the Minister, and they may have asked, well, if there is a definitive word, last word, well, it came from President Chávez. Hard to argue it was not a definitive word. Q. So, what is the reaction you think ConocoPhillips would have got if they had asked PdVSA, led by Mr. Ramírez, to lobby on its behalf at this time? A. **It seems to me absurd to even hypothetically suggest that they would talk to the President of PdV regarding forced migration. They had to talk to the Government. It was a Measure announced by the Government, by the highest level of Government. So, you had to talk to the highest level of Government and to see what you can do about it.** PRESIDENT LÉVY: It’s also hypothetical, but imagine for a second that it would have been important for Conoco to discuss that with PdVSA; that is, the possibility of lobbying. Who would have been available at PdVSA to discuss that? You tell me Mr. Ramírez would have been the Minister, so it’s absurd to think that you can approach him as PdVSA representative. Who would have been available for Conoco to discuss with at PdVSA? THE WITNESS: Its Parties, the Association. It was the Association that would migrate, so it would affect CVP--the Subsidiary of PdV. They’re partners in the joint venture. That was the logical contact. PRESIDENT LÉVY: So, it would have had to discuss with CVP. THE WITNESS: Yes, with Eulogio Del Pino, if you want, who was the head of CVP. That was it. They had Parties. PdV was part of the Association that forced to migrate. PdV was forced to

389. Finally, regarding the relevance of the duty of good faith, both Parties appear to agree that the duty of good faith under Article 1160 of the VCC does not generate new contractual obligations, but only determines the contours of existing contractual obligations.⁶²⁴ Thus, the Tribunal is of the view that the Claimants' invocation of the duty of good faith would be relevant to the extent that the Respondents have performed their contractual obligations in bad faith, or that their actions suggest an improper use of their contractual prerogative – to use the Claimants' words “as a gauge of Respondents' performance of their express contractual obligations”.⁶²⁵
390. As the Tribunal has concluded that only Section 9.01(b) of the Petrozuata AA gives rise to a “reasonable commercial efforts” obligation, the duty of good faith may inform the scope of this provision only.
391. Finally, the Tribunal must also assess the nature of the obligations flowing from Section 9.01(b) and the implications thereof, in view of the Respondents' argument that this provision only generates an “obligation of means”.
392. The Respondents have invoked the writings of various authors to explain the scope of an “obligation of means” as understood under Venezuelan law. According to their writings – with which the Claimants agree in principle – in case of an obligation of means, “given the randomness of the desired result, the debtor promises only his diligence, a vigorous, attentive conduct to anticipate possible obstacles and to try to overcome them, but there the only thing that the debtor can really promise is this prudent and careful behaviour.”⁶²⁶
393. The Respondents have also referred to French legal authorities on this issue, to show the similarity in understanding of this concept in the two jurisdictions. As the concept

migrate, not only Conoco, not only ARCO, not only Chevron. **PRESIDENT LÉVY:** And do you know who the head of CVP was at the time? **THE WITNESS:** Yes. Eulogio Del Pino. **PRESIDENT LÉVY:** Mr. Del Pino. And if Mr. Del Pino had requested a meeting with the Ministry, whether you, Mr. Ramírez, whoever would be in charge, what would have happened? You said it's absurd, so I would like to make sure that I understand exactly your position. **THE WITNESS:** For sure, they would not talk to me. At that level and given this situation, they would have to talk to the Minister at the very least. [...] The Minister upwards. Not to me. I was out of this decision, and so they would have to talk to the Minister and to make the argument, **but the decision was taken.** **PRESIDENT LÉVY:** Yes. And putting two--exactly. And putting two and two together, **even talking with the Ministry would not have had much logic, given what you said earlier. You don't even know what Minister Ramírez had as a personal view on the nationalization or forced migration or whatever.** **THE WITNESS:** He had personal views, but he had also no doubt that he would go with the decision of the Government. That was his role as a Minister. (emphasis added)).

⁶²⁴ R-PHB, § 357; SoD, §§ 236-249; Reply, § 75; C-PHB, § 201.

⁶²⁵ C-PHB, § 210.

⁶²⁶ José Mélich-Orsini, GENERAL DOCTRINE OF CONTRACTS (5th edn., 2012), **RLA-132**, 487-489, n. 45.

is indeed similarly understood, the Tribunal considers it sufficient to note the position under French law without opining on whether or not recourse can be had thereto:

[t]he obligation is of means when the debtor has committed to doing what is possible to achieve a result contemplated by the parties, but of which the debtor cannot or does not want to guarantee the achievement. The obligation requires him to adopt a reasonable and diligent behaviour, *the non-performance will then be characterized by a mistake in conduct, namely by a deviation from what the creditor was entitled to expect from a reasonable and diligent debtor placed in the same circumstances.*⁶²⁷

394. As to the implications of an obligation being one of “means”, the Respondents contend that “merely showing that the goal was not obtained does not prove the existence of non-performance”.⁶²⁸ The debtor of an obligation of means will only be considered responsible for breach if the creditor can show that “the activity or the conduct performed by the debtor is less than what is due; [that] it is defective. In other words [the creditor] must show the fault of the debtor”.⁶²⁹
395. The Claimants do not dispute the classification of the aforementioned contractual provision as an obligation of means. Nor do they contest that the burden is upon them to prove that the Respondents’ actions violate the expectation of diligent conduct.⁶³⁰ In the circumstances, it is for the Claimants to show whether the Respondents’ actions and omissions (that have been elaborated at paragraphs 342 – 354 above) constitute a failure to exercise the requisite level of due diligence in discharging their obligations under this provision of the Petrozuata AA.

3.2. *Do the Respondents’ actions breach the “reasonable commercial efforts” obligation (element (ii) of the civil liability test)?*

396. Having concluded that the Respondents are contractually obligated to exercise reasonable commercial efforts pursuant to Section 9.01(b) of the Petrozuata AA, the next question for the Tribunal to determine is whether the specific actions and omissions complained of at paragraphs 342 – 354 above, constitute breaches of such obligation.

⁶²⁷ Jean-Christophe Saint-Pau, *Right to Reparation: Conditions of Contractual Liability*, 11-10 JURISCLASSEUR CIVIL CODE, 16 May 2016, **RLA-145**, pp. 40-42 (emphasis added by Tribunal).

⁶²⁸ José Mélich-Orsini, *GENERAL DOCTRINE OF CONTRACTS* (5th edn., 2012), **RLA-132**, 487-489, n. 45.

⁶²⁹ Eloy Maduro Luyando and Emilio Pittier Sucre, *COURSE ON OBLIGATIONS: CIVIL LAW III, VOL. I* (2009), **RLA-137**, p. 188.

⁶³⁰ C-PHB, §§ 339-340; Tr. (Day 7), 1895:16-1896:6 (Prof. Mata Borjas).

397. By and large the conduct complained of relates to the purported transformation of the “old PDVSA” into the “new PDVSA” and the alleged role played by key PDVSA officials by virtue of their dual positions in the Government and PDVSA. According to the Claimants these “dual hats” enabled PDVSA to be transformed into a mouthpiece of the Chávez Administration and implement its policies in complete disregard of their obligations as contractual partners.
398. To begin with, it is difficult to comprehend the underlying rationale of the Claimants’ “‘old PDVSA’ vs. ‘new PDVSA’” argument. Even assuming that the “old PDVSA” was purportedly independent from the Government, it was not a State within a State, left entirely to its own devices. Quite to the contrary, PDVSA was and at all times remained indisputably a State entity required to act in accordance with its governing documents. It is also indisputable that pursuant to the provisions of its Articles of Association and By-laws, PDVSA is required to implement the policies as determined by the Government.⁶³¹ Some of the relevant provisions are set out below:

Article 1 – There shall be created a *state company*, under the form of a Sociedad Anónima, which **shall comply with and implement policy in matters of hydrocarbons that the National Executive establishes through the Ministry of Energy and Mines** in the activities that are entrusted to it.⁶³²

[...]

Title 1

General Provisions

Clause 2: The carrying out of the corporate purpose shall be done by the company **under the guidelines and policies that the National Executive, through the Ministry of Energy and Mines, establishes or decides** in accordance with the powers conferred upon it by law.

The activities that the State company carries out to that end **shall be subject to the norms of control that said Ministry establishes** in the exercise of the competence conferred to it by Article 7 of the Organic Law that Reserves to the State the Industry and Trade of Hydrocarbons.⁶³³ (emphasis added)

399. In these circumstances, regardless of whether it was “old” or “new”, PDVSA was bound to comply with and implement the policies of the prevailing Government and it was not at liberty to pursue its own agenda in that regard. As discussed in more detail

⁶³¹ See Allan R. Brewer-Carías, *The Nature of Petróleos de Venezuela, S.A., as an Instrument of the State in the Oil Industry*, 23 *Revista de Derecho Público*, July-September 1985, García Montoya ER I, **RER-1 App. GM-54**, pp 83-85. Claimants, perhaps inadvertently, have accepted that this is the case while arguing that the acts of the State are not extraneous to the Respondent. See *infra*, §§ 462, 473 – 474.

⁶³² PDVSA Original Articles of Incorporation and By-laws, **R-70**, Article 1 (emphasis added).

⁶³³ Decree No. 855, Revised Articles of Incorporation and By-laws of PDVSA, Official Gazette No. 33.321, published on 3 October 1985, **R-71**, Clause 2 (emphasis added).

below⁶³⁴ the Claimants would have difficulty contradicting this trite fact and acknowledge it in the process of trying to establish that PDVSA and the Government were organically linked. It is therefore contradictory for the Claimants to allege, on the one hand, that PDVSA's organic link to the Government is demonstrated by their obligation to comply with Government guidelines and policies, and, on the other hand, contend that this allegedly "organically linked" PDVSA should have acted contrary to these very policies in discharging its contractual obligations. It is not sufficient in this regard to advance that PDVSA itself prompted or prepared such guidelines and policies and this reinforces the point. Thus, in the Tribunal's view, the distinction between the "old" and the "new" PDVSA does not advance the Claimants' case in any manner.

400. The next set of allegations pertain to the consequences that flow from the alleged "dual hat[s]" worn by two PDVSA officials, namely, Mr. Ramírez, (who was simultaneously the Minister of Energy and the President of PDVSA) and Dr. Mommer (who was simultaneously the Vice Minister of Hydrocarbons and a non-executive Director on the Board of PDVSA). The Tribunal notes that although allegations have been made against four officials (i.e. including Mr. Rodriguez and Mr. Del Pino), the Claimants have concentrated largely on Mr. Ramírez and Dr. Mommer to support their "dual hat" theory. Hence, the Tribunal's analysis will concentrate on the allegations about these two individuals.
401. The core of the Claimants' allegations appear to be that (i) Mr. Ramírez and Dr. Mommer were responsible for formulating the various qualified measures⁶³⁵ as well as conceptualizing the Expropriation; (ii) it is impossible that these individuals would have been able to maintain a difference in their own minds as to what capacity they were acting in at the relevant point of time; and therefore (iii) it should be presumed that all actions performed by these individuals in their capacity as Ministers are equally the actions of PDVSA and *vice-versa*.
402. Keeping in mind the burden and standard of proof that the Claimants have to discharge, the Claimants must be able to show that while undertaking the allegedly breaching conduct, these individuals represented themselves as PDVSA. They have to show that the course of events leading up to the Expropriation would not have occurred without the contributions of these officials acting as PDVSA. Alternatively,

⁶³⁴ *Infra*, §§ 470-473.

⁶³⁵ i.e., the Royalty Measure in 2004 which abrogated the Royalty Reduction Agreement; the imposition of the Extraction Tax on the Projects; and the Income Tax Increase in 2006.

the Claimants need to show that when Mr. Ramirez and Dr. Mommer were discharging their functions as PDVSA President and Director respectively, they were actually acting as the “State”, that they were disregarding PDVSA’s interests altogether, and that their conduct surpassed their obligation to act in accordance with State policy pursuant to the PDVSA By-laws.

403. The single element on which the Claimants’ entire argument appears to be constructed is the allegation that it is impossible to distinguish who these individuals were acting for at a given point of time; that merely the wearing of “dual hats” constituted a breach as everything they did on behalf of the Ministry would equally be an act of PDVSA. The Tribunal is not persuaded by this argument.
404. With respect to Mr. Ramírez, the fact that he was simultaneously PDVSA President and the Minister of Energy does not automatically imply that all actions taken in his capacity as the Minister were equally those of PDVSA, even if they did relate to the oil industry or even to PDVSA itself. The Tribunal notes that the Claimants have relied upon the fact that Mr. Ramírez was involved in the formulation of the oil policy for the Chávez Administration, i.e. the policy of “Full Oil Sovereignty”. But that was indeed part of his functions as the Minister. Also, regardless of any actual inputs that he may have made in his capacity as PDVSA President, it is ultimately for the Government to formulate and enact the laws that reflect this purported policy of “Full Oil Sovereignty”.⁶³⁶ The Tribunal notes that the Claimants cite numerous public speeches and interviews given by Mr. Ramírez denouncing the *Apertura Petrolera* and the AAs and rely on the same as indicative of Mr. Ramírez active role in bringing about the destruction of the AAs.⁶³⁷ However, apart from the fact that Mr. Ramírez held dual positions while giving these speeches, there is nothing in the record to sufficiently indicate that in each of these instances Mr Ramírez was not only expressing his views as the Minister but also acting in his capacity as PDVSA President. Absent such additional substantiation, the Tribunal cannot accept the Claimants’ contention that Mr. Ramírez was equally representing PDVSA.

⁶³⁶ R-PHB, § 298.

⁶³⁷ C-PHB, §§ 258-275; Report submitted by Rafael Ramírez, Minister of Energy and Oil to the Special Commission to Investigate Irregularities in the Drafting, Conclusion and Implementation of the Operating Agreements, Strategic Partnerships and Internationalization Business of the National Assembly of Venezuela on 25 May 2005, Mares ER, **CER-1 CM-31**; Ramírez May 2005 Speech, **C-132**; President Chávez’s Presentation on PDVSA’s “Strategic Planning”, 18 August 2005, **C-264**; Rafael Ramírez, “*We are going to renationalize oil production*”, PDVSA Website, 19 August 2005, **C-265**; Rafael Ramírez, “*Full Oil Sovereignty: A popular, national and revolutionary policy*”, PDVSA Speech Series #2, 20 October 2005, **C-269**; Transcript of Speech by Rafael Ramírez, *With Mixed Companies, Venezuela Advances Toward Full Petroleum Sovereignty*, 23 March 2006, **C-130**; Transcript of Speech of Rafael Ramírez before PDVSA Employees, 31 October 2006, **C-150**.

405. Similarly, although the Claimants have challenged the actions of Dr. Mommer, the record shows that at all times he was acting in his capacity as the Vice Minister of Hydrocarbons and that he never interacted with the Claimants as a representative of PDVSA.⁶³⁸ This is also the case with Mr. Ramírez. Moreover, the record also shows that the Claimants understood this fact, because all communications to Mr. Ramírez and Dr. Mommer have been addressed to them in their governmental capacity.⁶³⁹ As the Respondents have repeated time and again:

[t]hroughout the so-called dismantling of the Apertura Petrolera, which Claimants argue commenced with the 2004 Royalty Measure, up to the filing of the Requests for Arbitration in this case in 2014, i.e., for an entire decade, ConocoPhillips recognized that the actions that caused Claimants' losses were all actions of the Government, not these Respondents.⁶⁴⁰

406. Some of the correspondence between the Claimants and Mr. Ramírez or Dr. Mommer as the case may be, is set out below:

- i. On 22 November 2004, the Claimants addressed a letter to **Mr. Ramírez in his capacity as the Minister of Energy**, objecting to the Royalty Measure;⁶⁴¹
- ii. On 14 January 2005, the Claimants addressed a letter to **Mr. Ramírez in his capacity as the Minister of Energy** and agreed to pay the Royalty Measure;⁶⁴²
- iii. On 26 April 2005, Dr. Mommer **in his capacity as the Vice Minister of Hydrocarbons** addressed a letter to the Claimants regarding the potential problems with the Petrozuata AA and Project;⁶⁴³
- iv. On 18 October 2006, the Claimants addressed a letter to Dr. Mommer **in his capacity as the Vice Minister of Hydrocarbons** in respect of the restructuring of the Hamaca Project;⁶⁴⁴

⁶³⁸ Mommer WS I, **RWS-1**, §§ 4, 46, 47; Letter from Vice Minister Mommer to Mr. Berry of Claimants, 26 April 2005, **RWS-1 Appendix 26**; ConocoPhillips Presentation, *Petrozuata: The Future and Key Issues*, August 2005, **RWS-1 Appendix 27**; Letter from A. Roy Lyons, ConocoPhillips to Vice Minister Mommer, 2 May 2006, **RWS-1 Appendix 30**; Tr. (Day 2), 512:7-513:1 (Mr Heinrich) (“**Q.** Did you ever hear anybody at ConocoPhillips addressing Dr. Mommer as external Board Member of PdVSA as opposed to Vice Minister? **A.** Well, I'm not sure addressing, but we were all aware of his dual roles. **Q.** I want to know whether you ever addressed him in the PdVSA role. **A.** Well, I wouldn't have. [...] **Q.** Have you seen any of the dozens of communications between ConocoPhillips and Dr. Mommer during this period? **A.** I've seen several. **Q.** Do any of them address him as anything other than Vice Minister? **A.** I don't believe so. I think they're addressed to the title of that office”).

⁶³⁹ See R-PHB, fn 577.

⁶⁴⁰ R-PHB, § 295

⁶⁴¹ Letter from Gregory Goff, ConocoPhillips to Minister Ramírez, 22 November 2004, **R-109**, p.1.

⁶⁴² Letter from Mr. Berry, ConocoPhillips to Minister Ramírez, 14 January 2005, **R-14**, p.1.

⁶⁴³ Mommer WS I, **RWS-1 Appendix-26**, p.1.

- v. On 29 November 2006, the Claimants addressed a letter to Dr. Mommer **in his capacity as the Vice Minister of Hydrocarbons** objecting to the imposition of the qualified measures by the Government;⁶⁴⁵
- vi. On 31 January 2007, the Claimants addressed a letter to **Mr. Ramírez (in his capacity of Minister of Energy), President Maduro (in his then capacity of Minister of Foreign Affairs), and Ms. Gladis Gutiérrez (in her capacity of Attorney General) and copying Dr. Mommer (in his capacity of Vice Minister of Hydrocarbons)**, stating that Venezuela's actions were contrary to the Venezuela-Netherlands BIT as well as the Foreign Investment Law, and therefore providing notice of the existence of a dispute under these instruments;⁶⁴⁶
- vii. On 12 April 2007 the Claimants addressed a letter to both **Mr. Ramírez (in his capacity of Minister of Energy) and Dr. Mommer (in his capacity of Vice Minister of Hydrocarbons)** in connection with the migration of the Projects into mixed enterprises.⁶⁴⁷
- viii. Numerous emails were addressed by Dr. Mommer to the Claimants, all in his capacity as the Vice Minister of Hydrocarbons.⁶⁴⁸

407. In any event, at the time Dr. Mommer presumably conceptualized the qualified public measures, he was a Managing Director of an entirely different PDVSA subsidiary⁶⁴⁹ which was not even a party to the AAs. Insofar as his role as a member of the Board of Directors of PDVSA is concerned, this in and of itself generates no consequences especially in light of the fact that Dr. Mommer was an external director of PDVSA and had no executive functions or authority to represent PDVSA before third parties.⁶⁵⁰ Therefore, the Claimants' attempt to bring him within the purview of the reasonable commercial efforts obligation under the Petrozuata AA is far-fetched and does not withstand scrutiny.

⁶⁴⁴ Letter from ConocoPhillips to Dr. Mommer, 18 October 2006, **C-148**, p.1.

⁶⁴⁵ Letter from ConocoPhillips to Dr. Mommer, 29 November 2006, **C-151**, p.1.

⁶⁴⁶ *Supra*, §§ 214-216.

⁶⁴⁷ Letter from ConocoPhillips to Minister Ramírez, Vice Minister Dr. Mommer, and PDVSA President Mr. Del Pino (re: Petrozuata Project), 12 April 2007, **C-174**; Letter from ConocoPhillips to Minister Ramírez, Vice Minister Dr. Mommer, and PDVSA President Mr. Del Pino (re: Hamaca Project), 12 April 2007, **C-175**.

⁶⁴⁸ Mommer WS II, **RWS-3 Appendix 34**.

⁶⁴⁹ Tr. (Day 5), 1401:11-1402:7, 1426:3-7 (Dr. Mommer).

⁶⁵⁰ Mommer WS II, **RWS-3**, §§ 3-4.

408. Additionally, the Tribunal accords weight to the Respondents' contention that the appointments of Mr. Ramírez and Dr. Mommer to PDVSA were entirely incidental to their role in the Ministry. According to this argument, the Tribunal merely needs to ask itself whether anything that transpired from 2003 (the "transformation of the PDVSA") to the Expropriation in 2007 would have changed if PDVSA itself had remained neutral and independent from the Chávez Administration.⁶⁵¹ For the Tribunal, the answer is evidently "no". Even if the Respondents had remained purportedly neutral and independent of the Government and even if Mr. Ramírez and Dr. Mommer had only held positions in the Ministry, they could have nonetheless devised and executed the Government's plan to nationalize the Projects. Their simultaneous role as PDVSA officials did not give them any special powers to assist the Government and participate in the Overall Expropriation. The same would have been put into motion in 2007 in any event. Similarly, regardless of its neutrality and independence, PDVSA, being required by its constitutive documents to adhere to the Government's policies and the law, would have no other recourse but to comply with each of the qualified measures. When viewed in this manner, the Claimants' allegations regarding the alleged implications of the "dual hats" worn by these officials are quite a leap in logic.
409. The Tribunal also finds it rather curious that despite their vehement objections to Mr. Ramírez and Dr. Mommer's "dual hatting" today, the Claimants do not appear to have contemporaneously challenged such appointments or the actions of the Government that made them possible. The Tribunal recollects that initially, the Articles of Association of PDVSA did not permit the Minister of Energy to simultaneously hold the post of PDVSA President.⁶⁵² This was presumably done to ensure a separation between PDVSA and the Government. However, in order to allow Mr. Ramírez to simultaneously act as PDVSA President, in 2004, the Government (and specifically President Chávez) amended the By-laws of PDVSA through a legislative act such that the Minister of Energy and Mines became eligible to be appointed as PDVSA President from that time onwards.⁶⁵³ On the same day, by another legislative act, the Government also proceeded to appoint Mr. Ramírez as PDVSA's President.⁶⁵⁴ Arguably, if the Claimants perceived these actions as "dual hatting" and contrary to their interests, they could have objected to the same and/or challenged the laws at

⁶⁵¹ R-PHB, §§ 284-285.

⁶⁵² PDVSA Original Articles of Incorporation and By-laws, **R-70**.

⁶⁵³ Partial Amendment of Decree No. 2184 of 10 December 2002, Containing the By-laws of Petróleos de Venezuela, S.A., Official Gazette No. 38,081, published on 7 December 2004, **C-112**, Article 2.

⁶⁵⁴ Reprint of Decree No. 3264 Appointing Rafael Ramírez as President of PDVSA, issued on 22 November 2004, Official Gazette No. 38,081, published on 7 December 2004, **C-113**.

the relevant time. There is nothing on record to show that the Claimants in fact did so. Thus, having accepted this state of affairs, it is unconvincing for the Claimants to now cry foul. By the same token, it is also arguable that the “dual hatting” was engendered and maintained by the Government, for it was the Government’s legislative acts that bestowed a dual hat on Mr. Ramírez and Dr. Mommer. It has not been argued that PDVSA was responsible for electing Mr. Ramírez as the President. Thus, given the Government’s role, it is questionable to what extent PDVSA can be held “responsible” for breaching contractual obligations in the instant case.

410. In any event, to the extent that the “dual hats” worn by these two officials may implicate the Tribunal’s assessment of the alleged breach of the reasonable commercial efforts obligation, the Tribunal considers that the Respondents would nevertheless be exonerated of liability due to the absence of a legally sufficient causal link between their alleged breaches and the loss caused to the Claimants.⁶⁵⁵
411. The Claimants have further alleged that PDVSA, and Mr. Ramírez personally, procured the 2007 Nationalization Decree pursuant to which they confiscated the Projects. According to the Claimants, the Respondents’ “common enterprise” with the Government in getting the 2007 Nationalization Decree enacted is evidenced by (i) the speeches of key PDVSA officials denouncing the AAs and the Apertura Petrolera; (ii) Mr. Ramírez’s role in drafting the 2007 Nationalization Decree, as he was the concerned Minister in the Government; and (iii) the Respondents’ role and contribution in developing the *Plan Siembra Petrolera* or the “Full Oil Sovereignty” Plan. In the Tribunal’s view, the Claimants’ position once again suffers from the same wrong assumption that everything done by one entity, i.e. the Government, is equally attributable to PDVSA. Pertinently, the Tribunal observes that this appears to be an assumption that the Claimants have made very early on.
412. As elaborated above, at the Hearing, Claimants’ witness Mr Heinrich stated that “[they] didn’t really differentiate [PDVSA] versus the Government [and...] expected [that PDVSA] were involved with the policies that were coming out in the public statements. [...] [The Claimants] *fully assumed* that [PDVSA] were working in the process, and none of [the qualified measures] was going to be a surprise.”⁶⁵⁶ It appears to the Tribunal that while the Claimants have built most of their case around this assumption, they have failed to show that the numerous speeches they rely on

⁶⁵⁵ *Infra*, §§ 455-490.

⁶⁵⁶ *Supra*, § 385 (emphasis added).

were in fact given by the Respondents, and not by Government officials or even both at the same time.

413. The same can be said of Mr Ramírez’s role in procuring the 2007 Nationalization Decree. The Parties agree that the power to enact laws derives from the Venezuelan Constitution.⁶⁵⁷ Article 236 thereof delineates the powers and obligations of the President of Venezuela which includes “the power to enact, with the previous authorization of an enabling law, decrees with the force of law”.⁶⁵⁸ This power is to be exercised by the President “in the Council of Ministers” and the “acts of the President of [Venezuela] [...] shall be countersigned to be valid by the [...] respective Minister or Ministers.”⁶⁵⁹
414. In light of this provision, the Respondents have argued that the entire policy of nationalization and the steps that were taken to dismantle the *Apertura*, were President Chávez’s “brainchild” and are thus attributable to him alone. The Respondents seem to suggest that Mr. Ramírez, despite being the Minister of Energy and Petroleum, had nothing to do with formulating hydrocarbon policy or drafting the 2007 Nationalization Decree. The Claimants, of course, argue at the other extreme that Mr. Ramírez’s contribution to the policy of nationalization was made in his capacity as PDVSA President. The truth, in the Tribunal’s view, lies somewhere in between the Parties’ diametrically opposed positions.
415. The Tribunal agrees with the Claimants to the extent that as a matter of Venezuelan law, the concerned Minister would ordinarily be responsible for preparing drafts of legislations and proposing them before the President and the Council of Ministers.⁶⁶⁰ However, in this instance, it is also true that the Claimants have not proved, either through documentary or other evidence, that Mr. Ramírez in fact drafted the 2007 Nationalization Decree and secured its enactment.⁶⁶¹ As the Respondents point out, the Claimants’ entire argument appears to be based once again on the presumption that this would have been the normal course of events under Venezuelan law. There is some force in the Respondents’ argument that the Claimants have not produced

⁶⁵⁷ C-PHB, § 281; Tr. (Day 8), 2078:10-12, 15-20 (Prof. García Montoya),

⁶⁵⁸ 1999 Constitution, **CLA-36**, Article 236(8) (“The powers and obligations of the President of the Republic are: [...] (8) To enact, with previous authorization of an enabling law, decrees with force of law”)

⁶⁵⁹ 1999 Constitution, **CLA-36**, Article 236 (“The President of the Republic will exercise in the Council of Ministers the powers established in paragraph [...], 8, [...] as well as those determined by law to be exercised in the same manner. The acts of the President of the Republic, except those established in paragraph 3 and 5, shall be countersigned to be valid by the Executive Vice-president and the respective Minister or Ministers”).

⁶⁶⁰ Tr. (Day 6), 1611:14-1612:13 (Prof. Brewer-Carías).

⁶⁶¹ C-PHB, §§ 283-284; R-PHB, § 450.

any witnesses who would have had personal knowledge of Mr. Ramírez's involvement in drafting the 2007 Nationalization Decree or any documents that attest to the same.⁶⁶² Consequently, the Tribunal is unable to accept the Claimants' conclusion that Mr. Ramírez was acting pursuant to his powers as PDVSA President at the relevant time.⁶⁶³

416. As regards the *Plan Siembra Petrolera*, the Claimants' allegations appear to hinge on a "timeline" or presentation that is available on the PDVSA's website⁶⁶⁴ and on President Chávez's declaration that "[t]his Plan came out of PDVSA, [...] was developed in PDVSA".⁶⁶⁵ According to the Tribunal, aside from possibly being political posturing, the latter does not prove anything. In particular, it certainly does not prove that the *Plan Siembra Petrolera* was conceived by PDVSA to destroy the AA and retain all the profits. As for the presentation on the PDVSA website, it merely records events across a timeline. The Tribunal cannot agree that this presentation is representative of a detailed plan of action to destroy the AAs and take control over the Orinoco Oil Belt, much less that it would have been formulated by Mr. Ramírez or Dr. Mommer acting as PDVSA.

Conclusion

417. In sum, the Tribunal concludes that (i) only Section 9.01(b) of the Petrozuata AA gives rise to a "reasonable commercial efforts" obligation; (ii) none of the provisions of the Hamaca AA invoked by the Claimants give rise to a "best efforts" obligation; (iii) the obligation under the Petrozuata AA is an obligation of means and it is therefore the Claimants' burden to prove that the said obligation has been breached; and (iv) the Claimants have failed to discharge this burden and to prove that the Respondents' actions constitute a breach of Section 9.01(b) of the Petrozuata AA.

⁶⁶² R-PHB, § 451.

⁶⁶³ R-PHB, §§ 294, 307.

⁶⁶⁴ PDVSA's "Oil Sowing" Timeline, **C-373**, p. 1.

⁶⁶⁵ President Chávez's Presentation on PDVSA's "Strategic Planning", 18 August 2005, **C-264**, p.1; C-PHB, §§ 262, 265.

d. **Second Willful Breach Claim: the existence and breach, if any, of the Respondents' duty to perform the AAs (i.e., elements (i) and (ii) of the civil liability test)**

418. The Claimants contend that the Respondents' failure to perform their contractual obligations under the AAs and the Guarantees "during the course of 2007"⁶⁶⁶ is a clear breach of their fundamental duty of performance pursuant to Articles 1264 and 1271 of the VCC. At the outset, the Tribunal deems it important to note that, whilst the Claimants have placed great emphasis on this argument – and it would now appear to be perhaps even the key prong of the two Willful Breach Claims – it was articulated for the first time in the Claimants' PHB on the basis of their experts' testimony at the Hearing.⁶⁶⁷

419. At the Hearing, in response to the Tribunal's questions, the Claimants' experts clarified that under Venezuelan law, the non-performance of a contract in and of itself is a *prima facie* breach of such contract.⁶⁶⁸

ARBITRATOR AYNÈS: [...] The starting point, of course, is because we have to decide on a claim for liability in contract, of course, the starting point is to find a breach, and Mr. Kahale repeatedly pointed out rightly that the first point is to have a breach. **Is it right that, under your law, a breach of a contract—the nonperformance of a contract, in itself, is prima facie a breach of the contract?**

THE WITNESS [Prof. Brewer-Carías]: **Yes, it is like that.**

ARBITRATOR AYNÈS: So, here it seemed that **it is not disputable that, at a certain point in time PdVSA ceased to perform the Association Agreement**; is that right?

THE WITNESS: Yes.

ARBITRATOR AYNÈS: **So, can we take it as a legal consequence that that is prima facie a breach of the Contract? Is that right, under your law?**

THE WITNESS: **Correct.**

ARBITRATOR AYNÈS: Or do we have to find other type of breach, specific violation of a specific clause, or something like that, or can we take it as a starting point that the nonperformance of the Contract is the breach.

THE WITNESS: Is a breach. That's correct.⁶⁶⁹

[...]

⁶⁶⁶ C-PHB, §§ 23(l), 27, 329.

⁶⁶⁷ *Supra*, fn 464.

⁶⁶⁸ Tr. (Day 6), 1641:17-23 (Prof. Brewer-Carías); Tr. (Day 7), 1947:18-23 (Prof. Mata Borjas).

⁶⁶⁹ Tr. (Day 6), 1731:15-1732:23 (Prof. Brewer-Carías).

ARBITRATOR AYNÈS: So, you--normally, you have not to find a specific provision which is breached in cases where the Contract has been given up, you know? When, at a certain point in time, the Contract is no more performed.

THE WITNESS: Yes, I agree.

[...]

THE WITNESS: **If you have a contract, and you do everything not to accomplish with the contract, you don't have to identify one word or phrase in the text of the contract. It's the will not to comply with the obligation of the contract. That's the basic breach.**⁶⁷⁰

420. Prof. Mata Borjas corroborated Prof Brewer-Carías' testimony:

ARBITRATOR AYNÈS: [...] [I]s there any difference between a breach in the course of performing of a contract, that means you are badly performing, or you are--and then you have to appreciate whether it is serious, not serious and so on, **and a breach which consists in nonperforming at all a contract at a certain point in time?**

THE WITNESS: I'm not sure I understand, but, in any case, the nonperformance--you might not perform a trivial or a minor obligation under Venezuelan law, according to Professor Mélich. That should not trigger the consequence, which is the option for the innocent Party to request performance, to request the termination of the agreement, and in any case to request compensation for damages.

ARBITRATOR AYNÈS: **Yes, but if it is nonperformance of the contract as a whole?**

THE WITNESS: **Well, then, you have a very serious breach, and there is no doubt that damages would be the consequence unless a "causa extraña no imputable", non-imputable element, interrupts the chain of causation.**⁶⁷¹

421. The Claimants also refer to the testimony of the Respondents' expert, Prof. García Montoya, who conceded during the Hearing that the Respondents' takeover of the Projects "would have impeded the performance of the Agreements [and] the continuity of the Project... **[which] in and of itself, constitutes a breach** [and] entails a violation of the obligation not to place obstacles and not to frustrate the expectations of the other Party."⁶⁷²

422. The Respondents have addressed the Claimants' allegations regarding breaches of the contractual provisions in great detail. However, they have not commented, either during the Hearing or in their PHB, on whether or not their non-performance of the AAs and the Guarantees constitutes a breach under Article 1271 VCC. In particular,

⁶⁷⁰ Tr. (Day 6), 1742:3-15 (Prof. Brewer-Carías) (emphasis added).

⁶⁷¹ Tr. (Day 7), 1947:3-23 (Prof. Mata-Borjas) (emphasis added).

⁶⁷² Tr. (Day 8), 2046:22-2047:16 (Prof. García Montoya) (emphasis added).

the Respondents' legal experts were not taken to that issue during their examination. Instead, the Respondents proceed straight to arguing that their liability is precluded due to the fact that, first, they were acting in compliance with the law (i.e. the 2007 Nationalization Decree) and, second, the Claimants have failed to establish the causal link between their non-performance and the loss suffered. Going into the elements of contractual liability, "compliance with the law" and "causation" are "downstream" elements, namely, flowing from the Respondents to the Claimants; as compared to the elements of existence of an obligation and its breach, which flow "upstream" from the Claimants to the Respondents.

423. In any event, as with its discussion regarding the breach of the "reasonable commercial efforts" obligation, the Tribunal considers it prudent to conduct the present analysis by examining whether the first two elements of civil liability, namely, (i) the existence of an obligation; and (ii) breach of that obligation, have been satisfied.

i. Are the Respondents obligated to perform the AAs and the Guarantees?

424. As regards the existence of an obligation to perform the AAs and the Guarantees, in light of the testimony of the Parties' legal expert witnesses set out above, both Parties appear to agree that such an obligation indeed exists. They also appear to agree that pursuant to Article 1271 of the VCC, the total non-performance of a contract is a *prima facie* breach which raises a presumption of liability.⁶⁷³

425. The Tribunal is convinced and notes that such a conclusion is also consistent with the nature of the obligation to perform a contract. To recapitulate, the Respondents have characterized the obligation of "best efforts" invoked by the Claimants as obligations of means and on this basis argued that it was the Claimants burden to prove breach.⁶⁷⁴

426. However, this would not be the case with the obligation to perform the contract. As conceded by the Respondents' expert Prof. García Montoya at the Hearing, with

⁶⁷³ *Supra*, §§ 419-421; Tr. (Day 8), 2114:23 – 2115:12 (Prof. García Montoya).

⁶⁷⁴ As a matter of legal principle, there appears to be no controversy between the Parties as to the difference between an obligation of means and an obligation of result (For the Respondents' position see §§ 363-364 *supra*. For the Claimants position, see C-PHB, §§ 339-341). As set out in the various authorities cited by the Respondents, an obligation of result is one where the debtor promises to achieve a specific result, such that the achievement of such a result is itself part of the obligation. In contrast, the debtor does not guarantee a result when he undertakes an obligation of means. See, *supra*, fn. 587.

respect to an obligation of result, “performance is an end in itself”,⁶⁷⁵ and non-performance of an obligation of result raises a presumption of liability:

Q. [...] Suppose that, in January 2007, the Respondents led by Mr. Ramírez as President of PdVSA, unilaterally took over operations of the Projects. [...] They have security prevent Claimants from entering the site. They stopped payment to Claimants. Would that be a breach of the Association Agreements?

A. If the taking was unilateral, if there was no motivation or justification under the Decree-Law, this would be a deviation of power, and this would bring about liability, and Respondents would be acting against the principle of legality, and this would bring about personal liability.

Q. What provision or provisions of the Association Agreements would Respondents have breached in this situation?

A. In this case, they would have impeded the performance of the Agreements, and they would have acted against the duties of respect to freedom, and this is something that the authority needs to respect and public entities also need to respect. They would have impeded the performance of the Project.

Q. Are you referring to a specific provision when you referred to duties with respect to freedom? Are there particular express provisions of the Association Agreements to which you are pointing?

A. Well, in this case they would have impeded the continuity of the Project. This, in and of itself, constitutes a breach. They are preventing the Project from being performed, and this entails a violation of the obligation not to place obstacles and not to frustrate the expectations of the other Party, and this would be proceeding against good faith.⁶⁷⁶

427. Arguably, performing the AAs is indeed an end in itself. When parties enter into a contract, the least that is expected in terms of the result sought to be achieved, is that the contract will be performed *per se*; and failure to perform or obstructing performance would hinder the achievement of this result. The Tribunal therefore considers that performance of the AAs, more exactly of some of the obligations under the AAs, and the Guarantees is an obligation of result. Accordingly, the consequences of non-performance of such an obligation of result will have to be considered in light of Article 1271 of the VCC, as conceded by the Respondents.⁶⁷⁷

428. Having concluded that the Respondents were indeed obligated to perform the AAs and that failure to do so would constitute a *prima facie* breach, the Tribunal shall now proceed to assess whether or not the Respondents acted in breach of their obligation.

⁶⁷⁵ García Montoya ER II, **RER-5**, n. 106 (emphasis added).

⁶⁷⁶ Tr. (Day 8), 2046:22-2047:17 (Prof. García Montoya) (emphasis added).

⁶⁷⁷ García Montoya ER II, **RER-5**, § 49.

ii. Did the Respondents breach their obligation to perform the AAs and the Guarantees?

429. Even though the Respondents have not engaged with the Claimants' argument, raised for the first time during the Hearing, regarding the existence and breach of a general obligation to perform the AAs and the Guarantees, the burden still lies on the Claimants to prove that the Respondents have committed a breach of their obligation to perform these contracts.
430. The Tribunal finds that the Claimants' case pertaining to the Second Willful Breach Claim is rather nebulous inasmuch as the Claimants merely allege that the Respondents failed to perform the AAs "during the course of 2007".⁶⁷⁸ The Claimants have not clearly set out (i) when this purported "non-performance" began or (ii) what actions constituted such non-performance.
431. Thus, with a view to bringing some clarity to the Claimants' case and also in order to account for the Respondents' counterarguments, to the extent that any such arguments have been made, the Tribunal considers it prudent to examine the Second Willful Breach Claim in the context of three distinct time periods:
- 1) **Prior to February 2007**, this being the period prior to the enactment of the 2007 Nationalization Decree;
 - 2) **February to 30 April 2007**, this being the period from the enactment of the 2007 Nationalization Decree until the day prior to the Expropriation; and
 - 3) **1 May 2007 onwards**, this being the period from the date of the Expropriation and afterwards.
432. The Tribunal deems these particular time periods to be relevant with a view to effectively analyzing both Parties' submissions. In this respect, while the Claimants argue that the "non-performance" took place "during the course of 2007", the Respondents' counterargument is that their actions were in compliance with the law. Put differently, the Respondents contend that they were complying with the mandate of the 2007 Nationalization Decree and thus their liability is precluded. With due regard to these submissions, the Tribunal notes that the 2007 Nationalization Decree was enacted in February 2007. Thus, from this period onwards, the Tribunal will have

⁶⁷⁸ C-PHB, §§ 329, 23(l), 27; The Tribunal notes that there appears to be only one occasion where the Claimants suggest that the Respondents' failure to perform the AAs and the Guarantees commenced from the date of the Expropriation i.e. 1 May 2007. See C-PHB, § 179 ("From [1 May 2007] onwards, the Respondent's completely failed to perform their obligations under the AAs and Guarantees").

to assess the Claimants' allegations having regard to the implications, if any, of the Respondents' defenses. In the period prior thereto, it follows that the Respondents' defenses resting on the 2007 Nationalization Decree will not apply. With these considerations in mind, the Tribunal will now assess whether the Respondents are in breach of their obligation of performance in the context of the aforesaid three periods.

433. With respect to the first period, i.e. prior to February 2007, the Tribunal finds that the Claimants have not articulated in any of their pleadings what actions they consider constitute non-performance by the Respondents. Therefore, given the insufficiency of the Claimants' allegations and in the absence of any proof to the contrary, the Tribunal considers that non-performance of the AAs by the Respondents during this period cannot be said to have occurred.
434. With respect to the second period, i.e. February to 30 April 2007, the Tribunal is, once again, not convinced that any non-performance of the AAs occurred during this period. The Tribunal reiterates that in none of their pleadings have the Claimants made allegations regarding which particular actions by the Respondents constituted "non-performance" during this period. To borrow the words of the Respondents' expert witness, Prof. García Montoya, the Claimants have not shown that the Respondents "unilaterally took over operations of the Projects. [...] They ha[d] security prevent Claimants from entering the site [or that] [t]hey stopped payment to Claimants"⁶⁷⁹ or that they "impeded the continuity of the Projects" or "prevented the Projects from being performed" in any way. The Tribunal further notes that significant contemporaneous correspondence was addressed by the Claimants to the Respondents during this period.⁶⁸⁰ However, in none of these letters did the Claimants make a single allegation that the Respondents had ceased to perform or were preventing the Claimants' performance of the AAs.
435. Rather, it appears that the only actions which according to the Claimants, constituted breaching conduct during this period, is the Respondents' participation in the

⁶⁷⁹ *Supra*, § 426.

⁶⁸⁰ Letter from President of ConocoPhillips to Mr. Del Pino (Petrozuata AA), 6 March 2007, **C-170**; Letter from President of ConocoPhillips to Mr. Del Pino (Hamaca AA), 6 March 2007, **C-171**; Letter from President of ConocoPhillips to Mr. Del Pino (Petrozuata AA), 13 March 2007, **C-172**; Letter from President of ConocoPhillips to Mr. Del Pino (Hamaca AA), 13 March 2007, **C-173**; Letter from President of ConocoPhillips to Minister Ramírez (Petrozuata AA), 12 April 2007, **C-174**; Letter from President of ConocoPhillips to Minister Ramírez (Hamaca AA), 12 April 2007, **C-175**; Letter from ConocoPhillips to Ruben Figuera (Petrozuata AA), 24 April 2007, **C-176**; Letter from ConocoPhillips to Ruben Figuera (Hamaca AA), 24 April 2007, **C-177**; Letter from ConocoPhillips to Board of Directors of Petrolera Hamaca, S.A., Hamaca Project Transition Committee, and Board of Petrolera Amariven, 30 April 2007, **C-180**; Letter from ConocoPhillips to Board of Directors of Petrozuata C.A., Petrozuata Transition Committee, 30 April 2007, **C-181**.

migration negotiations pursuant to the 2007 Nationalization Decree. The Tribunal recalls that the 2007 Nationalization Decree:

provided for the transformation of all oil associations, including the [Projects], into mixed companies [...]. Article 3 [...] required the associations to transfer operational control of the projects to PDVSA by April 30, 2007. Article 4 granted the parties to the associations a period of four months from the date of publication of [the 2007 Nationalization Decree] to reach agreement on the other terms and conditions of the migration, [...]. In case no agreement was reached within the initial four-month period, Article 5 required PDVSA subsidiaries to assume the activities carried out by the associations to ensure the continuity of the operations.⁶⁸¹

436. In the instant case, it appears that upon the enactment of the 2007 Nationalization Decree, the Claimants and the Respondents entered into negotiations with the Government for the migration of the Project companies, i.e. Petrozuata C.A. and Hamaca JVC, into *empresas mixtas* (mixed enterprises). However, since no agreement was reached with the Claimants on the migration within the four-month period provided for under the Decree, PDVSA's subsidiaries took over the Projects on 1 May 2007. The Claimants contend that the Respondents allegedly threatened and forced them to accept the migration on terms which were entirely biased in the Respondents' favor and under threat of expropriation. However - and this, in the Tribunal's view, is crucial - the Claimants submit that these very same threats constitute a breach of the "reasonable commercial efforts" obligation by the Respondents.
437. Given the tenor of the Claimants' submissions, the Tribunal is of the view that either one of two conclusions follows. First, that there is no factual allegation of "non-performance" of the AAs and the Guarantees between February – 30 April 2007. As a consequence, the Claimants have once again failed to prove breach of the AAs through such non-performance. Second, and in the alternative, that the breach of the "reasonable commercial efforts" obligation between February – 30 April 2007 due to the Respondents' participation in the migration negotiation also constitutes "non-performance" of the "reasonable commercial efforts" obligation. However, this would be fallacious. Assuming this is indeed the Claimants' argument, it is clear that they are not alleging any new breach, but only re-characterizing the breach of the "reasonable commercial efforts" obligation. It cannot be that breach of the "reasonable commercial efforts obligation" can be equally read as "non-performance of the reasonable commercial efforts obligation". In any event, this is not what the Claimants have demonstrated.

⁶⁸¹ R-PHB, § 271; 2007 Nationalization Decree, **C-166**, Articles 1, 3, 4 and 5.

438. In the circumstances, the Tribunal considers that the Claimants have failed to prove that the Respondents had ceased to perform their obligations under the AAs between February and 30 April 2007. Accordingly, there is no basis for the Respondents' liability under Articles 1264 and 1271 of the VCC.
439. The Tribunal acknowledges that it may also need to address the question of whether the Respondents' participation in the migration negotiations constituted a breach of their "reasonable commercial efforts" obligation. However, in the Tribunal's view, it is clear that any migration, forced or otherwise, would only have taken place pursuant to the 2007 Nationalization Decree.⁶⁸² Therefore, even assuming, for the sake of argument, that the Respondents did "force" the Claimants to migrate, answering this question is not crucial or in any event sufficient, as the Respondents' liability will turn on their "compliance with law" and/or "causation" defense. Therefore, the Tribunal considers that rather than opining on this allegation at the present juncture, it is apposite to consider the Parties' arguments in the context of the Respondents' defense of "compliance with law".⁶⁸³
440. Lastly, with respect to the third time period, i.e. 1 May 2007 onwards, the Tribunal notes that it is not disputed that the AAs were not performed on and from the date of the Expropriation on 1 May 2007. Thus, it follows that as from the Expropriation on 1 May 2007, the Respondents have arguably breached their obligation to perform the AAs under Venezuelan law.⁶⁸⁴ Be that as it may, the views recorded above regarding the implications of the Respondents' compliance with law and causation defenses would be equally applicable to the Respondents' liability for non-performance in the third period. In the circumstances, the Tribunal must determine whether the Respondents are precluded from liability for any reason, a question which the Tribunal shall turn to next.

Conclusion

441. In sum, the Tribunal concludes with respect to the Second Willful Breach Claim that:
- (i) the Respondents were obligated to perform the AAs and the Guarantees under Venezuelan law;
 - (ii) there is no question of non-performance of the AAs and the

⁶⁸² 2007 Nationalization Decree, **C-166**, Articles 1, 3 and 5.

⁶⁸³ *Infra*, §§ 443-474.

⁶⁸⁴ The Tribunal notes that the AAs were purportedly terminated and all rights and assets in the Projects formally transferred to PDVSA on 8 October 2007, pursuant to the "Law on the Effects of the Process of Migration to Mixed Companies of the Agreements of the Orinoco Oil Belt" (See SoC, § 141; *Law on the Effects of the Process of Migration into Mixed Companies of the Association Agreements of the Orinoco Oil Belt, as well as the Exploration at Risk and Profit Sharing Agreements*, Official Gazette No. 38,785, published on 8 October 2007, **C-198**). Therefore between May 2007 and October 2007, neither Party can be said to have performed the AAs.

Guarantees in the period prior to February 2007 as nothing to this effect has been alleged by the Claimants; (iii) there is no non-performance by the Respondents between February and 30 April 2007 as the Claimants have failed to prove any actions by the Respondents that amount to “non-performance”; (iv) the only non-performance is as of 1 May 2007. However, this conclusion is not in any way dispositive of the Respondents’ liability, which rather turns on them successfully demonstrating that their liability is rightfully precluded.

442. Accordingly, the Tribunal now turns to the next issue, namely, whether the Respondents’ purported liability for participating in the migration negotiations from February 2007 and their liability for non-performance of the AAs and the Guarantees from 1 May 2007 is precluded on any grounds.

e. *Is the Respondents’ liability precluded on any grounds?*

443. Having studied the Parties’ submissions on the potential preclusion of the Respondents’ liability, the Tribunal found them rather convoluted. In a nutshell, the Respondents raise two grounds on the basis of which they claim that their liability for any breach must be precluded: (i) the lack of any fault as they were acting in compliance with the law (i.e., element (iii) of the civil liability test); and (ii) the absence of a causal link between their purported breaches and the Claimants’ loss (i.e., element (v) of the civil liability test). It is in the context of the second ground (i.e. the element of causation) that the Respondents contend that the law, namely the 2007 Nationalization Decree, was a non-attributable external cause as it was passed by the Government and therefore acts as a break in the causal link between the Respondents’ actions and the Claimants’ loss. The Claimants, on the other hand, take a completely different track. In their view, “non-attributable external cause” implicates the element of “fault”, inasmuch as the 2007 Nationalization Decree will only spare the Respondents of liability if it was external and not attributable to them. In light of what appear to be arguments that are somewhat intertwined, the Tribunal considers it prudent to first clarify the Parties’ positions and the issues they raise, before proceeding to its assessment of such issues.

444. The main thrust of the Respondents’ defense against the Willful Breach Claims is that their liability under Venezuelan law, if any, is precluded because all of their actions were undertaken in compliance with law, i.e. the 2007 Nationalization Decree. Thus

the Respondents argue that their liability is precluded due to the absence of fault, i.e., the third element of civil liability test.⁶⁸⁵

445. The Respondents cite numerous authorities to the effect that, “whoever causes damage to another through an act that in other circumstances would have every appearance of fault, would not be liable if he acted under a legal mandate [...] since the action he has performed is not unlawful but, on the contrary, perfectly legal.”⁶⁸⁶ Thus, the Respondents argue that they had no other option but to carry out the migration and consequent Expropriation of the Projects as this was mandated by the 2007 Nationalization Decree.⁶⁸⁷ In their view, one of the essential elements of civil liability i.e. ‘fault’ on their part, is absent in this case. To buttress this argument, they add that in any event, they are required to act in accordance with the directions and policies of the Government – a fact which the Claimants were well aware of when they invested in the Projects.⁶⁸⁸
446. The Claimants reply that the Respondents’ above attempt to cast itself in the role of an “innocent bystander” is surreal.
447. First, they re-characterize the Respondents’ “compliance with law” defense as an *hecho del príncipe*. Claimants’ expert, Prof. Brewer-Carías, explains the concept of *hecho del príncipe* and why it is the same as “compliance with law”, as follows:

[W]hen one party allege[s] that [it] is complying with a law in order to not comply with contractual obligation, this is *an excuse of noncompliance*, and [...] it is in relation to an act of Government, *it is exactly the same as the theory of fait du prince as an extraneous non-attributable cause that can excuse the compliance of contractual obligations*. So, [*hecho del príncipe*] is the same [*as compliance with law, but*] with another name.⁶⁸⁹

448. In light of the above, the Claimants interpret the Respondents’ defense as seeking to escape liability on the basis that there is no *breach*. According to the Claimants, the Respondents’ approach is therefore misguided, as the compliance with law defense

⁶⁸⁵ R-PHB, §§ 427 ff.

⁶⁸⁶ R-PHB, § 428; Oscar E. Ochoa G., General Theory of Obligations, Civil Law III, Vol. II (2009), **RLA-136**, pp. 563-565; García Montoya ER I, **RER-1**, § 52; Carlos Eduardo Acedo Sucre, THE FUNCTION OF FAULT IN LIABILITY FOR UNLAWFUL ACT IN VENEZUELAN LAW, COMPARED WITH FRENCH AND ITALIAN LAW (1993), García Montoya ER I, **RER-1 App. GM-40**; Enrique Urdaneta Fontiveros, MISTAKE, DECEIT AND DURESS UB CONTRACT FORMATION (2009), García Montoya ER I, **RER-1 App. GM-41**.

⁶⁸⁷ 2007 Nationalization Decree, **R-4**, Articles 1, 3, 5.

⁶⁸⁸ R-PHB, § 434; PDVSA Original Articles of Incorporation and By-laws, **R-70**; Decree No. 855, Revised Articles of Incorporation and By-laws of PDVSA, Official Gazette No. 33.321, published on 3 October 1985, **R-71**.

⁶⁸⁹ Tr. (Day 6), 1622:7-14 (Prof. Brewer-Carías).

cannot under any circumstances undo the existence of the breach itself. Rather, the compliance with law defense excuses fault.⁶⁹⁰

449. On this basis, the Claimants argue that in order to escape liability on the strength of a *hecho del príncipe* or a *fait du prince*, the Respondents must establish that such *hecho del príncipe/ fait du prince* was “an extraneous non-attributable cause that can excuse the compliance of contractual obligations”. Put differently, according to the Claimants, in order to escape liability it is not enough for the Respondents to merely establish that they were acting “in compliance with the law”, they must also show that such law was a non-attributable extraneous cause.⁶⁹¹
450. According to the Respondents however, ‘*hecho del príncipe*’ or “non-attributable extraneous cause” goes to the element of “causation” (i.e. the final element of the civil liability test). The Respondents contend that “the debtor may have committed a breach, but no liability arises from that breach because the *hecho del príncipe* breaks the chain of causation between the breach and the damage.”⁶⁹² On this premise, the Respondents’ purportedly use *hecho del príncipe* as an additional defense to show the absence of causation, namely that the 2007 Nationalization Decree being an act of the Government, broke the causal link to the damages suffered. They argue that even assuming their role in procuring the 2007 Nationalization Decree were to be considered a cause in fact, their actions do not satisfy the legal standard/test of causation under Venezuelan law.
451. Having studied the Parties’ submissions, the Tribunal considers that regardless of the terminology employed by the Parties, in order for the Respondents’ liability for non-performance of the AAs and the Guarantees to be precluded, the Respondents have to establish that any fault on their part was the result of a ‘non-attributable external cause’, both in fact and in law.⁶⁹³ This conclusion results from Article 1271 of the

⁶⁹⁰ C-PHB, § 350. There had been some debate on the effect of the compliance with law defense, which led the Tribunal to seek a clarification from the Parties as to the differences between ‘compliance with law’ and ‘*hecho del príncipe*’ in so far as their effect on contractual liability is concerned. Although it appears at first blush that there is some divergence in views, upon closer examination of the Parties’ responses, both Parties appear to agree in principle on the effect of a ‘compliance with law’ defense. The Respondents’ answer to the Tribunal’s question in this regard was that the “defense of compliance with law relates to the element of fault [and that i]f compliance with law is established, it precludes a finding of contractual [...] liability.” Along the same lines, the Claimants respond that the “[c]ompliance with law’ defense [...] excuses fault (*culpa*) and thus *liability* for breach”. Thus the divergence, if there should be one, appears to be with regard to the correct place in the civil liability test to assess the relevance of “non-attributable external cause”. See R-PHB, § 440; Claimants’ Responses to Tribunals Questions, C-PHB, Appendix A, p. 3 Question 2(b), para 7.

⁶⁹¹ C-PHB, §§ 347 ff.

⁶⁹² R-PHB, § 440.

⁶⁹³ C-PHB, § 348.

VCC, which provides that a debtor shall be required to pay damages for non-performance of an obligation, “unless he proves that the non-performance [...] arises from an external cause not attributable to him”.⁶⁹⁴

452. In sum, even if the Tribunal accepts that the Respondents’ actions after the 2007 Nationalization Decree were taken pursuant to the provisions of this Decree – and this fact does not appear to be disputed by the Parties⁶⁹⁵ – the only way for the Respondents to avoid liability is by establishing that the 2007 Nationalization Decree was non-attributable and external to them.

453. As far as the burden of proof is concerned, the Parties do not dispute that the burden of proving that the 2007 Nationalization Decree is a non-attributable external cause, rests with the Respondents, who seek to invoke this defense.⁶⁹⁶

454. The Parties’ submissions having been thus clarified, the issues that the Tribunal shall proceed to examine in the context of the Respondents’ defenses to liability are, (i) whether the 2007 Nationalization Decree, is as a matter of fact, not-attributable and external to the Respondents; and (ii) assuming that the 2007 Nationalization Decree is not external and attributable to the Respondents, is it the “cause in law” or the legally sufficient cause of the Claimants’ losses.

i. Is the 2007 Nationalization Decree not attributable and external to the Respondents, as a matter of fact?

455. In order to establish that the 2007 Nationalization Decree is a non-attributable external cause (or *causa extraña no imputable*) as a matter of fact, the following elements must be satisfied, namely, (i) the act occurs after the parties enter into the contract; (ii) it is unavoidable, unforeseeable, and irresistible; (iii) it occurs in the total absence of fault of the defendant; and (iv) it renders performance absolutely impossible.⁶⁹⁷

456. The Claimants’ expert, Prof. Brewer-Carías, stated during the Hearing that:

[The 2007 Nationalization Decree] couldn’t be extraneous to PdVSA, first, due to the organic link between the controller of the public enterprises and the controlled public enterprise, particularly in the oil sector. And, second, due to

⁶⁹⁴ VCC, **CLA-2**, Article 1271; C-PHB, § 348.

⁶⁹⁵ R-PHB, §§ 427 *et. seq.*; C-PHB, §§ 348-350.

⁶⁹⁶ C-PHB, § 355; Rejoinder § 265; García Montoya ER II, **RER-5** § 99; Tr. (Day 8), 2086:17-2087:3.

⁶⁹⁷ C-PHB, § 355; Rejoinder § 265; García Montoya ER II, **RER-5**, § 99.

the fact that the Minister acting defining these policies and proposing the Decree-Law was at the same time the President of PdVSA.⁶⁹⁸

457. Elaborating on this idea further, the Claimants submit three *independent* grounds as to why the 2007 Nationalization Decree cannot be extraneous to PDVSA: either (i) it was for the specific purpose of conferring a financial benefit on the State-entity i.e. PDVSA, in which case, there is a presumption of non-extraneousness; *or* (ii) the Government and the State-entity have become organically linked; *or* (iii) the state-owned entity, PDVSA, contributed to the issuance of the 2007 Nationalization Decree.⁶⁹⁹
458. In light of the Tribunal's finding that the Respondents did not procure the 2007 Nationalization Decree, the examination of the third ground mentioned above can be dispensed with. In any event, the Tribunal notes that the Claimants' arguments once again rely on the "dual hats" worn by Mr. Ramírez and Dr. Mommer. As already determined above, in the Tribunal's view the Claimants' "dual hat" theory does not withstand scrutiny. Accordingly, the Tribunal will only assess the arguments made on the first two grounds.
459. As regards the first ground (that the 2007 Nationalization Decree was for the specific purpose of conferring a financial benefit on the Respondents), the Claimants rely on the Böckstiegel Guidelines⁷⁰⁰ to determine whether the *hecho del príncipe* defense is available in this case.⁷⁰¹ Pursuant to these Guidelines, the distinction between a State and a state-enterprise can be ignored and the *hecho del príncipe* defense discarded if it is obvious that the State exercises its sovereign powers with the clear aim of modifying contractual obligations and/or extricating the state-entity from liability.⁷⁰²
460. The Claimants submit that the Böckstiegel Guidelines' approach of focusing on the nature and the purpose of the State act has been widely applied and accordingly any defenses have been rejected when the sovereign act was for the benefit of the

⁶⁹⁸ Tr. (Day 6), 1622:18-24 (Prof. Brewer-Carías).

⁶⁹⁹ C-PHB, § 357.

⁷⁰⁰ VCC, **CLA-2**, Article 4 ("The Law must be given the effect that appears evident from the meaning of the words, in accordance with the connection among the words themselves and the intention of the legislator. When there is no specific provision in the Law to apply, the provisions that regulate similar cases or analogous subject matters shall be considered; and, if there were still any doubt, the general principles of the law will apply."); Brewer Carías ER, **CER-5**, § 68 (arguing that they apply as 'general principles of the law'); Tr. (Day 6), 1702:12-1704:4 (Prof. Brewer-Carías).

⁷⁰¹ C-PHB, §§ 360-364.

⁷⁰² Karl-Heinz Böckstiegel, *ARBITRATION AND STATE ENTERPRISES: A SURVEY ON THE NATIONAL AND INTERNATIONAL STATE OF LAW AND PRACTICE* (1984), **CLA-73**, p. 47 ("Böckstiegel Guidelines").

State-entity.⁷⁰³ In a similar vein, given that the purpose of the 2007 Nationalization Decree was to ensure that the entire financial benefit of the AAs flowed only to the Respondents and could then be applied towards Government spending, the Claimants conclude that the Respondents cannot invoke compliance with law or *hecho del príncipe*.

461. As to the second ground (that the Respondents and the Government are organically linked), the Claimants rely on the decision in *Air France*⁷⁰⁴ to argue that the Government and PDVSA had become organically linked, such that the 2007 Nationalization Decree was not extraneous to the Respondents. According to the Claimants' expert, Prof. Brewer-Carias, "it is impossible to say that an act of the Minister of Energy and Mines would be extraneous to the main company that acts in the oil sector in Venezuela, and *even less* if the President of the company is at the same time the minister."⁷⁰⁵
462. Pertinently, this organic link is not merely anchored on the Claimants' "dual hat" theory. The Claimants' expert, Prof. Brewer-Carias, has also pointed to other criteria which, in his view, lead to the undeniable conclusion that PDVSA was inextricably linked with the State:
- i. PDVSA and its subsidiaries became "integrated into the national Public Administration" and "subject to [...] political and administrative control by the National Executive."
 - ii. PDVSA's By-laws are themselves an act of Presidential authority, and state that the National Executive Power, through the Ministry of Energy and Mines, will set policies, guidelines, and other provisions for PDVSA.
 - iii. All capital stock of PDVSA is provided by the "Republic of Venezuela," and all the shares of PDVSA, according to Article 303 of the Constitution, are and must remain the ownership of the Republic.

⁷⁰³ Pierre Lalive, *Arbitration with foreign states or state-controlled entities: some practical questions*, in Julian D. M. Lew, *Contemporary Problems in International Arbitration* (1987), **CLA-78**; A. H. Hermann, *Rebuff for a Portuguese State Trader*, *FINANCIAL TIMES*, 27 February 1986, **C-248**; Anton Heini, *The substantive public policy in the new Swiss law of international arbitration*, reprinted in TransLex (1989) **CLA-80**.

⁷⁰⁴ *Air France*, French Cour de Cassation (Labor Chamber), Decision No. 69-40253, Judgment dated 15 April 1970, **CLA-54**; *Air France*, Conclusions by General Counsel Robert Mellottée on the French Cour de Cassation (Labor Chamber) Decision No. 69-40253, *Recueil Dalloz*, Jurisprudence (1971), **CLA-55**; Brewer-Carias ER, **CER-5**, §§ 58-62.

⁷⁰⁵ Tr. (Day 6), 1623:21-25 (Prof. Brewer-Carias)

- iv. The By-laws provide that the “Ministry of Energy and Mines and other Ministries that may be appointed from time to time by the President of the Republic shall exercise the representation of the Republic in the Shareholders’ Meeting, which shall be presided over by the Ministry of Energy and Mines.”
- v. PDVSA’s board of directors comprises government officials and appointees.
- vi. PDVSA and the Government cooperated to use oil revenues to support the Government and further PDVSA’s activities.⁷⁰⁶

463. In light of the above, the Claimants submit that the relationship of ownership and control after 2003 clearly constitutes an organic link between the Government and PDVSA, which precludes a finding that the 2007 Nationalization Decree was extraneous.

464. The Respondents reply that each of the three elements necessary to ascertain that the 2007 Nationalization Decree was non-attributable and external to the Respondents “are all present [in this case]”.⁷⁰⁷ Regarding the Claimants’ reliance on the Böckstiegel Guidelines and the *Air France* decision, the Respondents submit as follows:

- o The Böckstiegel Guidelines have been misapplied in the instant case. Quoting the Guidelines in full,⁷⁰⁸ the Respondents point out that the Claimants rely on the wrong rule therein. In their view, the rule cited by the Claimants – to argue that the acts of the Government are not extraneous if they are for the benefit of the state-entity – is only applicable to *administrative acts* of the State’s executive organs. Where the State act is a ‘law of general application’ the Guidelines provide that by definition this law will be recognized as a *force majeure*, unless the private enterprise supplies *prima facie* evidence that the State passed such a law so that it could escape fulfilling its contractual obligations.⁷⁰⁹
- o The *Air France* decision is not applicable in the instant case. That case did not involve a State act, but the decision of a supervising authority which was in fact “organically related with the normal operations” of the State-entity, which is why the decision of such an authority was not considered external to the State-entity

⁷⁰⁶ Brewer-Carías ER, **CER-5**, §§ 67-73.

⁷⁰⁷ R-PHB, § 449; *supra*, § 455.

⁷⁰⁸ Böckstiegel Guidelines, **CLA-73**, R-PHB, § 926.

⁷⁰⁹ Böckstiegel Guidelines, **CLA-73**; R-PHB, § 926.

i.e. *Air France*. The Respondents further contend that the reliance on the *hecho del príncipe* or *fait du prince* is misplaced because these doctrines permit the private contracting party to seek damages from its co-contracting State party, when the latter makes the performance of the contract more burdensome pursuant to its own actions. *A contrario*, it cannot apply when the measure at issue emanates from a public entity which is not a party to the contract.⁷¹⁰ Thus, given that the present case involves “an act by the National Government via the Legislative Branch” and not by “PDVSA” the latter is released from any responsibility.⁷¹¹

465. To begin with, the Tribunal is not convinced that any of the legal principles cited by the Claimants apply to the determination of the present question. The Claimants’ expert, Prof. Brewer-Carías seeks to import the Böckstiegel Guidelines and French jurisprudence on the grounds that they are general principles of law, considering that Article 4 of the VCC allows recourse to general principles of law. However, such reliance on Article 4 is questionable at best. Article 4 of the VCC insofar as it is relevant provides that:

[...] When there is no specific provision in the Law to apply, the provisions that regulate similar cases or analogous subject matters shall be considered; and, if there were still any doubt, the general principles of the law will apply.⁷¹²

466. It appears evident to the Tribunal that one cannot simply rely on ‘general principles of law’ at will. Such recourse is only permitted if there is no specific provision of law to apply, nor any provisions that can be applied by analogy. The Claimants have not shown this to be the case. Equally, the Claimants have not shown that either the Böckstiegel Guidelines or the *Air France* principles have been accepted in Venezuelan law, i.e. the applicable law in the present arbitration; as a matter of fact, relying on French doctrine, as persuasive as it may be, is almost an admission that there would not be any Venezuelan authorities to the same effect. In the circumstances, the Tribunal considers that the Claimants have sought to paint Article 4 of the VCC with a very broad brush, and the relevance of the authorities they cite is simply not tenable. Having said that, the Tribunal in any event agrees with the Respondents that both of these authorities are misapplied.

⁷¹⁰ R-PHB, § 454; Fanny Luxembourg, *Fait du Prince: Convergence of Private and Public Law*, 8 LA SEMAINE JURIDIQUE EDITION GÉNÉRALE (2008), **RLA-93**, § 2; André de Laubadère, Jean-Claude Venezia and Yves Gaudemet, *TREATISE OF ADMINISTRATIVE LAW*, VOL. I (15th ed., 1999), **RLA-94**, p. 837; Christophe Guettier, *Law of Administrative Contracts* (2004), **RLA-95**, p. 562.

⁷¹¹ Rejoinder, § 268.

⁷¹² VCC, **CLA-2**, Article 4.

467. The Böckstiegel Guidelines, insofar as they are relevant, provide as follows:

A. *Acts of state in the form of administrative acts*

1. Due to the presumption that a state will not have its executive organs act to the detriment of its own foreign trade organs, including state enterprises, administrative acts of state should in principle not be considered as *force majeure*.

2. This presumption is not applied, however, if it can be seen *prima facie* or can be proved by the state enterprise that the administrative act was caused by general considerations not connected with this contract or this sort of contract.

3. In spite of rule 2 the presumption under 1 is applicable again, if the private party proves that in its specific case the general considerations did not apply.

B. *Acts of state in the form of law*

1. If it is not a general law but a law for an individual case, the same rules apply as under A.

2. A general law, due to its *per definitionem* general character, will in principle have to be recognized as *force majeure*.

3. Rule B2 does not apply, however, if the private enterprise supplies at least *prima facie* evidence that it was in the interest of the state not to fulfil its contractual obligations which was the motivation of the law.⁷¹³

468. Evidently, the Claimants are mistaken in their reliance on Part A of the Guidelines which pertains to the treatment of the *administrative acts* of one state organ (executive organs) vis-a-vis another (trade organs including state-entities). As admitted by the Claimants' expert Prof. Brewer-Carías, none of the laws at issue in the present case were administrative acts.⁷¹⁴ They were all "acts of the State in the form of law" which are clearly governed by Part B of the Guidelines and are thus subject to *force majeure* or analogous defenses, if they are of general application.⁷¹⁵ The Claimants' obvious reliance on the wrong guideline brings their argument regarding the relevance and applicability of the Böckstiegel Guidelines up short.

469. In any event, the exception under rule B3 would also not come to the Claimants' assistance as the purpose of the 2007 Nationalization Decree was not to renege from the Respondents' contractual obligations. The 2007 Nationalization Decree first and

⁷¹³ Böckstiegel Guidelines, **CLA-73**, pp. 47, 48. ("In practical examples the rules mean: if in a state-trading country the state refuses an export or import licence, this is not normally a case of force majeure (A1). [...] If a foreign investor does not receive the transfer of profits due from a state enterprise because the transfer law has been changed by the legislative body, this is a case of force majeure (rule B2).")

⁷¹⁴ Tr. (Day 6), 1704:5-1707:14 (Prof. Brewer-Carías).

⁷¹⁵ Böckstiegel Guidelines, **CLA-73**, pp. 46-48.

foremost envisaged continued participation of foreign oil companies, but subject to an altered shareholding and company structure. It was only in the event that the Parties were unable to agree on the migration of the association to mixed enterprises that the 2007 Nationalization Decree envisaged the taking of the Project.⁷¹⁶

470. As regards the Claimants' reliance on the *Air France* decision, the Tribunal agrees with the Respondents that the decision therein is distinguishable from the present case. In that case, the obligation to pay Air France personnel was assumed by Compagnie Air-France itself, albeit with the assent of its regulatory authority, pursuant to an approval granted by the same regulatory authority.⁷¹⁷ Subsequently, the same regulatory authority hindered performance of the contract. It is in this context, that the Cour de Cassation held that:

[As the] modalities of determination of the salaries of [flight personnel] have been validly fixed by Compagnie Air-France with the approval of the Regulatory Authority [...] the subsequent irregular intervention of *this authority* in an attempt, as such, to hinder the performance of the obligation [...] cannot be opposed by [Air-France] subject to such regulation [being] an unforeseeable and insurmountable act of a *third party external to it*.⁷¹⁸

471. As Respondents' expert, Prof. Garcia Montoya rightly pointed out during the Hearing, the implication of this distinction is that the administrative act in question, which hindered performance of the contract, was enacted by the same entity which was a party to the contract. In the present case however, the act in question i.e. the 2007 Nationalization Decree, is an act of the Government and moreover, the Government is not a party to the AAs and the Guarantees.
472. Further, much ado has been made about the criteria developed in the *Air France* decision to indicate the existence of an organic link between the State and the state-entity. Although it may appear at first blush, that the facts in this case fit neatly within this criteria, the Tribunal is unable to accede to this checklist approach. The generality of the conditions elaborated in the *Air France* case would result in a situation where every state-entity would be equivalent to the State. As a result, any and every act of the State would without exception be treated as an act of the state-entity and the compliance with law defense would be rendered a virtual dead letter. In

⁷¹⁶ 2007 Nationalization Decree, **R-4**, Articles 3, 4 and 5.

⁷¹⁷ *Air France*, Conclusions by General Counsel Robert Mellottée on the French Cour de Cassation (Labor Chamber) Decision No. 69-40253, *Recueil Dalloz*, Jurisprudence (1971), **CLA-55**.

⁷¹⁸ *Air France*, French Cour de Cassation (Labor Chamber), Decision No. 69-40253, Judgment dated 15 April 1970, **CLA-54**, p. 2 (emphasis added).

the Tribunal's view, such a position cannot be countenanced in the facts of the present case.

473. The Tribunal has already previously confirmed that the Respondents were not involved in procuring the 2007 Nationalization Decree. Additionally, the Tribunal notes that in their reliance on *Air France*, the Claimants appear to accept that the Respondents are mandated to follow the dictats of the Chávez Administration pursuant to PDVSA's Articles of Association and By-laws.⁷¹⁹ It would therefore follow that the consequences of the 2007 Nationalization Decree were "unavoidable, irresistible and rendered performance of the AAs and the Guarantees impossible". In the circumstances, the Tribunal concludes that the 2007 Nationalization Decree was indeed external and not attributable to the Respondents. Accordingly, at the very least, the Respondents are not at fault, which consequently precludes their liability for non-performance of the AAs and the Guarantees.

474. The Tribunal is of the view that the above determination is dispositive of the remaining case on willful breach. As the Tribunal has concluded that the Respondents' actions were not in any way the factual cause of the Claimants' losses it is not necessary for the Tribunal to examine the Parties' remaining arguments on causation. However, for the sake of completeness, the Tribunal proposes to address the Respondents' argument that they are in any event, not liable due to the absence of a causal link between their purported breaching conduct and the damages suffered by the Claimants.

ii. Is the 2007 Nationalization Decree the "cause in law" of the Claimants' loss?

475. The nub of the Respondents' argument on this issue is that regardless of any purported involvement in procuring the 2007 Nationalization Decree, they remain free from liability, as their alleged breaching conduct is not the *legally sufficient cause* of the Claimants' loss. Accordingly, this issue requires the Tribunal to assess whether any purported breach by the Respondents satisfies the legal standard of causation under Venezuelan law. Both Parties disagree on the legal standard of causation that is applicable under Venezuelan law.

476. The Respondents submit that the standard of causation prevalent under Venezuelan law, is that of "adequate causation" or "efficient/preponderant causation". Relying on

⁷¹⁹ *Supra*, § 462.

various authorities on Venezuelan law, the Respondents explain this standard as follows:

Among the theories that try to explain the scope of the [...] causal link [...] the theory of adequate causation [...] states that among the chain of events that determine the damage it is not correct to follow the standard of culpable act or the proximate act, nor that of the triggering event. **But it must be determined which of the events of the chain is legally adequate to cause the damage.**⁷²⁰

477. As to the test for determining the legally adequate cause, the Respondents submit that:

[t]o identify the cause of the damage [...] [t]he following question must be answered: is the action or omission of the allegedly liable party **in and of itself capable of normally producing such damage?** [I]f the answer is affirmative, it must be concluded that such condition is adequate and thus the cause of the damage; if the answer is negative, then we are dealing with a simple concurrent condition and not with the cause.⁷²¹

478. Applying this test to the facts of the present case, the Respondents submit that the legally adequate cause of the Claimants' loss was evidently the 2007 Nationalization Decree which was, and could only, have been enacted by the Government. Even assuming the Respondents had any purported role to play in procuring the enactment of the Decree, the fact remains that such action was not *in and of itself* normally capable of causing the Claimants any loss and the Respondents are consequently absolved of liability.⁷²²

479. In contrast, the Claimants submit that the test for causation is set out in Article 1275 of the VCC which provides that:

Even if failure to comply with the obligation is a result of willful misconduct, damages related to the loss suffered by the creditor and the profits of which he has been deprived, shall not exceed those that are the **immediate and direct consequence** of the failure to perform the obligation.⁷²³

480. Accordingly, they contend that the test to be applied is 'did Respondent's non-performance of the AAs and Guarantees directly cause to [sic] the Claimants' loss?'⁷²⁴ The Claimants then go on to contend that causation under Article 1275 is not

⁷²⁰ *Banco Provincial S.A. v. Banco Central de Venezuela*, García Montoya ER I, **RER-1 App. GM-92**, pp. 29-30. (emphasis added)

⁷²¹ Civil Code of Venezuela: Background/Codifying Commissions/ Parliamentary Debates/ Jurisprudence/ Doctrine/ Concordances (2001) García Montoya ER I, **RER-1 App. GM-64**, p. 469.

⁷²² C-PHB, §§ 461 ff.

⁷²³ VCC, **CLA-2**, Article 1275 (emphasis added by the Claimant)

⁷²⁴ C-PHB, § 391.

restricted to any particular theory of causation.⁷²⁵ Their expert, Prof. Brewer-Carías, explains that “the [VCC] does not impose the need to identify one specific cause. If it is a chain of acts that are the cause of the willful breach, then all are part of the cause.” Next, the Claimants’ other expert Prof. Mata Borjas states that “‘the discretion of the judge is paramount’ to any theory [of causation] and that ‘the purpose of the causation analysis...is not to apply a rigid formula...but rather to arrive at an appropriate outcome that reflects reality.’”⁷²⁶ Thus, the Claimants essentially argue for a “case-by-case” analysis of causation.

481. In light of this standard of causation, the Claimants’ case against the Respondents appears to be that:

[T]he Government could not have nationalized the petroleum industry, expropriated the Projects, and destroyed the AAs without PDVSA’s willing involvement. Had the Chávez Government been able to nationalize and operate the entire petroleum industry in Venezuela with “old” PDVSA still in place, it would have done so. But it could not. PDVSA’s clashes with the Government from 1998 to 2001, and its labour strike in opposition to the Government’s initial efforts to politicize the company in 2002, demonstrated that the Government could not accomplish its objectives without a “new” PDVSA. [And i]t was only with the willful and active participation of “new PDVSA” that Claimants’ dispossessions were possible.⁷²⁷

482. The Claimants’ thus conclude that the Respondents cannot now argue that the 2007 Nationalization Decree is only attributable to the Government and is a supervening act that breaks the chain of causation of the Claimants’ losses.
483. Against this backdrop, the Tribunal will first determine the applicable standard of causation under Venezuelan law and second determine if the Respondents’ actions satisfy this legal standard.
484. The Tribunal is unable to follow the Claimants’ interpretation of Article 1275 of the VCC and their “case-by-case” or “discretionary” theory of causation. The Claimants make a rather expansive claim that “all commentators agree [that Article 1275] is not restricted by any particular theory of causation”. However, they provide little basis for this statement.⁷²⁸ Moreover, the strength of the Claimants’ submission on the standard of causation is belied by the testimony of their own expert witness. When questioned on causation during the Hearing, Prof. Mata Borjas admitted that although

⁷²⁵ C-PHB, § 398.

⁷²⁶ Mata Borjas ER II, **CER-4**, § 39.

⁷²⁷ SoC, §§ 91-94, 181; Reply, § 122; C-PHB, §§ 404-407.

⁷²⁸ Mata Borjas, **ER II**, § 39, citing Maduro and Pittier, referred to by Respondents, R-PHB, § 462.

different commentators from different jurisdictions used different terminology, by and large, Venezuelan Courts and commentators have adopted the “adequate causation” test. It also appears to the Tribunal from this testimony, that the “discretion” the Claimants speak of, does not pertain to which theory of causation is applicable, but rather to the manner in which the Tribunal applies this theory to the facts of a specific case.⁷²⁹

Q. But, Professor, did you adopt the adequate causation?

A. I used that word in my First Report, yes.

Q. So, did that mean that you were adopting the adequate causation test?

A. I used the word, and for the purpose of my conclusions, I used the standard of adequate causation. I used the standard of a regular causation. I used the standards of ordinary causation because--

[...]

A. Let me put it in very simple words. Number 1, there is a touchstone under Venezuelan law. The rule of law at play here is the application or it's for this Tribunal to apply or not to apply Article 1275. That's Number 1. Now, Article 1275 [...] it's the notion that the damage must be the direct and immediate consequence of the alleged conduct. **Having said that, it is for the Tribunal or for any court handling a "responsabilidad civil" claim to analyze and to interpret that rule of law. In doing so, according to Venezuelan law, the rule of interpretation is stated under Article 4 of the Venezuelan Civil Code, which states that the interpreter of a rule of law in Venezuela have to first go to the words chosen by the lawmaker, but not stay with the words alone because, again, as it is the case with contracts, the purpose of the Interpreter is to determine the intent of the lawmaker, of the legislator. In this case, it is for this Tribunal to determine whether the damages is to direct an immediate sequence. That has to be made with discretion. It has to be made on a case by case basis.** The circumstances, the specific circumstances are for the Tribunal, not for me, to determine. In so doing, the Tribunal may choose between different theories. Secondly, that is to be done on a case by case basis, and then you have several decisions and several Italian authors making an identity between the theory of adequate causation with the theory of regular causation.

Q. I'm sorry to interrupt. I just want to ask you a very simple question: Isn't adequate causation the theory of causality mostly adopted by Venezuelan authors?

A. It has been adopted repeatedly by Venezuelan courts.

Q. By courts and authors; right?

A. It has been accepted by Venezuelan courts and Venezuelan authors, such as probably the two most recognized, Professor Mélich-Orsini and Professor Gert Kummerow used the expression. Professor Kummerow uses

⁷²⁹ Mata Borjas, **ER II**, § 39; C-PHB, § 397.

expressions such as “the necessary premise.” They use different expressions. One of them is “adequate causation.”⁷³⁰

485. In light of the above, the Tribunal is satisfied that the standard of causation under Venezuelan law is, as argued by the Respondents, that of adequate causation.

486. Applying this standard to the facts of the present case, the Tribunal is of the view that even assuming the Respondents had played any role in procuring the 2007 Nationalization Decree (which the Tribunal has already concluded they did not), their purported actions were not the adequate, direct or immediate cause of the Claimants’ loss. This is because the ultimate power to enact the 2007 Nationalization Decree could only have been exercised by the Government. The Respondents’ conduct would in and of itself not have been sufficient to cause the Claimants any loss. This has been acknowledged by the Claimants’ expert Prof. Mata Borjas, who confirmed that the Expropriation could only have taken place through the intervention and supervening acts of the Government:

Q. [...] My question is: Absent the actions of the President and the National Assembly, could the interests of Claimants have been nationalized?

A. No, you needed a specific governmental formality, yes.

Q. The actions of the Respondents on their own would have been sufficient to cause the damages claimed by Claimants?

A. I would have to--need to think about it, but, in this particular case, it's a joint conduct of Respondents and the Government what was alleged to be the cause

Q. No, but I'm asking you to assume on their own, the actions by the Respondents on their own, would that have been sufficient to cause the damage?

A. Based on the Expropriation?

Q. Yes. We're talking about the Expropriation.

A. No, you would need a formality for the Expropriation, you would need a governmental act. That is correct.⁷³¹

487. In the circumstances, even assuming that the Claimants had established all other elements of civil responsibility, the Willful Breach Claims would have failed, as the Respondents have successfully proved that their purported actions were not the legally sufficient cause of the Claimants’ losses.

⁷³⁰ Tr. (Day 7), 1908:8-1911:6 (Prof. Mata Borjas).

⁷³¹ Tr. (Day 7), 1913:17-1914:11 (Prof. Mata Borjas).

488. As the remaining arguments (on “disloyal delay”) will not materially alter the Tribunal’s conclusions, these will not be addressed. The Tribunal does note however, that its conclusions in respect of the Willful Breach Claims are fortified by the Claimants’ conduct from the date of the first alleged breach in 2004 (the Royalty Measure) till the actual commencement of the arbitration in 2014. As the Claimants have admitted, through an entire decade – from 2004 to 2014 – they simply assumed that the Respondents were aware of the fact that contractual obligations had been breached. No doubt the Respondents were aware that the Claimants objected to the qualified measures and the Expropriation. However, complaining about these measures does not automatically indicate that there have also been contractual breaches, much less of the specific provisions that the Claimants ultimately came to rely on in their SoC.
489. This is compounded by the fact that the scope of the Willful Breach Claims has been constantly changing. In their Request for Arbitration, the Willful Breach Claims were only based on the “duty of good faith” under Venezuelan law. Then in the SoC, the Claimants put together some provisions of the AAs which could support their claim. Importantly though, they did not claim damages for the effects of the Royalty Measure and the Extraction Tax. Nor did they argue that non-performance of the AAs was itself a breach. This last argument only took shape at the Hearing and was finally made in their post-hearing submissions. The Tribunal can only infer from the growth story of the Willful Breach Claims, that the Claimants themselves were not confident of its persuasiveness and were building on it as the proceedings progressed. For these additional reasons, the Tribunal finds little difficulty in dismissing the Willful Breach Claims in their entirety.
490. The Tribunal therefore concludes that (i) regardless of whether this relates to the element of fault or to the element of causation in the civil liability test, in order to escape liability, the burden lies with the Respondents to prove that the 2007 Nationalization Decree is a “non-attributable external cause”; (ii) the Respondents have proved that the 2007 Nationalization Decree is not attributable and is external to them as a matter of fact; and (iii) even assuming that the Respondents played a role in procuring the 2007 Nationalization Decree, it would not satisfy the test for causation under Venezuelan law and thus not be the legally sufficient cause of the Claimants’ alleged losses.

4. Conclusion

491. In light of the aforementioned analysis, the Tribunal has come to the following conclusions regarding the Willful Breach Claims:

- i. The Willful Breach Claims are arbitrable in light of the fact that they are pertaining to purported breaches of the Respondents' contractual obligations arising out of the AAs which are commercial contracts, as opposed to the mere implementation of the 2007 Nationalization Decree.
- ii. In order to establish the Respondents' liability for willful breach, the following elements of the civil liability test under Venezuelan law must be satisfied, namely (i) the existence of an obligation; (ii) breach of the obligation; (iii) fault and its non-preclusion by an external non-attributable cause; (iv) damages; and (v) existence of a causal link between the purported breaches and the resulting damage.
- iii. As regards the First Willful Breach Claim concerning the Respondents' obligation to exercise "reasonable commercial efforts", the Tribunal finds that such an obligation exists under the Petrozuata AA. In that regard, Section 9.01(b) of the Petrozuata AA obligated the Respondents to exercise "reasonable commercial efforts" in order to ensure the success of the Petrozuata Project and to refrain from any conduct that would hinder the functioning of the Petrozuata Project. Under Venezuelan law, such an obligation is classified as an "obligation of means", meaning that it does not require the achievement of a specific result, but rather an exercise of due diligence and care in an effort to achieve the desired result. Furthermore, it is for the Claimants to prove that such due diligence and care has not been exercised by the Respondents, thus constituting a breach of their obligation.
- iv. Correspondingly, the Tribunal finds that no "reasonable commercial efforts" obligation exists under the Hamaca AA. In particular, the Tribunal concludes that the language of Articles 10.4(a) and 10.5(a) of the Hamaca AA is not broad enough to include an obligation on the part of the Respondents to "lobby" the Government in order to retain the application of the most favorable fiscal regime for the Parties and the Projects.
- v. The Tribunal further concludes that the Claimants have failed to prove that the Respondents did not exercise "reasonable commercial efforts" as required

under the Petrozuata AA. In this respect, the Tribunal considers that the “dual hats” worn by Mr. Ramírez and Dr. Mommer do not automatically result in a situation where their acts as Ministers of the Government also constituted actions of PDVSA. Moreover, the position of these individuals in PDVSA did not give them any special powers to bring about the Overall Expropriation. Even if Mr. Ramírez and Dr. Mommer had not held such positions in PDVSA, the Government would have nevertheless remained empowered to enact the various qualified measures and PDVSA would have remained obligated to implement such measures pursuant to its Articles of Incorporation and By-laws.

- vi. Accordingly, in relation to the First Willful Breach Claim the Tribunal concludes that an obligation to exercise reasonable commercial efforts exists under the Petrozuata AA, but not under the Hamaca AA. However, the Tribunal also finds that the Claimants have failed to prove the breach of this reasonable commercial efforts obligation.
- vii. As regards the Second Willful Breach Claim – alleging that the Respondents failed to perform the AAs “during 2007” – the Tribunal finds that an obligation of performance of contractual obligation *per se* exists under Article 1271 of the VCC, such that non-performance amounts to a breach. Moreover, under Venezuelan law, an obligation of performance is characterized as an “obligation of result”, such that non-performance creates a presumption of liability (in contrast to an obligation of means, where liability needs to be proved).
- viii. However, the Tribunal finds that the Claimants fall short of proving the entire extent of their Second Willful Breach Claim, in that the Claimants have only successfully proven non-performance of the AAs from the date of the Expropriation i.e. from 1 May 2007, and not any period prior thereto. In other words, the Claimants’ allegation that the Respondents stopped performing the AA’s “during 2007” is too broad.
- ix. Accordingly, in relation to the Second Willful Breach Claim, the Tribunal concludes that an obligation to perform the AAs exists under Venezuelan law (i.e. element (i) of the civil liability test), and the Claimants have proven the breach of such obligation by the Respondents, but only from the date of the Expropriation (element (ii) of the civil liability test).

- x. Furthermore, even though the Respondents have breached their obligation to perform the AAs, the Tribunal finds that their liability is precluded for the following reasons. First, the Respondents were acting pursuant to the 2007 Nationalization Decree. This Decree is a non-attributable external cause. Accordingly, the Respondents were acting in compliance with the law and their fault is precluded. Second, even assuming the Respondents were involved in “procuring” the 2007 Nationalization Decree, the Respondents’ actions do not satisfy the legal standard for causation under Venezuelan law which requires the Claimants to show that the Respondents’ actions were the “adequate cause” of the losses sustained. Under Venezuelan law it is the enactment of the various qualified measures by the Government that constitutes the legally sufficient cause of the Claimants’ loss.
- xi. In sum the Tribunal concludes that the Respondents are not liable for willfully breaching the AAs and the Willful Breach Claims are accordingly dismissed.

D. HECHO ILÍCITO

492. In the alternative, the Claimants argue that the Respondents’ willful destruction of the AAs also attracts liability under the principle of *hecho ilícito* enshrined in Article 1185 of the VCC. Article 1185 of the VCC reads:

Whoever intentionally, negligently or recklessly, has caused damage to another has the obligation to repair it. Similarly, a party who has caused someone else damage, surpassing in the exercise of his rights the limits established by good faith, or by the object in light of which that right has been granted, is equally bound to repair it.⁷³²

493. In light of the above, the Claimants reiterate the sequence of events leading up to their dispossession and to the destruction of the AAs. Accordingly, they argue that all four elements constitutive of an *hecho ilícito* requiring reparation (i.e. existence of fault, damage, liability to indemnify, and causation) have been satisfied in the case at hand.⁷³³
494. The Respondents’ response is three-fold and runs as follows: (i) as a matter of Venezuelan law, the Claimants cannot assert *hecho ilícito* alongside their contractual

⁷³² VCC, **CER-1**, Article 1185.

⁷³³ C-PHB, § 455; *supra*, § 257.

claim for Willful Breach; (ii) compliance with law cannot constitute tortious conduct; and (iii) the Claimants do not satisfy the element of causation for *hecho ilícito*.⁷³⁴

495. The Tribunal considers that the Parties' submissions regarding the Respondents' first contention (i.e. that in the present case the AAs preclude a finding of extra-contractual responsibility) are entirely dispositive of the issue in favor of the Respondents. Therefore, it is unnecessary for the Tribunal to assess the Parties' remaining submissions on the Respondents' second and third contentions.
496. According to the Claimants' legal expert, Prof. Mata Borjas, there is no rule under Venezuelan Law preventing a plaintiff from making a claim on grounds of contractual liability and, in the alternative, on grounds of extra-contractual liability. This is so given that Article 1185 VCC "establishes the recognized right of the victim to attain relief from the tortfeasor, without any qualification. There is no restriction that the victim cannot be a party to a breached contract or that the wrongdoing must differ from the violation of an agreement".⁷³⁵ In view of this, the Claimants argue that extra-contractual responsibility for an *hecho ilícito* can arise despite the existence of a contractual relationship between a plaintiff and a defendant. For the purposes of both contractual and extra contractual responsibility, this remains the case irrespective of whether the questionable "conduct" is the "same" in both scenarios.⁷³⁶
497. The Claimants refer to a number of decisions rendered by Venezuelan courts in support of their position.⁷³⁷ Indeed, this case law suggests that, under Venezuelan law, a claim for extra-contractual responsibility can be admissible despite the existence of a contractual relationship between the disputing parties. However, this aspect is not controversial.
498. It is not the Respondent's position that the mere existence of a contract between two parties *de jure* precludes either of them from advancing an extra-contractual claim (either directly or alternatively) against the other. Rather, in the Respondents' submission, the issue is whether, despite the existence of a contract binding both parties, the specific elements of extra-contractual responsibility for an *hecho ilícito* are properly ascertained. In this respect, the Tribunal agrees with the Respondents that

⁷³⁴ R-PHB, §§ 429-436, SoD, §§ 250-271; Rejoinder, §§ 260-286.

⁷³⁵ Mata Borjas ER I, § 80.

⁷³⁶ C-PHB, § 456.

⁷³⁷ C-PHB, fn. 804; *Petra Peña v. FICS de Venezuela* [2010], **CLA-40**, pp. 17-18; *Kassen v. Banco Consolidado, C.A.* [1990], **CLA-38/CMB-16**, p. 39; *Palazzi v. Clínica El Ávila* [2012], **CMB-13**, p. 115; *María del Socorro Prato v. Seguros de Venezuela* [1988], **CMB-14**, p. 28; *Edgar Parra v. Avenza* [1994], **CMB-15**, p. 514.

this can only occur if the following two requirements are met: (i) the action taken by one of the parties involves a violation of a “legal duty independent” from the contract at hand; and (ii) the damage caused by said action results in the loss of a “patrimonial or moral benefit distinct from those guaranteed by the contract”.⁷³⁸

499. As explained by the Respondents’ legal expert,⁷³⁹ Prof. García Montoya, in recent cases the Venezuelan Supreme Court has consistently found the two above criteria to be decisive in assessing whether a claim for extra-contractual responsibility may arise in spite of the existence of a contract between the disputing parties.⁷⁴⁰ In fact, as will be further discussed below, the judicial decisions referred to by the Claimants follow the same view.⁷⁴¹
500. As argued by the Claimants, in *Petra Peña* the Supreme Court held that, in instances of a “wrongful act”, there is “a possibility for the claim of both types of contractual and non-contractual liability” to be “borne of the same legal relationship of the parties [i.e. a contract]”.⁷⁴² However, the Claimants appear to have disregarded the Supreme Court’s eventual finding, by which the identified “wrongful act” stemmed from a distinct and “demonstrated” case of “fraud”.⁷⁴³
501. Similarly, the Supreme Court in *Palazzi* allowed for both contractual and extra-contractual claims pursuant to allegations of contractual willful misconduct.⁷⁴⁴ In particular, the Supreme Court affirmed that, when the harmful act results from criminal behavior or from intentional misconduct, negligence or recklessness, a victim has the possibility of opting between a contractual and a tortious cause of action.⁷⁴⁵ That being said, the Supreme Court conditioned its finding by stating that a party is entitled to such choice only when the harmful act pertains to “circumstances of extraordinary occurrence” and not from the “mere breach of contractual provisions”, concluding that, “in principle, the scopes of contractual and criminal responsibility are

⁷³⁸ SoD, § 258.

⁷³⁹ García Montoya ER I, **RER-1**, § 96.

⁷⁴⁰ *Oficina Técnica de Construcciones C.A. v. Banco Unión S.A.C.A. and Banco Hipotecario Unido S.A.* [2002], **GM-72**, **31**, **34**; *Juan Pedro Pereira Meléndez v. Christian Herman Klager Bischoef and Gerhardt Otto Klaeger Ritter* [2004], **GM-73**, pp. 12-14; *Hyundai de Venezuela, C.A. v. Hyundai Motor Company* [2011], **GM-74**, p. 41-44; *Elida Gutiérrez de Rodríguez v. Servicios de Bienes Raíces Cima, C.A. and Inversora Caraballeda, C.A.* [2012], **GM-75**, pp. 25-30.

⁷⁴¹ *Supra*, fn. 737

⁷⁴² C-PHB, fn. 804, referring to *Petra Peña v. FICS de Venezuela* [2010], **CLA-40**, p. 17-18.

⁷⁴³ *Petra Peña v. FICS de Venezuela* [2010], **CLA-40**, p. 17

⁷⁴⁴ Mata Borjas ER I, fn. 61.

⁷⁴⁵ *Palazzi v. Clínica El Ávila* [2012], **CMB-13**, p. 115.

mutually exclusive”.⁷⁴⁶ In this regard, it should be underlined that *Palazzi* concerned moral damages suffered by the plaintiff as a result of admitted gross negligence: negligence that was deemed sufficient to support criminal liability for manslaughter.⁷⁴⁷

502. The remaining court rulings referenced by the Claimants fare no differently. First, as explained by Prof. García Montoya (and in line with the Supreme Court’s findings in *Pallazi*), the discussion on tortious claims *vis-à-vis* contractual responsibility in both *Prato* and *Parra* took place in the context of moral damages due to non-contractual breaches.⁷⁴⁸
503. Second, while in *Kassen* the High Court of Miranda determined that a contractual relationship between the parties could not prevent the occurrence of an *hecho ilícito*, such statement was not made in a void.⁷⁴⁹ In that case, the High Court clarified that: (i) an “*hecho ilícito* may well be borne collaterally out of the abusive application of a specific clause”; and (ii) in order to conclude that a contractual provision had been abusively applied, its application was required to fall “outside of the limits imposed by the peaceful contractual good faith, meaning, outside the terms established by Article 1160 of the Venezuelan Civil Code”.⁷⁵⁰
504. It is noteworthy that the threshold determined in *Kassen* had already been adopted by the Supreme Court in *Prato* years before.⁷⁵¹ Still, the High Court went on to elaborate that, under Venezuelan law, the abuse of rights is “typically” a “non-contractual conduct that gives rise to a compensation different from the compensation foreseen in or foreseeable under the contract”.⁷⁵²
505. Overall, the legal authorities relied upon by the Claimants militate against their position. In all cases, the possibility of bringing an extra-contractual claim, either in tandem or alternatively to a contractual claim, was essentially assessed against the two criteria already identified above: (i) whether the breached obligation or implied

⁷⁴⁶ *Palazzi v. Clínica El Ávila* [2012], **CMB-13**, p. 115 (translation by the Tribunal).

⁷⁴⁷ *Palazzi v. Clínica El Ávila* [2012], **CMB-13**, pp. 58-59, 63, 114 (translation by the Tribunal).

⁷⁴⁸ García Montoya ER I, **RER-1**, fn. 109 (and the sources referenced therein).

⁷⁴⁹ *Kassen v. Banco Consolidado, C.A.* [1990], **CLA-38** [or **CMB-16**], p. 39.

⁷⁵⁰ *Kassen v. Banco Consolidado, C.A.* [1990], **CLA-38** [or **CMB-16**], p. 39.

⁷⁵¹ *María del Socorro Prato v. Seguros de Venezuela* [1988], **CMB-14**, p. 28 (“*La presencia de una relación contractual entre las partes no impide que la ocurrencia de un hecho ilícito genere una indemnización derivada del mismo. Este hecho ilícito bien puede nacer colateralmente de la aplicación abusiva de una determinada cláusula, fuera de los límites impuestos por la buena fe contractual específica del caso, es decir, fuera de los términos previstos por el artículo 1.160 del Código Civil*”).

⁷⁵² *Kassen v. Banco Consolidado, C.A.* [1990], **CLA-38** [or **CMB-16**], p. 40.

duty (including contractual good faith, as both authors referred to above say) was independent from or in excess of the scope of the contract concluded between the disputing parties; or (ii) whether the damage caused by such breach resulted in a loss not guaranteed by the contract in question.

506. In light of the above, the Tribunal finds that, pursuant to Venezuelan law, the Claimants must cumulatively satisfy both of the foregoing requirements in order to succeed on their *Hecho Ilícito* claim. In the Tribunal's view the Claimants have failed to meet such a standard.
507. The Claimants' positions for Willful Breach and *Hecho Ilícito* are, for all material and legally relevant purposes, identical. No substantive differentiation is made in terms of the circumstances that, according to the Claimants, arguably give rise to the Respondents' contractual responsibility under their Willful Breach Claims, or to extra-contractual responsibility under their *Hecho Ilícito* claim.
508. Indeed, the Claimants submit that the elements necessary to establish liability under Article 1185 of the VCC are comprised of factual, legal, or quantum considerations to some extent shared with their Willful Breach Claims. For instance, with regard to the element of fault (which both Party experts agree implies a "wrongdoing" or an action "contrary to the law"),⁷⁵³ the Claimants specifically refer to their arguments on the Respondents' alleged willful breaches of the AAs.⁷⁵⁴ With respect to the element of causation, the Claimants argue that it is complied with for the same reasons as in the context of their Willful Breach claim.⁷⁵⁵ As to damages, the Claimants once more deal with the losses allegedly suffered either contractually or extra-contractually, jointly.⁷⁵⁶
509. Put simply, the Tribunal is of the view that the Claimants have failed to ascertain a duty allegedly breached by the Respondents which would be different from the obligations required by the AAs. The Claimants submit that the Respondents breached their obligation to perform the AAs in good faith in accordance with Article 1160 of the VCC.⁷⁵⁷ However, as seen, in both *Kassen* and *Prato* it was required that, for a parallel or alternative extra-contractual claim to succeed, the victim must identify a wrongful act exceeding the scope of implied contractual obligations (i.e. the

⁷⁵³ Mata Borjas ER I, § 75; García Montoya ER I, §§ 92-93.

⁷⁵⁴ C-PHB, § 455(a).

⁷⁵⁵ C-PHB, fn. 802.

⁷⁵⁶ C-PHB, §§ 455(b), 466, 513, 1027(g), 1027(n).

⁷⁵⁷ *Supra*, §§ 341.

contractual good faith mandated by Article 1160 of the VCC).⁷⁵⁸ The Claimants have not met such requirement.

510. Assuming *arguendo* that the Claimants did point to a legal duty breached by the Respondents concomitant to or preceding the Expropriation, the Claimants have nevertheless failed to prove that the alleged damage resulting thereof is not guaranteed by the AAs. In other words, all of the Claimants' alleged damages are limited to the loss of rights or advantages arising under the AAs. In fact, the Claimants request that the Tribunal declare the Respondents' "integral role in destroying the Claimant's contractual rights" capable of constituting an *hecho ilícito*, warranting full reparation under Venezuelan law.⁷⁵⁹ No moral or distinct harm is claimed for what, *in abstracto*, could be sought by way of the Respondents' alleged contractual liability under the AAs. Thus, in line with *Kassen*,⁷⁶⁰ the compensation requested by the Claimants for their *Hecho Ilícito* claim is no different from the compensation foreseen under the AAs pursuant to their Willful Breach claim.
511. Lastly, the Tribunal is aware that, according to the Claimants' expert, Prof. Mata Borjas, "a claimant may indeed concurrently assert contractual and extra-contractual liability where the respondent has engaged in, for example, an 'abuse of rights' [...]." The Claimants' legal expert goes on to affirm that, "on the Claimants' case, Respondents' willful destruction of the Claimants' Project Interests would satisfy the standard of 'abuse of rights' under Venezuelan law".⁷⁶¹ Nonetheless, Prof. Mata Borjas' observation is untenable for the following reasons.
512. First, the Claimants have not made such an explicit submission on 'abuse of rights' in either their oral or written pleadings in the context of their Willful Breach claim. Second, the opinion of Prof. Mata Borjas is unsubstantiated. The expert fails to make any references to Venezuelan law equating the notion of willful breach with the 'abuse of rights' doctrine. Third, neither Prof. Mata Borjas nor the Claimants have identified a legal right held by the Respondents whose exercise must be deemed an abuse. Fourth, the Claimants have in any event failed to substantiate how the damages resulting from such an alleged 'abuse of rights' (assuming it were to exist) could give rise to losses not guaranteed or recoverable through the AAs themselves.

⁷⁵⁸ *Supra*, §§ 503-504.

⁷⁵⁹ C-PHB, § 1027(g).

⁷⁶⁰ *Supra*, § 504.

⁷⁶¹ Mata Borjas ER II, § 52.

513. For the reasons set out above, the Tribunal dismisses the Claimants' claim for the Respondents' extra-contractual responsibility for the occurrence of an *hecho ilícito*, in its entirety.

E. THE COUNTERCLAIM

514. Respondent Corpoguanipa⁷⁶² has raised a counterclaim under the Hamaca AA for a declaration that, in the event it is found liable for DAs under the Hamaca AA it will be entitled to exercise the option provided under the Hamaca AA, to purchase Claimant Phillips' rights and interests in the Hamaca Project. The Claimants dispute both the legality of the counterclaim and the method adopted by the Respondents for its valuation. The Tribunal therefore proposes to first examine Parties' arguments on the legality of the counterclaim, and only in the event it is upheld, will the Tribunal examine the arguments on valuation.

1. The Respondents' position

515. The Respondents contend that pursuant to Articles 14.4 and 14.5 of the Hamaca AA, they are entitled to purchase or "buy-out" the Claimants' "Project Interests"⁷⁶³ in the Hamaca Project as an alternative to paying compensation for DAs pursuant to an award made in the Claimants' favour⁷⁶⁴ (Articles 14.4 and 14.5 are hereinafter collectively referred to as the "Buy-Out Provisions" and the option to purchase the Claimants' interest is hereinafter referred to as the "Buy Out Option"). The Respondents submit that "Project Interest" as defined in the Hamaca AA is not restricted to the Claimants' shareholding in the Hamaca Project, but extends to all "rights, titles, interests and obligations" relating thereto. As such, they contend that the definition is broad enough to permit them to acquire the Claimants' "claim for compensation" made in the present arbitration.⁷⁶⁵

516. In support of the above interpretation, the Respondents rely on the negotiating history of the Hamaca AA⁷⁶⁶ and more particularly the HCA which stipulates that remedies

⁷⁶² All references to "Respondents" in this part of the Award dealing with the counterclaim shall be understood to mean Respondent Corpoguanipa. Similarly, all references to "Claimants" shall be understood to mean Claimant Phillips.

⁷⁶³ Hamaca AA, C-3, Article 1. Project Interest is defined at Article 1 of the Hamaca AA (*infra*, § 526).

⁷⁶⁴ See SoD, §§ 325-334; Rejoinder, §§ 364-371. See also Terms of Reference, § 40 (Respondents' arguments). Articles 14.4 and 14.5 of the Hamaca AA are set out at §§ 525-529 *infra*. There is no buy-out or related provision in the Petrozuata AA, and thus this issue relates only to the Hamaca AA.

⁷⁶⁵ Rejoinder, § 370.

⁷⁶⁶ April 1996 Corpoven Presentation, R-97, p.18; Hamaca Preliminary Term Sheet, C-41, pp. 21-22; Letter from ARCO to Corpoven, May 29 1996, R-101, p.1.

for DAs in the form of either compensation or amendments to the provisions of the Hamaca AA would be “without prejudice to the option for [Respondents], according to the provisions of the Association Agreement, to purchase such participation of the [Claimants] on equitable conditions”.⁷⁶⁷

517. Countering the Claimants’ contentions that the Buy-Out Option apply only in case of DAs pursuant to which the Hamaca Project remains a going concern (and not a case like the present, where the Hamaca Project has been expropriated and there is nothing left to “buy-out”), the Respondents submit that there is no basis for drawing such a distinction in the text of the Buy-Out Provisions. Given that the definition of a DA in the Hamaca AA expressly includes “expropriation of the assets of, or a Party’s interest in, the Association or Association Entities”, in the Respondents’ view the Claimants’ argument is unsustainable.⁷⁶⁸ Accordingly, the Respondents submit that they are entitled to buy out the Claimants’ interests in the Hamaca Project – i.e. any potential award of compensation obtained in this arbitration – in the event an award of compensation is made in the Claimants’ favour.

2. The Claimants’ position

518. In response, the Claimants argue that “[t]he Counter-Claim is no more than an opportunistic afterthought by the Respondents, and should be dismissed as such.”⁷⁶⁹ They submit first that the Buy-Out Provisions are not relevant to the Willful Breach Claims because the Respondents’ liability for willful breach is governed by Venezuelan contract law and not Article 14 of the Hamaca AA; and second, that it cannot be invoked in respect of the DA Claims because there is nothing left to “buy-out”. As the Tribunal has dismissed the Willful Breach Claims and upheld the DA Claims, only the arguments pertaining to the latter will be considered.

519. The Claimants argue that the text and structure of the Buy-Out Provisions leaves no doubt that the Buy-Out Option was intended to apply only in a situation where the Hamaca Project remained a going concern and not, as is the instant case, where the Claimants’ interest in the Project has been expropriated over 10 years ago and there is nothing left to “buy out”.

⁷⁶⁷ Hamaca Congressional Authorization, **R-11**, Twenty First Condition; SoD, § 327; Rejoinder, § 364.

⁷⁶⁸ SoD, § 332.

⁷⁶⁹ C-PHB, § 465.

520. Drawing the Tribunal's attention to various clauses in Article 14.4 and 14.5⁷⁷⁰, the Claimants submit that these provisions were structured in a specific way. *First* they envisaged multiple opportunities for the Parties to agree upon amendments to the terms of the Hamaca AA in the event of a DA. *Secondly*, they contemplated the possibility for the Claimants to maintain the AAs and their interests therein, by relinquishing their DA claim *before* the Buy-Out Provisions were triggered. According to the Claimants all of these provisions would be rendered meaningless if, as the Respondents claim, the Buy-Out Option could also operate after an Expropriation.⁷⁷¹
521. The Claimants also argue that the Respondents' attempt to buy out the Claimants' claim for compensation contradicts the framework and structure of the Buy-Out Provisions, which envisage the option to *either* pay damages *or* to purchase the Claimants' Project Interest and not both. According to the Claimants, the Respondents are attempting to "compel a forced sale of [Claimants'] interest in the Hamaca Project years after the expropriation of that interest [...] and [to permit the Respondents to do so] would produce an absurd and highly inequitable result that ignores the plain terms of the AA".⁷⁷²

3. Relevant provisions of the Hamaca AA

522. In their submissions, both Parties have emphasized the text of the Buy-Out Provisions.⁷⁷³ Accordingly, the Tribunal shall first set out the relevant provisions which are at issue in the counterclaim, namely Articles 14.4 and 14.5 of the Hamaca AA.
523. As elaborated above,⁷⁷⁴ in the event the Parties agree that a DA resulting in MAE has occurred, then pursuant to Articles 14.1(a) and 14.3(c), the Parties are required to enter into good faith negotiations regarding suitable amendments to the terms of the Hamaca AA, that would compensate the Claimants for the damages they have suffered as a result of the DAs.⁷⁷⁵

⁷⁷⁰ The Tribunal shall set out these clauses to the extent necessary in its analysis.

⁷⁷¹ Reply, §§ 254-260; C-PHB, §§ 473, 477-478.

⁷⁷² C-PHB, § 486.

⁷⁷³ SoD, §§ 326, 332; Rejoinder, § 368; Reply, § 250.

⁷⁷⁴ *Supra*, § 109.

⁷⁷⁵ Hamaca AA, C-3, Article 14.1(a) ("[I]n the event that any Foreign Party shall be an Affected Party [i.e., a Party that suffers a MAE due to a DA], the Parties will enter into good faith negotiations regarding amendments to the terms of this Agreement and the Related Agreements (the "Amendments") that would compensate the Affected Party, on the terms and conditions set forth in this Article XIV, for the Damages [...] suffered by it as a result of the Discriminatory Actions."); 14.3(c) (Upon delivery of a Notice of Triggering Event by the Claimant to Corpoguanipa, Corpoguanipa and the Claimant are required to enter into negotiations with the objective of determining whether

524. The Buy-Out Provisions come into play in the event the Parties are unable to agree that a DA resulting in MAE has occurred *or* in the event that they are unable to agree upon amendments to the Hamaca AA. In such a situation, Articles 14.4(a) and (b) enable the Parties to enter into a two phased arbitration, wherein in the first phase, the arbitral tribunal will determine if a DA resulting in a MAE has occurred, and if so, the consequent damages suffered by the Claimants.⁷⁷⁶ If a DA resulting in MAE has occurred, then in the second phase, the Parties can also seek the determination of a “Buy-Out Price” for purchasing the Claimants’ “Project Interest”. The provisions to the extent relevant, are set out below:

(a) In the event that [Corpoguanipa] and the [Claimants] do not come to full agreement on whether Discriminatory Actions resulting in a Material Adverse Effect have occurred, or the Parties do not come to full agreement on the Amendments, within six (6) months of delivery of a Notice of Triggering Event, [Corpoguanipa], or the [Claimants] shall be entitled to commence arbitration proceedings in accordance with Section 17.2. The arbitration proceedings shall be bifurcated, with the panel *first considering whether the [Claimants] had suffered a Material Adverse Effect as a result of one or more Discriminatory Actions in the relevant fiscal years, and, if the answer is affirmative, determining the [...] Damages [...]*.

(b) In the event that it is agreed or determined that one or more Discriminatory Actions resulting in a Material Adverse Effect have occurred and that the [Claimants] [are] thus an Affected Party, in a second stage of the same proceedings the arbitral panel shall determine the “Buy-Out Price” [...]. During the second stage of the arbitration proceedings, the Parties shall continue (or commence) negotiations regarding the Amendments.⁷⁷⁷

525. Article 14.4(c) defines what the “Buy-Out Price” shall be depending upon the stage of development of the Hamaca Project. In the instant case, the Parties agree that the definition of “Buy-Out Price” in Article 14.4(c)(B)⁷⁷⁸ is applicable, which states in relevant part that:

they agree that a DA resulting in MAE has occurred. “If [Corpoguanipa] and the [Claimants] agree that a Discriminatory Action resulting in a Material Adverse Effect has occurred, and that the [Claimants are] thus an Affected Party, the Parties shall enter into good faith negotiations regarding the Amendments; provided that the Amendments shall not result in a cost to Corpoven Sub exceeding the Damages actually suffered by the [Claimants]...”).

⁷⁷⁶ Hamaca AA, **C-3**, Article 14.3(d) (“The ‘Damages’ of an Affected Party [i.e. Claimants] shall be equal to the amount in Dollars needed for the Affected Party to attain one hundred percent (100%) of the Reference Net Cash Flow that the Affected Party would have attained in the relevant Fiscal Years had the Discriminatory Action not occurred, plus interest thereon at LIBOR from the date Damages are incurred until the date the Damages are determined in accordance with Section 14.4(a). The calculation of such amount shall be increased to take into account Venezuelan taxes such that the Affected Party receives the full amount of the Reference Net Cash Flow after such Venezuelan taxes.”)

⁷⁷⁷ Hamaca AA, **C-3**, Article 14.4(a) and (b).

⁷⁷⁸ C-PHB, § 482; Rejoinder, § 369; R-PHB, § 230. The Tribunal notes that the Parties differ on the question of whether pursuant to this provision, the Buy-Out Price is capped in the same manner as compensation payable for a DA. The Tribunal will address that issue, if necessary, once it has concluded whether the Counterclaim stands or falls.

[...] the Buy-Out Price shall be equal to the commercial value (without taking into account the effect of the Discriminatory Actions but taking into account the provisions of this Article XIV in respect of the Threshold Cash Flow) of the Affected Party's Project Interest.⁷⁷⁹

526. The term "Project Interest" is defined as follows:

"Project Interest" shall mean, (i) [...] in respect of Phillips, 20%, or; (ii) with respect to any Party, such Party's undivided *direct or indirect percentage interest in the Association*, the direct or indirect interest held by such Party in each Association Entity (as defined in Section 4.10), *and all rights, title, interests and obligations attaching thereto, including, without limitation, the Party's rights under this Agreement* and all rights and interests in the Initial Upgrader, the Second Upgrader and all other assets jointly owned by two or more of the Parties and all contracts and leases jointly entered into by or on behalf of the Parties in connection with the Project activities, in each case as the same may vary from time to time.⁷⁸⁰

527. Article 14.4(b) finally stipulates that "the Parties shall continue (or commence) negotiations regarding the Amendments"⁷⁸¹ even during the second phase of the arbitration.

528. Article 14.5 then addresses the consequences of the Parties not reaching an agreement regarding potential amendments to the Hamaca AA and the arbitral panel delivering its decision on the "Buy-Out Price" in the meantime, providing in relevant part as follows:

(a) In the event that the Parties have *not previously agreed on the Amendments*, upon receipt of an arbitral award relating to the Buy-Out Price, the [Claimants], within thirty (30) days, shall notify [Corpoguanipa] of whether it elects to withdraw or maintain its claim for compensation. If [it] does not withdraw its claim, [Corpoguanipa], within thirty (30) days of receipt of the Affected Party's notice, shall **either**:

(1) **pay the Affected Party's Damages** [...] for the relevant Fiscal Years out of [Corpoguanipa]'s net cash flow from the Project (with interest accruing on any amount of Damages determined to be owing, but not paid, in any year at a rate equal to LIBOR plus 2%); provided that in the event any Affected Party accumulates unpaid Damages in excess of the Affected Party's Project Interest of \$75,000,000, or in the event that such Affected Party has accrued Damages outstanding for a period in excess of three hundred and sixty-five (365) days, all accrued but unpaid Damages of such Affected Party shall be promptly paid by [Corpoguanipa] or PDVSA in its capacity as guarantor, in each case out of their general corporate funds or otherwise; **or**

(2) **purchase the Affected Party's Project Interest at the Buy-Out Price**, [...]; or

⁷⁷⁹ Hamaca AA, C-3, Article 14.4(c).

⁷⁸⁰ Hamaca AA, C-3, Article 1 (emphasis added).

⁷⁸¹ Hamaca AA, C-3, Article 14.4(b).

- (3) have the Parties continue to negotiate the Amendments, in which event, if the Parties have not agreed upon the necessary Amendments within three (3) months of the Affected Party's notice to [Corpoguanipa], the Affected Party shall be entitled to give notice to [Corpoguanipa] of its decision to terminate such negotiations and upon receipt of such notice [Corpoguanipa], within ten (10) Business Days, shall elect to either pay Damages or purchase the Affected Party's Project Interest at the Buy-Out Price, on the terms set forth in (1) or (2) above, as applicable.⁷⁸²

529. Article 14.5(b) to (d) addresses aspects of interest payment, tax benefits and the implications of the Respondents' participation in the Hamaca Project reducing below 25%. As such, the Tribunal does not consider them germane to the discussion on the legality of exercising the Buy-Out Option.

4. Analysis

530. In light of the Parties' arguments the crux of the dispute is whether the Buy-Out Provisions are compatible with and can be invoked in case of an Expropriation.

531. At first blush, the Tribunal notes that the definition of DA in the Hamaca AA⁷⁸³ – which expressly includes expropriation – and the text of the Buy-Out Provisions read together, appear to suggest that the Buy-Out Option can be invoked in case of Expropriation. However, the Tribunal finds merit in the Claimants' argument that reading the Buy-Out Provisions in this manner would render parts of these Provisions dead letter or self-contradictory. Therefore, the Tribunal considers that in order to determine the true scope of application of these Provisions they must be construed as a whole.

532. In that regard, as the Claimants rightly point out, the primary (and preferred) solution envisaged in the event a DA results in MAE, is amendments to the Hamaca AA *in lieu* of the damages suffered by the Claimants. Moreover, the Buy-Out Provisions repeatedly envisage opportunities for the Parties to agree on such amendments. In particular:

- Article 14.3(c) provides that if the Claimants consider that they have suffered MAE pursuant to the DA and the Respondents agree with such characterization, the Parties are required to enter into good faith negotiations with the objective of

⁷⁸² Hamaca AA, C-3, Article 14.5(a) (emphasis added).

⁷⁸³ Hamaca AA, C-3, Article 14.1(b)

reaching an agreement on the amendments that can be made to the Hamaca AA;⁷⁸⁴

- Article 14.4(b) provides that the Parties can continue their negotiations or even commence fresh negotiations regarding the Amendments, regardless of having commenced arbitration to determine the Buy-Out Price;
- Article 14.5(a) restricts payment of damages or the Buy-Out Option to cases where the Parties have not previously agreed on Amendments; and
- Article 14.5(a)(3) provides that even after the Buy-Out Price has been determined and the Claimants have decided not to withdraw their claim for compensation, the Parties may make one last attempt to negotiate amendments to the Hamaca AA.⁷⁸⁵

533. In the Tribunal's opinion, it stands to reason that the foremost objective of the above provisions was to keep the Hamaca AA and the Parties' relationship alive to the extent possible, or as the Claimants eloquently describe:

while the Contracting Parties [were] negotiating a revision to their ongoing Association Agreement to compensate for the effect of a Discriminatory Action and save their commercial marriage, if they can, a Buy-Out Price [was to be] identified that could lead to a future amicable divorce.⁷⁸⁶

534. In the circumstances, it is inconceivable that the Buy-Out Option could also be applicable in a situation where the Claimants had been dispossessed of the Hamaca Project and the Hamaca AA terminated, leaving no contractual relationship to salvage through suitable amendments.⁷⁸⁷ Given the tenor of the above requirements, the Tribunal finds that there is a significant chink in the Respondents' counterclaim.

535. The Tribunal notes that the Respondents give some importance to the fact that two of the Claimants' witnesses, Mr. Manning and Mr. Heinrich, appeared to accept that the Buy-Out Option could be triggered by any DA during the Hearing.⁷⁸⁸ However, the

⁷⁸⁴ As argued elsewhere, the Claimants are required to inform the Respondents that they consider themselves to have been affected by a DA resulting in MAE by issuing a Notice of Triggering Event (*Supra*, §§ 238-240). It is if the Respondents' agree to such characterization that the obligation to enter into good faith negotiations regarding amendments to the Hamaca AA kicks in. However, in the instant case, the objective of issuing such a Notice was rendered nugatory by virtue of the fact that the Hamaca AA had been terminated and no "amendments" to the same could be negotiated.

⁷⁸⁵ Reply, §§ 255-256.

⁷⁸⁶ Tr. (Day 1), 66:4-12 (Claimants' Opening Statement).

⁷⁸⁷ C-PHB, § 485.

⁷⁸⁸ Tr. (Day 2), 425:3-426:6 (Mr. Manning); Tr. (Day 3), 676: 5-20 (Mr. Heinrich).

Tribunal is far from convinced by the spin that the Respondents seek to put on their testimony. Mr. Manning expressed his hesitation to apply the Buy-Out Provisions in an expropriation scenario⁷⁸⁹ and in response to questions from the Tribunal, Mr. Heinrich clarified that he only referred to the Hamaca AA in his capacity and to the extent necessary as a member of the Board of Directors of the Hamaca JVC.⁷⁹⁰

536. That apart, the Respondents' counterclaim would contradict the framework and mechanism of the Buy-Out Option, as more particularly discussed below.
537. Article 14.5(a) contemplates that once the Claimants have decided not to withdraw their claim for compensation, the Respondents can do one of two things: *either* "pay the Affected Party's [i.e. the Claimants] damages"; *or*, "purchase the Affected Party's [i.e. the Claimants] Project Interest at the Buy-Out Price". It is clear from the use of "either [...] or" in this provision that these two options must be exercised *in the alternative* and not in conjunction. That is to say, the Respondents may only exercise the right to buy-out or purchase the Claimants' Project Interest, if they have elected to not pay compensation for losses caused due to a DA. Either the Respondents can compensate the Claimants for the losses suffered (i.e. a one way transaction from the Respondents to the Claimants) or, the Respondents can retain the damages and instead purchase the Claimants' Project Interests at the Buy-Out Price (i.e. a two way transaction involving an "exchange of property").
538. The Respondents seek to conflate both of these options in their Counterclaim. Their claim is that they are "entitled to acquire [the Claimants' claim for compensation] at the buy-out price."⁷⁹¹ In support of this argument, they rely on the allegedly broad definition of "Project Interests" in the Hamaca AA, which covers "all rights, titles, interests, and obligations associated with" the Claimants percentage interests in the

⁷⁸⁹ Tr. (Day 2), 425:3-426:6 (Mr. Manning).

⁷⁹⁰ Tr. (Day 2), 678:4-679:12 (**PRESIDENT LÉVY:** [...] I meant from 1995-odd until 2007 so, a whole period, and I know you may not remember. I was asking if you ever needed personally to go into that contract or have it explained for some clauses because it was necessary for the operation. **THE WITNESS [Mr. Heinrich]:** For the operation standpoint, no, but, from the--my understanding of the provisions, particularly in the Discrimination Clause, I did go through and review at the time. **PRESIDENT LÉVY:** Yeah, but, when you referred earlier to modeling, to requesting information about the Contract, or operation of finances, generally speaking, why did you need to use the Hamaca Contract? [...] **THE WITNESS:** It was not a document I used on a regular basis, but again, to understand the Committee structures, the organization and management, I used it more to understand the overall organization, but it was not a document, particularly after construction was complete and we went into operation, that I needed to go into it in detail. But, occasionally, I would reference things like the decisions of the Board, you know, what were Board decisions versus Committee decisions, to understand what our people involved with different committees needed to be—**PRESIDENT LÉVY:** That's exactly what I mean. So, as a member of the Board, sometimes you needed to refer to the Hamaca Agreement? **THE WITNESS:** Yes.)

⁷⁹¹ Rejoinder, § 264.

Hamaca JVC.⁷⁹² The Tribunal sees two related problems with this argument. First, as the Claimants rightly assert, to accept such a reading would bely the very notion of “acquisition” or “exchange of property” that is inherent in a “purchase”.⁷⁹³ Second, going by their present argument, the Respondents appear to be exercising the option to pay as well as to purchase. Rather, they appear to be “purchasing” the very same “compensation” that they are electing not to pay. Thus, the Tribunal is unable to agree with the Respondents’ reading of and reliance on the definition of “Project Interests” to support its argument.

539. In fact, the Respondents’ argument is contradicted by the HCA – a document to which they have attached great importance. The Twenty First Condition of the Hamaca Congressional Authorization provides that:

The Association Agreement will include provisions that allow for the *compensation* of the Participants, *through amendments to the provisions of the Association Agreement or through the payment of damages*, in the event that the Net Cash Flow of a Participant of the Association’s activities is substantially and adversely affected as a direct, necessary and demonstrable consequence of discriminatory and unjust measures, without prejudice to the option for Corpoven, *according to the provisions of the Association Agreement, to purchase such participation of the Affected Party* on equitable conditions, if the effect of such amendments or the payment of such damages results in a change of conditions unacceptable for Corpoven. It is understood that the Affected Party must have exhausted all remedies conferred upon it by the laws to obtain the revocation of the discriminatory measures. In no case will it be understood that the application of these mechanisms limits, affects or restricts in any way the power of the governmental bodies (“*Órganos del Poder Público*”) to adopt measures pursuant to the Constitution and applicable Laws.⁷⁹⁴

540. The Tribunal notes that this provision first and foremost confirms that the method of compensating the Claimants for a DA resulting in MAE is either through amendments to the provisions of the Association Agreement or through the payment of damages. Second, this provision clearly requires the Respondents to exercise their much emphasized “without prejudice” Buy-Out Option “according to the provisions of the Association Agreement.” This in itself is sufficient for the Tribunal to conclude that the Hamaca AA prevails over anything that the HCA may stipulate, at least insofar as the Buy-Out Provisions are concerned. In any event, as concluded elsewhere, in case of inconsistencies between the Hamaca AA and the HCA, the former will control.⁷⁹⁵

⁷⁹² Rejoinder, § 370.

⁷⁹³ Reply, §§ 251-252.

⁷⁹⁴ First Hamaca Congressional Authorization, **C-59**, Twenty First Condition (emphasis added).

⁷⁹⁵ *Supra*, § 268.

541. In the alternative, even if the HCA were applied, it does not alter the Tribunal's conclusions. The Twenty First Condition stipulates that the Respondents can purchase the "participation" of the Claimants in the event they find the payment of damages or the amendments unacceptable. A reading of other conditions of the Hamaca Congressional Authorization clearly demonstrates that participation is understood in the same sense as "shareholding" and not "damages payable due to Expropriation" as any right or interest attached to such shareholding. For instance, the Second Condition stipulates that "For the purposes of complying with tax obligations and other general responsibilities, each of the parties will be independently responsible, *according to its share of participation in the Association*; since the Association is formed without legal personality."⁷⁹⁶ The Third Condition stipulates that "[t]he Association Agreement shall specify the *initial share of participation of each Party in the Association*, establishing that ARCO and Corpoven shall each have an initial interest of 30%, and that Phillips and Texaco shall each have an initial interest of 20% in the Association."⁷⁹⁷ Thus, if the Tribunal were to interpret "Project Interest" in light of the above conditions, the meaning of "Project Interest" has to be limited. The Respondents' attempt to "purchase" the Claimants' "claim for compensation" and consequently this Counterclaim is still bound to fail.
542. In the circumstances, the Tribunal is of the view that a harmonious reading of the Buy-Out Provisions must necessarily lead to the conclusion that they are incompatible with a situation where the Hamaca Project has been completely expropriated. Accordingly, the Respondents' Counterclaim is dismissed.

IV. QUANTUM

543. The positions and arguments of each Party, insofar as they are necessary to resolve the relevant quantum issues in dispute, have been reproduced prior to the Tribunal's analysis of each issue. For the sake of clarity, the Tribunal emphasizes that it has not provided a summary of each and every specific objection and argument raised by the Parties in their quantum submissions, as it would be both repetitive and unnecessary. Thus the Tribunal has reproduced only what it views as the most important arguments

⁷⁹⁶ Hamaca Congressional Authorization, **C-59**, Second Condition (emphasis added).

⁷⁹⁷ Hamaca Congressional Authorization, **C-59**, Third Condition (emphasis added). See also **Fourth Condition** ("The Parties may participate in Phase III according to the proportion of their interest in the Association at the time the decision to participate in Phase III is made and shall have the privileged right to acquire the interest not taken by other Parties in said proportion."), **Eighth Condition** ("The *initial participation by the Parties* (and the inclusion of any third party) in the Association, including but not limited to, the participation of the Parties in Phase III, can be modified pursuant to the provisions set forth in the Association Agreement, subject to what was established in the Third Condition. Under no circumstances shall the said modifications affect Corpoven's control rights that are hereby established.").

for its decision. That being said, even if not expressly reproduced, the Tribunal has considered and carefully examined all of the Parties' arguments and corresponding facts.

544. The Tribunal notes that, since the very outset, the Claimants have argued that, “[u]nder the AAs, the Guarantees, and Venezuelan law, [the] Respondents are **jointly and severally** liable to [...] indemnify [the] Claimants pursuant to the DA Claim”.⁷⁹⁸ As pointed out by the Claimants, the Tribunal further notes that the “Respondents also appear not to contest that they are **jointly and severally** liable to pay damages for the Willful Breach Claim, and to indemnify Claimants pursuant to the DA Claim”.⁷⁹⁹ Given the Respondents' silence, the Tribunal has no reason to depart from the Claimants' submission. In this regard, as set out in *infra* Section VI, the Tribunal's findings must be deemed as holding the Respondents jointly and severally liable to indemnify the Claimants under the DA provisions of each AA.

A. PRELIMINARY MATTERS

1. The DA formulae

a. The Petrozuata AA

545. Sections 9.07(a) to (c) of the Petrozuata AA set out the formula for the payment of compensation by the Respondents following the issuance of a “discriminatory” and “unjust” qualified measure affecting the Claimants (i.e. a measure that can be characterized as a DA).⁸⁰⁰ These provisions state as follows:

(a) Subject to paragraph (d) below, the Injured Shareholder shall be compensated from cash available to the Company for the payment of dividends to the Class A Privileged Shareholder and the repayment of Cash Call Loans (both principal and interest) to the Class A Privileged Shareholder, starting with the next declaration of dividends or Cash Call Loan repayment installment, until full compensation has been made of the amounts calculated in accordance with subparagraph (b) below. The Company will be deemed to have paid the dividend or Cash Call Loan (both principal and interest) repayment, as the case may be, to the Class A Privileged Shareholder which corresponds to any compensation made hereunder. Any compensation payment due which cannot be paid because the Company has insufficient cash in any given Fiscal Year from which to declare dividends or make payments on cash call Loans (both principal and interest) shall be deferred and accumulated until the next fiscal year(s) until finally paid, unless the accumulated amount reaches US \$ 200 million (Two Hundred Million Dollars) in which case the Class A Privileged Shareholder shall, out of its own general funds, pay this accumulated amount to

⁷⁹⁸ SoC, ¶ 264 (emphasis added).

⁷⁹⁹ Reply, fn. 573 (emphasis added); C-PHB, fn. 818, 870.

⁸⁰⁰ *Supra*, § 103.

the Injured Shareholder. Any accumulated amount existing at the Termination Date shall be paid by the Class A Shareholder out of its own general funds. The Class A Privileged Shareholder may remedy the damage or settle the obligation through alternative means if the terms and conditions of such alternative remedy are acceptable to the Injured Shareholder.

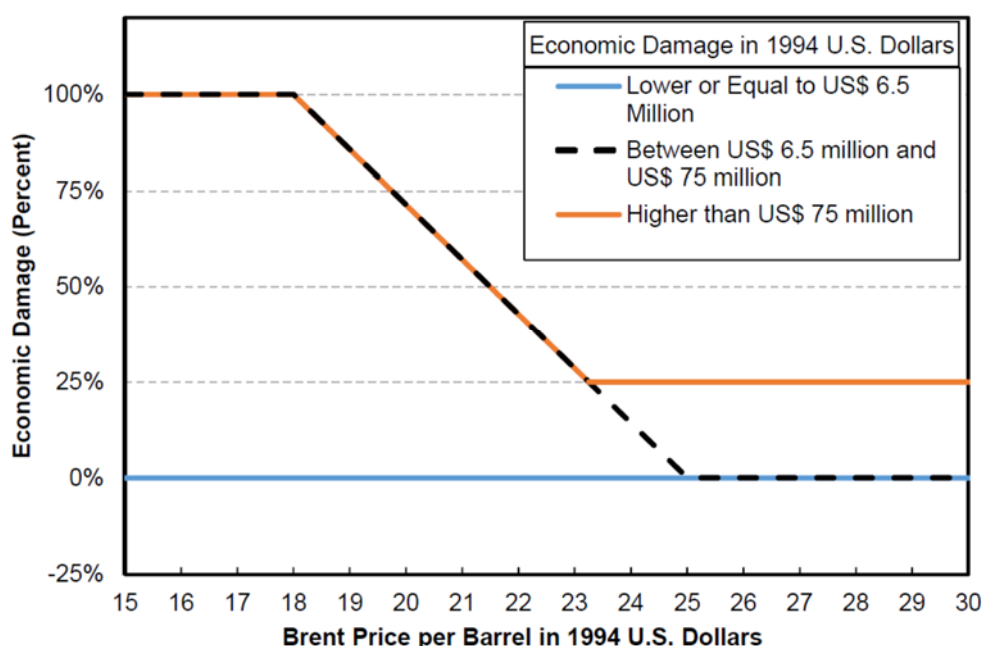
(b) Subject to the provisions of subparagraph (c) below, the amount to be compensated shall be calculated by determining the Price of Brent Crude Oil deflated annually to the year 1994 by the US Inflation Index for each applicable year. If the result yields a price of Brent crude oil of \$18.00 per barrel or less, 100% of the damages suffered by an Injured Shareholder shall be compensated, including the threshold amount for purposes of calculating Significant Economic Damage. If the result yields a price of Brent crude oil of \$25.00 per barrel or more, then 0% of the damages suffered by an Injured Shareholder shall be compensated. If the result yields a price of Brent crude oil of between \$18.00 and \$25.00 per barrel, the percentage of damages to be compensated shall be determined by the following formula:

100% less [100% times (Price of Brent Blend Crude Oil less \$18.00) divided by \$7.00]

as illustrated by the graph attached hereto and made a part hereof as Exhibit "S".

(c) In the event that in any given Fiscal Year the economic damage suffered by virtue of Discriminatory Actions is greater than \$75 million (in 1994 Dollars inflated by the US Inflation Index) the amount to be compensated for that Fiscal Year shall be the greater of 25% of the actual economic damage or the amount resulting from the calculation according to subparagraph (b) above.⁸⁰¹

546. Exhibit S of the Petrozuata AA illustrates the content of Sections 9.07(a) to (c) in the following graph:⁸⁰²



⁸⁰¹ Petrozuata AA, C-1, Sections 9.07(a)-(c) (emphasis added).

⁸⁰² Brailovsky & Flores ER I, RER-3, § 85 (Figure 4); Petrozuata AA, C-1, Exhibit S.

547. On the basis of Sections 9.07(a) to (c) and Exhibit S, the Parties and their quantum experts essentially agree that the DA compensation mechanism in the Petrozuata AA operates as follows:⁸⁰³

- i. Qualified measures must have caused the Claimants economic harm in any given fiscal year greater than USD 6.5 million in Yr. 1994 USD⁸⁰⁴ (i.e. SED). If not, then no compensation is owed by the Respondents. As established elsewhere,⁸⁰⁵ the harm suffered by the Claimants as a result of the Income Tax Increase and the Expropriation has crossed the aforementioned *de minimis* threshold.
- ii. If the economic harm for a given fiscal year is between the minimum of USD 6.5 million and USD 75 million in Yr. 1994 USD, then compensation is set pursuant to a sliding scale determined by a range of average Brent crude oil (“Brent”) prices.⁸⁰⁶ Accordingly, the indemnity by the Respondents will be 0% of the damages suffered by the Claimants (or nil indemnity) when the average Brent price for the given fiscal year (deflated to Yr. 1994 USD) is greater than or equal to USD 25 per barrel. In turn, the indemnity by the Respondents will be 100% of the damages suffered by the Claimants when the average Brent price for the given fiscal year (again deflated to Yr. 1994 USD) is less than or equal to USD 18 per barrel. In between these Brent prices (i.e. USD 18 and USD 25 per barrel), the percentage of the Respondents’ indemnity obligation will decrease by approximately 14% for every USD 1 increase in the Brent price.
- iii. If the economic harm suffered by the Claimants for a given fiscal year is greater than USD 75 million in Yr. 1994 USD, then the compensation obligation by the Respondents is equal to the greater of: (i) 25% of the economic damages suffered by the Claimants; or (ii) the amount determined in accordance with the Brent price sliding scale.
- iv. If the harm is greater than USD 75 million in Yr. 1994 USD, and for the relevant time period the Brent price has been greater than USD 25 per barrel in yr. 1994 USD, then establishing the Respondents’ indemnity obligation

⁸⁰³ C-PHB, § 985; R-PHB, §§ 142-144; Abdala ER I, **CER-3**, § 55; Brailovsky & Flores ER I, **RER-3**, §§ 86-87.

⁸⁰⁴ The Tribunal uses the phrase “Yr. 1994 USD” to signify the USD as valued in the given year.

⁸⁰⁵ *Supra*, § 196-201.

⁸⁰⁶ Brent is a light and sweet crude oil produced in the North Sea often used as a global pricing benchmark.

does not require the use of the Brent price sliding formula: compensation to the Claimants is set at 25% of the harm suffered by the Claimants as a result of the discriminatory qualified measures at issue.

548. In light of the above, it is common ground that, since the adoption of the Income Tax Increase and the Expropriation in 2007, the annual average Brent price has always been greater than USD 25 per barrel in Yr. 1994 USD.⁸⁰⁷ The Parties' quantum experts further agree that the same can be expected and therefore safely projected for the remainder of the original term of the Petrozuata AA, i.e., until 2036.⁸⁰⁸
549. It follows that the Respondents' indemnity obligation under the Petrozuata AA for the harm caused by the Income Tax Increase and the Expropriation is equivalent to either: (i) 25% of the corresponding harm as long as the said harm for any given year *exceeds* USD 75 million in Yr. 1994 USD; or (ii) 0% of the corresponding harm if said harm for any given year *fails to exceed* USD 75 million in Yr. 1994 USD.⁸⁰⁹
550. The Claimants' quantum expert, Mr. Abdala, alleges that because the Petrozuata AA does not provide for a complete and specific formula to determine the Claimant's yearly harm (as does the Hamaca AA),⁸¹⁰ it is more appropriate to adopt a "standard economic approach" computing the Project's "Revenues", "Costs", "Taxes", "Change in Working Capital", and "Debt Payments".⁸¹¹
551. To some extent, a similar approach is taken by the Respondents' quantum experts. Indeed, Mr. Brailovsky and Mr. Flores do not openly contest either Mr. Abdala's assertion that the Petrozuata AA lacks a clear formula for the calculation of the Claimants' yearly harm, or the actual formula proposed by Mr. Abdala. Rather, in order to carry out the DA provisions of the Petrozuata AA, Mr. Brailovsky and Mr. Flores essentially consider the same inputs as Mr. Abdala: they also account for, *inter alia*, the Project's production volumes and sales (i.e. revenue),⁸¹² the Projects' costs,⁸¹³ the applicable fiscal regime,⁸¹⁴ working capital,⁸¹⁵ and debt services.⁸¹⁶ The

⁸⁰⁷ Abdala ER I, **CER-3**, § 55.a; Brailovsky & Flores ER I, **RER-3**, fn. 145.

⁸⁰⁸ Abdala ER I, **CER-3**, § 55.a; Brailovsky & Flores ER I, **RER-3**, fn. 146.

⁸⁰⁹ Abdala ER I, **CER-3**, § 55.b; Brailovsky & Flores ER I, **RER-3**, fn. 149.

⁸¹⁰ Abdala ER I, **CER-3**, § 56.

⁸¹¹ Abdala ER I, **CER-3**, § 56.

⁸¹² Brailovsky & Flores ER I, **RER-3**, pp. 47 ss, 66 ss; Brailovsky & Flores ER II, **RER-7**, pp. 29 ss, 57 ss.

⁸¹³ Brailovsky & Flores ER I, **RER-3**, pp. 78ss, 82 ss; Brailovsky & Flores ER II, **RER-7**, pp. 33 ss, 73-75.

⁸¹⁴ Brailovsky & Flores ER I, **RER-3**, p. 96 ss.

⁸¹⁵ Brailovsky & Flores ER I, **RER-3**, p. 103; Brailovsky & Flores ER II, **RER-7**, p. 75.

main difference between the Parties' experts thus lies in the methodology adopted to arrive at the actual values of these inputs.

552. The Tribunal agrees with the Parties that the Petrozuata AA lacks a contractually defined exact formula to establish the harm against which the Claimants can claim compensation under the DA provisions. The Tribunal nevertheless has noted the Parties' implicit agreement as to the general mechanics and quantum inputs to that effect.

b. The Hamaca AA

553. Articles 14.2(a) and 14.2(b) to (i) of the Hamaca AA set out the formula for the computation of damages payable to the Claimants by the Respondents in the event of harm caused by DAs.⁸¹⁷ In their relevant part, they provide as follows:

(a) Corpoven Sub shall be required to compensate any Foreign Party, in the manner described in this Article XIV, to the extent that the Party **suffers a reduction of more than five percent (5%) in any Fiscal Year in its Reference Net Cash Flow as the result of one or more Discriminatory Actions** (including Discriminatory Actions occurring after, but having an effect on the Reference Net Cash Flow from, such year) (any such Party, an "Affected Party"), **with such reduction being determined by comparing, with respect to any Party in any Fiscal Year, such Party's Reference Net Cash Flow for such year, including the effect of all uncompensated Discriminatory Actions, with the Party's Reference Net Cash Flow for such year excluding the effect of the uncompensated Discriminatory Actions** (such reduction, a "Material Adverse Effect"), it being understood that any Discriminatory Actions would be considered unjust if they resulted, individually or in the aggregate, in a Material Adverse Effect.

(b) The obligation described in (a) shall be modified following the **first period (the "Initial Period")** of three (3) consecutive Fiscal Years after the Date of First Commercial Shipment in which:

- (i) the Affected Party's average Reference Net Cash Flow is equal to or greater than the average Threshold Cash Flow (as defined in Section 14.2(g)); and
- (ii) the Price of Brent Crude Oil (as defined below), averaged over such three-year period, is equal to or greater than \$27.00.

For the purposes of this Section, the "Price of Brent Crude Oil" shall mean the average, over a specified period of time, of the daily high and low quotes per barrel for dated Brent, FOB Sullom Voe, published in Platt's Oilgram Price Report (International Spot Crude Price Assessments for Brent (DTD)) published daily by the Commodities Division of Standard & Poor's, deflated to average 1996 Dollars using the US Inflation Index (as defined below); provided that in the event that Brent Crude Oil shall cease to be representative of world crude oil prices or Platt's Oilgram Price Report ceases to be published, the Parties

⁸¹⁶ Brailovsky & Flores ER I, RER-3, p. 103.

⁸¹⁷ *Supra*, § 108.

shall unanimously agree on a substitute marker crude oil or reference publication and amend this definition accordingly. For the purposes of the definition of Brent Crude Oil, the "US Inflation Index" shall mean the annual percentage increase or decrease, if any, in the "Implicit Price Deflators for Gross Domestic Product" as published by the United States Department of Commerce, Bureau of Economic Analysis (or a substitute source unanimously agreed by the Parties if such index shall cease to be published).

(c) In the years immediately following the Initial Period, Corpoven Sub's compensation obligation shall be as follows:

- (i) In any Fiscal Year in which a Party suffers a Material Adverse Effect as the result of one or more Discriminatory Actions, the Parties shall determine whether the Affected Party's Reference Net Cash Flow for that Fiscal Year averaged with the two (2) immediately preceding Fiscal Years was equal to or greater than the Affected Party's Threshold Cash Flow for that Fiscal Year averaged with such Party's Threshold Cash Flow for the two (2) immediately preceding fiscal years.
- (ii) If the answer to (i) above is negative, Corpoven Sub shall be required to compensate the Affected Party in accordance with Sections 14.2(d) and (e).
- (iii) If the answer to (i) above is affirmative, Corpoven Sub shall not be required to compensate the Affected Party for any Material Adverse Effect suffered by the Affected Party as a result of any one or more Discriminatory Actions that were generally applicable to extra heavy crude oil projects subject to taxation under paragraph unique of Article 9 of the Income Tax Law (such actions "Generally Applicable Discriminatory Actions"). Corpoven Sub's relief from the obligation to compensate shall terminate at the end of the first Fiscal Year during which the Affected Party's Reference Net Cash Flow for that Fiscal Year averaged with the two (2) immediately preceding Fiscal Years is less than the Affected Party's Threshold Cash Flow for that year averaged with the Affected Party's Threshold Cash Flow for two (2) immediately preceding Fiscal Years.

(d) In all Fiscal Years after the termination of relief from compensation described in (c)(iii), Corpoven Sub shall not be obligated to compensate the Affected Party for any Material Adverse Effect suffered by it in such Fiscal Years, to the extent that:

- (i) the Material Adverse Effect is attributable to the application of one or more Generally Applicable Discriminatory Actions;
- (ii) the Affected Party's Reference Net Cash Flow is equal to or greater than the Affected Party's Threshold Cash Flow; and
- (iii) the Price of Brent Crude Oil is equal to or greater than \$27.00.

(e) In all years following the Initial Period, in any Fiscal Year when the Price of Brent Crude Oil averages \$27.00 or more, any compensation payable by Corpoven Sub to any Affected Party shall be limited to the lesser of: (a) the Affected Party's Damages or (b) the difference between the Affected Party's Reference Net Cash Flow and the Affected Party's Threshold Cash Flow.

(f) For the purposes hereof, the "Reference Net Cash Flow" of a Party in respect of any Fiscal Year shall equal:

$$[(SR - DP - EX - ROY - OT) \times (1 - ITR)] - SC + DP$$

Where: **SR** = (the Party's Project Interest of **Commercial Production** or **Development Production** as applicable, multiplied by the applicable Reference Price) plus any compensation received from Corpoven Sub in respect of prior Discriminatory Actions

DP = depreciation calculated on the basis of a 10-year depreciation schedule or, if different, the schedule required by law

EX = the Party's pro rata share of actual expenses of the Association

ROY = the actual royalty rate applicable to the Party's Project Interest of Extra Heavy Oil multiplied by the royalty base

OT = actual Venezuelan taxes paid that are deductible for income tax purposes

ITR = the actual Venezuelan income tax rate applicable to the Party in connection with the Association's activities; and

SC = Venezuelan taxes paid that are not deductible for income tax purposes.

(g) For purposes hereof, "**Threshold Cash Flow**" shall be calculated in the same manner as Reference Net Cash Flow, except that for the purpose of determining Threshold Cash Flow: (i) **SR will be calculated by replacing the Reference Price with the Adjusted Price** [...]. For the purposes hereof, "**Adjusted Price**" shall mean that price for Commercial Production determined in accordance with a formula established by the Board from time to time pursuant to Section 4.8(a)(xxvii) that reflects the market price for Commercial Production which would exist if the Price for Brent Crude Oil were \$27.00, taking into account the quality differential between Commercial Production and Brent crude. Notwithstanding the foregoing, if the Board has not established the formula for determining the Adjusted Price on the date that is ninety (90) days prior to the anticipated start-up date of the Initial Upgrader, as set forth in the Phase II Business Plan, or at any time thereafter within ninety (90) days of the request of any Party, any Party may request that such formula be determined by an expert who is a reputable individual possessing expert knowledge and experience with respect to the pricing of crude oil. All calculations will be based on FOB prices for each crude at the point of origin.

(h) For the purposes hereof, the "**Reference Price**" shall mean (x) for Commercial Production, the Formula Price or, if applicable, the Bid Price for such Commercial Production or (y) for Development Production, the price calculated for such Development Production at the wellhead, based on the value received for blended crude less the cost of diluent oil and all other costs, as provided in the Authorization and Accounting Policies.

(i) Calculations of Reference Net Cash Flow and Threshold Cash Flow shall be made in Dollars to the exclusion of any other currency.⁸¹⁸

⁸¹⁸ Hamaca AA, C-3, Articles 14.1(b)-(i) (emphasis added, underline original).

554. According to the Claimants, the “cornerstone of the indemnification calculation” under the Hamaca AA is the Reference Net Cash Flow (“RNCF”) as defined in Article 14.2(f).⁸¹⁹ This is so, the Claimants submit, given that the RNCF is used in deciding whether the MAE “threshold” has been met, and then in determining the amount owed by the Respondents.⁸²⁰ The Claimants therefore argue that the DA compensation provisions of the Hamaca AA respond to the following two-step inquiry:

Step 1: has the Material Adverse Effect threshold been met? Like the Petrozuata AA, the Hamaca AA requires that the Discriminatory Action or Actions have a minimum economic impact before Respondent Corpoguanipa (and Respondent PDVSA under the Guarantee) are required to indemnify. Rather than the monetary amount used in the Petrozuata AA, however, the threshold under the Hamaca AA is defined as a percentage reduction in the Reference NCF. Specifically, a Discriminatory Action will have caused a Material Adverse Effect if there is a five percent or greater difference between: (i) cash flows to Claimant CPH in the but-for scenario, assuming no Discriminatory Measures; and (ii) *actual* cash flows to Claimant CPH (as reduced by the Measures). [...]

Step 2: determining the amount of indemnification. The second step of the Hamaca indemnification analysis is to:

- (a) calculate the Reference NCF without the effect of the Discriminatory Action or Actions (*i.e.*, the but-for scenario) for each year from 2007 through the expiration of the Hamaca AA in 2037;
- (b) subtract the actual cash flows received by Claimant CPH in each of those years; and
- (c) determine the present value of the lost cash flows by updating past losses and discounting future losses.

However, for purposes of calculating item (i) above, the DA provisions in the Hamaca AA limit oil prices to US\$27 per barrel (in 1996 dollars), for purposes of determining the but-for revenues that would have been obtained (the variable “SR” in the Reference NCF formula set out above). Because Brent prices have exceeded US\$27 per barrel since 2008 (and are expected to do so in future), this results in a substantial reduction in damages over the life of the Hamaca AA, compared to actual losses.⁸²¹

555. The Tribunal agrees with the Claimants that the RNCF is of fundamental importance for the Respondents’ indemnity obligations under the Hamaca AA. Indeed, the RNCF is required to determine the existence of MAE. In turn, it is undisputed that the Claimants must demonstrate the existence of MAE in order to be entitled to compensation under the Hamaca AA. Accordingly, “Step 1” of the Claimants’ proposed inquiry corresponds to the text of the Hamaca DA provisions. In this regard,

⁸¹⁹ C-PHB, § 991.

⁸²⁰ C-PHB, § 991.

⁸²¹ C-PHB, §§ 994-995.

the Tribunal recalls that, as established elsewhere,⁸²² the Income Tax Increase and the Expropriation have indeed caused MAE to the Claimants.

556. That being said, the Tribunal shares the Respondents' indication that "Step 2" of the Claimants' suggested inquiry is incomplete: while the RNCF is an essential benchmark in order to carry out the Respondents' indemnity obligation, it is alone insufficient after the expiration of what Article 14.2(b) of the Hamaca AA denominates as the Initial Period (i.e. the three consecutive fiscal years after the date of first commercial shipment).⁸²³ Subsequent to the Initial Period, Articles 14.2 (c) to (e) become controlling and a second benchmark must be taken into account in addition to the RNCF,⁸²⁴ namely, the Threshold Cash Flow ("TCF") as defined in Article 14.2(g).⁸²⁵

557. The TCF is calculated in the same way as the RNCF,⁸²⁶ albeit with the following input adjustment:

(i) **SR** will be calculated by replacing the **Reference Price with the Adjusted Price** [...]. For the purposes hereof, "**Adjusted Price**" shall mean that price for Commercial Production determined in accordance with a formula established by the Board from time to time pursuant to Section 4.8(a)(xxvii) **that reflects the market price for Commercial Production which would exist if the Price for Brent Crude Oil were \$27.00, taking into account the quality differential between Commercial Production and Brent crude.** Notwithstanding the foregoing, if the Board has not established the formula for determining the Adjusted Price [...] any Party may request that such formula be determined by an expert [...].⁸²⁷

558. In this context, the Tribunal notes that the Parties' quantum experts agree that the first commercial shipment took place in October 2004.⁸²⁸ Hence, the Initial Period elapsed at the end of 2007.⁸²⁹ As such, harm exceeding the minimum MAE will not be compensated if the average RNCF for any given year and the two prior years is greater than the average TCF for the same three-year period.⁸³⁰ If the average RNCF

⁸²² *Supra*, § 196-201.

⁸²³ SoC, §§ 131-133.

⁸²⁴ *Supra*, § 553.

⁸²⁵ Brailovsky & Flores ER I, **RER-3**, § 97.

⁸²⁶ Hamaca AA, **C-3**, Article 14.2(f); *supra*, § 553.

⁸²⁷ Hamaca AA, **C-3**, Article 14.2(g) (emphasis added, underline original); *supra*, § 553.

⁸²⁸ Abdala ER I, **CER-3**, § 51; Brailovsky & Flores ER I, **RER-3**, § 93.

⁸²⁹ Abdala ER I, **CER-3**, § 51 ("[...] but only after an "initial period" of three years after the date of first commercial shipping, which took place in October 2004. As a consequence, the US\$27 per barrel cap applies to the RNCF only from January 1, 2008 onwards."); Brailovsky & Flores ER I, **RER-3**, § 93 ("The Initial Period ended at the end of 2007, three years after the First Commercial Shipment, which took place in October 2004.").

⁸³⁰ Hamaca AA, **C-3**, Article 14.2(c)(iii).

is lower than the average TCF, however, “then compensation to the Claimants is calculated as the **lesser of**: (i) the actual damages suffered; and (ii) the difference between the [TCF] and the [RNCF]”.⁸³¹

559. It is thus clear to the Tribunal that, contrary to the Claimants’ position,⁸³² the calculation of the RNCF is not limited to prices for Brent at USD 27 per barrel. Rather, it is the Adjusted Price pertaining to the TCF which is to be calculated proportionally to the said fixed Brent price. The fact that the RNCF and the TCF share almost the same quantum inputs to establish the Respondents’ compensation obligations does not mean that both cash flows are indistinguishable.⁸³³ The RNCF must first be used in order to identify the MAE suffered by the Claimants as a result of DAs. After the Initial Period, which is the case at hand, the identified harm must then be contrasted with the TCF in order to calculate the indemnity owed to the Claimants.⁸³⁴
560. Notwithstanding the foregoing, it is undisputed that, since the Expropriation, the Claimants’ RNCF is nil.⁸³⁵ This translates into a reduction in the Claimants’ cash flow of a 100%.⁸³⁶ Further, as already mentioned above, Brent has been trading upwards of USD 27 per barrel since 2007 and is expected to continue doing so.⁸³⁷ It follows that the actual harm suffered by the Claimants due to the Income Tax Increase and the Expropriation has most certainly exceeded the average TCF for the relevant period (in accordance with Articles 14.2(c)(i)-(ii) of the Hamaca AA). Therefore,

⁸³¹ Brailovsky & Flores ER I, **RER-3**, § 99; Hamaca AA, **C-3**, Article 14.2(e).

⁸³² *Supra*, § 554.

⁸³³ The Tribunal notes that, in addition to the calculation of the “SR” input based on the Adjusted Price (as opposed to the Reference Price), the TCF also differs with respect to the RNCF on a few other inputs. To wit, the “DP” (depreciation), “EX” (expenses), “ROY” (royalty rate), “OT” (taxes deductible for income tax purposes), “ITR” (income tax) and “SC” (taxes not deductible for income tax purposes) inputs set out at Article 14.2(g) of the Hamaca AA. However, there appears to be a common understanding as to how the driving distinction between the RNCF and the TCF is the latter’s calculation of the “SR” input pursuant to the Adjusted Price. Indeed, during the Hearing, the Claimants’ quantum expert, Mr. Abdala, accepted that the TCF is calculated by taking the RNCF’ inputs and “basically” replacing the RNCF’s Reference Price with the TCF’s Adjusted Price (Tr. (Day 10), 2691:4-10). The Respondents’ quantum expert, Mr. Flores, expressed the same view (Tr. (Day 10), 2749:25 – 2750:4). Accordingly, the Tribunal understands that the (non)applicability or (ir)relevance of the remaining inputs of the RNCF/TCF formula are not in dispute.

⁸³⁴ *Supra*, fn. 830-831.

⁸³⁵ Abdala ER I, **CER-3**, § 48 (“Since the date of nationalization, this computation is simplified, given that net cash flows to the investor in the actual scenario are nil, and therefore yearly damages can be calculated as the but-for reference net cash flows (**RNCF**) defined in Article 14”); Brailovsky & Flores ER I, **RER-3**, 99 (“[...] the Reference Net Cash Flow became equal to zero after the nationalization [...]”).

⁸³⁶ Abdala ER I, **CER-3**, § 48. It is noteworthy to recall that MAE is caused by only a 5% reduction of the Claimants’ RNCF as a result of a discriminatory qualified measure.

⁸³⁷ *Supra*, § 548.

pursuant to Article 14.2(e) of the Hamaca AA, the compensation owed to the Claimants as a result of the DAs at issue is “simply equal to the [TCF]”.⁸³⁸

561. In light of the above, the Tribunal notes that the Parties ultimately adopt the same approach in terms of how to implement the DA provisions in the Hamaca AA: the “SR” input in the RNCF must reflect a Brent price benchmark fixed at USD 27 per barrel (i.e. the “SR” as defined in the TCF).⁸³⁹ Further, in determining the Respondents’ indemnity obligation pursuant to the Hamaca DA provisions, the calculations of Mr. Abdala, Mr. Brailovsky and Mr. Flores all account for, *inter alia*, the Claimants’ revenues, costs and corresponding fiscal regime.⁸⁴⁰ Therefore, despite the Parties’ differences with respect to each individual quantum input, which will be discussed in detail below,⁸⁴¹ the Parties appear to agree on the mechanics and methodology of the Hamaca DA provisions.

562. In sum, as pointed out by the Claimants, the overall exercise required to calculate the compensation owed by the Respondents under the Hamaca AA (and, indeed, also under the Petrozuata AA) entails “determ[in]ing] the present value of lost past and future cash flows [...]”.⁸⁴²

2. *Ex post v. ex ante* quantum assessment

563. It is common ground between the Parties and their experts that, subject to the limits set forth in the DA provisions, Venezuelan law requires compensation in accordance with the full reparation (*restitution in integrum*) principle.⁸⁴³ In this context, since the very outset both Parties have argued in favor of an *ex post* date-of-award valuation as the most appropriate standard for the calculation of damages under Venezuelan law.⁸⁴⁴

564. Notwithstanding the foregoing, the Parties dispute the inter-temporal principle applicable to the historical data of the said *ex post* valuation. In other words, while the Parties do not disagree on the key inputs necessary to determine the compensation

⁸³⁸ Brailovsky & Flores ER I, **RER-3**, § 99; C-PHB, Appendix F, §§ 8-9; *supra*, fn. 831, § 553.

⁸³⁹ Abdala ER I, **CER-3**, § 48; Brailovsky & Flores ER I, **RER-3**, §§ 98-99; For further analysis on the calculation of the Projects’ price projections *see infra*, § IV.C.3.

⁸⁴⁰ *See generally* Abdala ER I, **CER-3**; Brailovsky & Flores ER I, **RER-3**.

⁸⁴¹ *Infra*, §§ IV.B.-H.

⁸⁴² C-PHB, § 978.

⁸⁴³ C-PHB, § 497; R-PHB, § 577; Mata Borjas ER I, CER-2, § 69; García Montoya ER I, RER-1, § 139.

⁸⁴⁴ SoC, § 274; SoD, §§ 347,356; Reply, §§ 266, 270; Rejoinder, § 372 ss. The Tribunal deals with the appropriate valuation date further below (*see infra* §§ 581 ss).

owed under the DA provisions (i.e. the Projects' production volumes, oil prices, costs, and applicable fiscal regime),⁸⁴⁵ they are not in agreement when it comes to determining the relevant historical data comprising the same key inputs.

565. The Claimants submit that “the Tribunal’s award of damages must return Claimants to the position they would have enjoyed if Respondents’ wrongful acts had not occurred. This is referred to as the ‘but-for’ scenario. In that scenario, Claimants would have maintained their ownership interests (and management role) in the Projects, and would have continued to receive cash flows (dividends) from the Projects’ operations through the end of their contractual terms”.⁸⁴⁶ In this regard, the Claimants contend that both the “agreed pre-expropriation production profiles” and the “agreed cost projections in the pre-expropriation business planning documents” constitute the best evidence of what the Projects could have reasonably be expected to achieve applying the but-for test.⁸⁴⁷ According to the Claimants, international tribunals have frequently relied on such pre-expropriation projections, and with good reason: “they reflect what the disputing parties agreed was likely to be achieved, at a nonsuspect time prior to the dispute arising”.⁸⁴⁸ As such, the valuation’s historical period (i.e. the data up to the date of valuation) must be circumscribed to the Projects’ projections (particularly on production volumes and costs) prior to the Expropriation. Conversely, pre-Expropriation data must be carried forward into the remainder of the historical period, namely, from 2007 all through the date of valuation (i.e. the date of the Award).
566. The Respondents in turn argue that the Claimants’ alleged but-for application impermissibly places them in a better position than they would be, had they remained in the Projects.⁸⁴⁹ This is so because the Claimants: (i) take advantage of any post-Expropriation development, such as capturing the benefit of the increase in oil prices; and (ii) at the same time ignore any increase in the Projects’ actual costs and their decline in production by defaulting into pre-Expropriation projections (i.e. as envisaged in the 2006 ConocoPhillips Composite Economic Model and the 2006 Petrolera Ameriven Economic Model).⁸⁵⁰

⁸⁴⁵ *Supra*, §§ 551, 561.

⁸⁴⁶ C-PHB, § 504.

⁸⁴⁷ C-PHB, §§ 48(Quantum), 489-496, 603, 612, 614, 801-805.

⁸⁴⁸ C-PHB, § 603; Reply, §§ 322-324, 433-435.

⁸⁴⁹ R-PHB, § 568.

⁸⁵⁰ R-PHB, § 573.

567. In the Respondents' view, the Claimants' approach is incorrect: "it is part of the ABCs of any *ex post* quantum analysis that what happens over time in a project must be taken into consideration[;] actual experience trumps projections [...]".⁸⁵¹ Thus, in order to adequately reflect the actual development of the Projects since the Expropriation, the data pertaining to the historical period must account for all information available at the date of valuation, "not just the benefits of value-enhancing factors".⁸⁵² Differently stated, a proper *ex post* date-of-award valuation cannot ignore the negative development of the Projects subsequent to the Expropriation.⁸⁵³
568. According to the Respondents, the Claimants' reliance on pre-Expropriation projections is only germane to *ex ante* date-of-breach valuations. However, "if *ex ante* production and costs are to be used instead of actual figures, as Claimants suggest with their reliance upon the 2006 ConocoPhillips Composite Economic Model and the 2006 Petrolera Ameriven Economic Model, then [an *ex ante* valuation] should be applied in its entirety, without mixing and matching *ex ante* and *ex post* data".⁸⁵⁴ This would require also assuming oil prices as of 2007, given that the oil price surge that occurred thereafter was not in either Party's contemplation at that time.⁸⁵⁵ In particular, the Respondents submit as follows:

Claimants insist that they can ignore any negative development that occurred in the Projects post-nationalization, whether on the cost side or relating to production and revenues, and calculate compensation as if the pre-dispossession plans of over a decade ago were immutable and the Projects were insulated from any negative developments. Their theory is that the 2006 models they rely on constitute the best evidence of what the parties hoped for at the time and that such predispossession plans have been accepted as such by other tribunals, including the ICC tribunal in the *Mobil* case. But both the ICC *Mobil* and the ICSID *Mobil* tribunals calculated compensation on an *ex ante* basis, not an *ex post* basis.⁸⁵⁶

[...]

Claimants point to the *Mobil* ICC case as a model for calculating compensation based on *ex ante* business plans and other information, but they forget that the *Mobil* tribunal did that only because it was calculating compensation as of June 26, 2007. In this Arbitration, they want the Tribunal to use pre-nationalization data, but in the context of an *ex post* analysis that avoids the impact of discounting from the present to 2007, when the loss was actually incurred, inflating compensation to astronomical heights which increase daily. In other words, they want to mix and match facts, data and concepts to achieve a

⁸⁵¹ Rejoinder, § 373.

⁸⁵² R-PHB, §§ 577, 569-570.

⁸⁵³ R-PHB, § 571.

⁸⁵⁴ R-PHB, § 10.

⁸⁵⁵ R-PHB, §§ 748-750.

⁸⁵⁶ R-PHB, § 571.

windfall. Claimants' compensation demand [in] applying the [DA] formula[e] is many times what it would be if the *Mobil* ICC tribunal's approach were adopted. That result would be a scandal. As explained at the Hearing, a proper *ex post* analysis would lead to much the same result as the *Mobil* ICC case, but if the Tribunal were to avoid entering into the morass of the *ex post* analysis, the amount determined by applying the *Mobil* ICC methodology should effectively be the maximum of any rational compensation in this case.⁸⁵⁷

569. In this regard, the Respondents submit that applying the DA compensation provisions to a full expropriation scenario is "somewhat artificial".⁸⁵⁸ For instance, the "EX" variable in the RNCF set out in the Hamaca AA requires the consideration of "actual expenses", not "but-for expenses".⁸⁵⁹ Further, the Petrozuata AA contains provisions contemplating the payment of compensation out of dividends from ongoing operations, while the Hamaca AA calls for the application of the TCF formula "on a fiscal year-by-fiscal year basis".⁸⁶⁰ In the circumstances, the Respondents submit that this Tribunal can join the *ICC Mobil* tribunal in "appreciat[ing] the difficulties inherent in applying the [DA] formula[e] on an ongoing basis when the [P]roject[s] no longer exist[t] and solv[e] the dilemma by considering that the loss resulting from the [E]xpropriation [...] was incurred in the fiscal year 2007 (i.e. adopting an *ex ante* date-of-breach quantum valuation *in toto*).⁸⁶¹
570. The Claimants vehemently oppose the Respondents' proposition to undertake an *ex ante* valuation. They deem it an "11th-hour reversal" raised for the first time at the Hearing, for which there is no legitimate explanation or justification in either the Respondents' pre-Hearing submissions, pleadings, expert reports, or under Venezuelan law.⁸⁶²
571. The Tribunal finds merit in the position of both Parties. On the one hand, the Tribunal agrees with the Claimants that the Respondents' suggested *ex ante* valuation constitutes a "*volte-face*" with respect to the approach assumed prior to the Hearing.⁸⁶³ Indeed, as already noted, the Respondents (along with the Claimants) consistently argued in favor of adopting an *ex post* date-of-award quantum valuation

⁸⁵⁷ R-PHB, § 817.

⁸⁵⁸ R-PHB, § 813.

⁸⁵⁹ R-PHB, § 812, referring to Article 14.2(f).

⁸⁶⁰ R-PHB, § 813, referring to Section 9.07(a) of the Petrozuata AA and Article 14.2 of the Hamaca AA.

⁸⁶¹ R-PHB, §§ 813-817; *Mobil Cerro Negro, Ltd. v. Petróleos de Venezuela, S.A. and PDVSA Cerro Negro, S.A.*, ICC Case No. 15416/JRF/CA, Final Award, 23 December 2011, **CLA-16**, § 606

⁸⁶² C-PHB, §§ 502-503.

⁸⁶³ C-PHB, § 502.

in their SoD and Rejoinder.⁸⁶⁴ It was only at the commencement of the Hearing that the Respondents for the first time articulated the pertinence of undertaking an *ex ante* valuation in the present case.⁸⁶⁵ In view of this, and for the reasons explained further below, the Tribunal finds no reason to depart from the underlying agreement existing between the Parties up to the Hearing.

572. First, the voluminous quantum submissions by the Parties advocating for an *ex post* valuation could hardly justify a last minute decision opting for an *ex ante* valuation. Given that the case has been pleaded by both Parties based on an *ex post* valuation, there is insufficient evidence for the Tribunal to confidently opt for an *ex ante* approach. The Respondents refer to the Parties' valuation models adduced in the ICSID proceedings (which do put forward both *ex ante* and *ex post* valuations). Nonetheless, the fact remains that the materials prepared and submitted for the present arbitration, including those by the Respondents, have by and large dealt with an *ex post* date-of-award valuation of the compensation owed pursuant to the DA provisions.⁸⁶⁶ Indeed, both of the Respondents' quantum expert reports are premised on *ex post* valuation.⁸⁶⁷

573. Second, the Respondents' proposed *ex ante* valuation has been argued as a viable yet not a mandatory alternative. Indeed, the Respondents do not seem to argue that an *ex post* valuation is in and of itself unwarranted. Rather, the Respondents posit that an *ex ante* valuation would avoid the "morass" of undertaking an *ex post* valuation.⁸⁶⁸ It follows that the convenience of favoring an *ex ante* valuation assumes that the difficulties of carrying out an *ex post* date-of-award valuation are insurmountable. However, they are not.

574. The Parties' quantum experts are not at odds on the mechanics and arithmetic of applying (in different ways) the disputed valuation inputs in relation to the DA compensation provisions. To that effect, both Parties have provided *ex post*, date-of-award, valuation models allowing to change and toggle the various quantum inputs in dispute. In all valuation models, the final compensation owed to the Claimants varies in accordance with the way each input is toggled, in favor of either the Claimants or the Respondents. The Tribunal can therefore decide which Party should prevail on

⁸⁶⁴ *Supra*, § 563.

⁸⁶⁵ C-PHB, § 503.

⁸⁶⁶ The Tribunal deals with the different valuation models further below (*see infra* §§ 581 ss).

⁸⁶⁷ Brailovsky & Flores ER I, **RER-3**, § 9; Brailovsky & Flores ER II, **RER-7**, §§ 2, 5-6.

⁸⁶⁸ *Supra*, fn. 857-861.

each issue and toggle the respective input accordingly. Put simply, an *ex post* (as opposed to an *ex ante*) valuation is feasible.

575. In any event, the Tribunal disagrees with the Respondents' argument that applying the DA provisions in the context of a full expropriation is artificial. As argued by the Claimants, and "contrary to Respondents' suggestion,⁸⁶⁹ the phrase 'actual expenses' in the [RNCF] formula does not alter the fact that in [a] but-for scenario, the expenses that *would have been incurred*, in the absence of the Measures, must be used".⁸⁷⁰
576. As rightly explained by the Claimants' quantum expert at the Hearing, this is so because Article 14.2(a) of the Hamaca AA requires the definition of two scenarios, "one with the effects of the [DA at issue] and one without [said] effect. In the scenario with the effect, [one must] use the actual cash flows so as to base [the] analysis of the [RNCF]. Of course, in the scenario without the impact of the [respective DA], [one must] necessarily [...] create a but-for world in which the actual cash flows would no longer be used, but rather [...] the cash flows that would have taken place if the [DA] would not have taken place".⁸⁷¹ This scenario accommodates the fact that, as pointed out by the Respondents,⁸⁷² the Hamaca AA calls for compensation on a year-by-fiscal year basis.
577. As to the Respondents' argument in relation to the Petrozuata AA, it is not accurate to claim that the DA provisions therein only provide for compensation "out of dividends from ongoing operations".⁸⁷³ In the right circumstances, Section 9.07(a) of the Petrozuata AA also allows for the payment of compensation directly out of the Respondents' "general funds".⁸⁷⁴

⁸⁶⁹ *Supra*, fn. 859.

⁸⁷⁰ C-PHB, § 996.

⁸⁷¹ Tr. (Day 10) 2689:19 – 2693:4 (Abdala); Hamaca AA, **C-3**, Article 14.2(a) ("Corpoven Sub shall be required to compensate any Foreign Party, [...] to the extent that the Party suffers a reduction of more than five percent (5%) in any Fiscal Year in its Reference Net Cash Flow as the result of one or more Discriminatory Actions [...], with such reduction being determined **by comparing**, with respect to any Party in any Fiscal Year, such Party's Reference Net Cash Flow for such year, **including the effect of all uncompensated Discriminatory Actions**, with the Party's Reference Net Cash Flow for such year **excluding the effect of the uncompensated Discriminatory Actions** [...])" (emphasis added).

⁸⁷² *Supra*, fn. 860.

⁸⁷³ R-PHB, § 81; *supra*, fn. 860.

⁸⁷⁴ *Supra*, § 226 (" [...]the Injured Shareholder shall be compensated from cash available to the Company for the payment of dividends [...]. Any compensation payment due which cannot be paid because the Company has insufficient cash in any given Fiscal Year from which to declare dividends or make payments on cash call Loans (both principal and interest) shall be deferred and accumulated until the next fiscal year(s) until finally paid, **unless the accumulated amount reaches US \$ 200 million (Two Hundred Million Dollars) in which case the**

578. For the above reasons, the Tribunal cannot accept the Respondents' proposition to undertake an *ex ante* date-of-breach valuation *in toto*. Notwithstanding the foregoing, the Tribunal agrees with the Respondents that, in principle, an *ex post* date of award valuation requires considering the totality of the actual historical data preceding the date of valuation. Indeed, the use of projections contemporaneous to a determined date of breach is mostly apposite in the context of an *ex ante* date-of-breach valuation.
579. That being said, the Tribunal considers that the use of both *ex ante* and *ex post* data is not necessarily unwarranted. First, the Tribunal notes that the Respondents themselves occasionally rely on pre-Expropriation (*ex ante*) calculations.⁸⁷⁵ Second, it would be unreasonable to uphold allegedly actual post-Expropriation (*ex post*) data should the Tribunal deem said data either unsubstantiated or unreliable. In those circumstances, the Tribunal finds that reverting to *ex ante* projections is appropriate. After all, as rightly pointed out by the Claimants, both the ConocoPhillips Composite Economic Model and the Petrolera Ameriven Economic Model at some point constituted the shared view of all Project participants, including the Respondents.⁸⁷⁶ Still, the decision to consider *ex ante* over *ex post* data must be assessed on a case-by-case.
580. In light of these considerations, the Tribunal shall undertake an *ex post* date-of-award valuation. Accordingly, as a general rule, quantum items will be assessed against actual historical data, as opposed to pre-Expropriation projections. Nevertheless, should the *ex post* data with respect to a particular quantum issue prove to be questionable (i.e. as a result of being, *inter alia*, unsubstantiated or unreliable), the Tribunal shall consider and apply *ex ante* projections instead.

3. Preferred valuation model and valuation date

581. In their PHB, the Respondents rely on the valuation model elaborated by Mr. Vladimir Brailovsky and Mr. Daniel Flores for the ICSID Arbitration.⁸⁷⁷ The Brailovsky/Flores ICSID 2016 Valuation Model ("BFVM") offers an *ex post* quantum assessment as of 31 December 2016 (as a proxy to the date of the Award).⁸⁷⁸ In turn, the Claimants

Class A Privileged Shareholder shall, out of its own general funds, pay this accumulated amount to the Injured Shareholder") (emphasis added).

⁸⁷⁵ *Infra*, § 835.

⁸⁷⁶ C-PHB, §§ 612, 801.

⁸⁷⁷ R-PHB, fn. 1897-1900.

⁸⁷⁸ BFVM, App. BF-406.

rely on the updated valuation model elaborated by Mr. Abdala and attached to their PHB.⁸⁷⁹ The Abdala Updated Valuation Model (“AUVM”) also offers an *ex post* calculation of the Claimants’ incurred damages, yet it does so as of 27 May 2016 (as a proxy to the date of the Award).⁸⁸⁰

582. Given BFVM’s later valuation date *vis-à-vis* the AUVM’s (by 7 months), the former in principle seems preferable in the context of an *ex post* date-of-award valuation: it has a closer proximity to the actual date of the present Award. However:

- i. The AUVM better differentiates between the various quantum aspects of the Willful Breach Claim and those of the DA Claim. In particular, it allows independently verifying the impact that the DA Claim has in function of the relative success (or lack thereof) of the Willful Breach Claim.⁸⁸¹
- ii. The AUVM allows toggling the disputed quantum inputs at issue in a way that better represents the Parties’ argumentative structure on the relevant issues. This is only natural. After all, albeit part of the record, the BFVM was prepared and submitted for the purposes of the ICSID Arbitration. As such, it accounts for issues not in dispute between the Parties. For instance, the BFVM calculates damages for the Corocoro project, which is not at issue in the present dispute.
- iii. The AUVM is consistent with pre-Hearing valuation models. Prior to the Hearing, each Party introduced two *ex post* date-of-award valuation models. The Claimants’ first valuation model for their DA Claim had a valuation date of 30 June 2015.⁸⁸² The second one had a valuation date of 27 May 2016.⁸⁸³ Correspondingly, the Respondents’ first *ex post* date-of-award had a valuation date of 30 June 2015,⁸⁸⁴ while the second one of 27 May 2016.⁸⁸⁵ Up to the Hearing, the Parties’ *ex post* valuation models were thus aligned in terms of the date serving as proxy for the date of the Award. Notably, 27 May 2016 constituted the last common date for quantifying the indemnity owed to the

⁸⁷⁹ C-PHB, §§ 51(e), 1004.

⁸⁸⁰ AUVM, C-PHB **Appendix E**.

⁸⁸¹ BFVM, **App. BF-406**, Control Panel, Willful Breach Damages Percentage.

⁸⁸² Abdala ER I, **CLEX-002**.

⁸⁸³ Abdala ER II, **CLEX-078**.

⁸⁸⁴ Brailovsky & Flores ER I, **RER-3**, § 9; Brailovsky & Flores ER I, **App. BF-005**; Brailovsky & Flores ER I, **App. BF-011**; Brailovsky & Flores ER I, **App. BF-006**; Brailovsky & Flores ER I, **App. BF-012**.

⁸⁸⁵ Brailovsky & Flores ER II, **RER-7**, §§ 2, 5-6; Brailovsky & Flores ER II, **App. BF-215**.

Claimants pursuant to the DA provisions of each AA. It follows that, both before and during the Hearing, the Parties have had the opportunity of thoroughly reviewing and commenting on the valuation of the Claimants' DA Claim as of 27 May 2016. In the circumstances, it seems contrary to due process and good practice considerations to opt for a different valuation date post-Hearing.

583. Further, the Claimants' request for relief is made in function of damages calculations as of 27 May 2016, namely, the same valuation date as in the AUVM.⁸⁸⁶ In other words, AUVM's date of valuation coincides with the benchmark date pursuant to which the Claimants claim for damages. Given the consistency between the valuation date in the Claimants' submissions and AUVM, the Tribunal is therefore well positioned to assess whether the Claimants' quantum submissions are indeed supported by their expert evidence.
584. The Tribunal notes that, had the Claimants adopted a valuation date as of 31 December 2016 as opposed to one set at 27 May 2016, their DA Claim may have increased.⁸⁸⁷ However, as confirmed by their PHB, the Claimants' prayer for relief for their DA Claim in full amounts to USD 7.31 billion as of 27 May 2016, not 31 December 2016.⁸⁸⁸ In this regard, the Tribunal is of the view that, both valuation dates being apposite for an *ex post* valuation, it is within the Claimants' prerogative to condition and limit their request for relief as they deem it necessary.
585. In light of the above, the Tribunal considers that the AUVM constitutes the most appropriate valuation model for the Tribunal to establish the indemnity owed to the Claimants under the DA provisions. Accordingly, the Tribunal's determination of the various quantum issues in dispute shall be implemented by subsequently toggling the different options provided in the AUVM.⁸⁸⁹ It follows that, pursuant to the Claimants'

⁸⁸⁶ C-PHB, § 1027(a)-(b), (g), (j)-(o).

⁸⁸⁷ Mr. Abdala clarified that the DA Claim would amount to 7.91 billion if valued as of 31 December 2016 (Abdala Hearing Presentation, 8 December 2016, slide 27). The latter figure is corroborated by the *ex post* valuation model prepared by Mr. Abdala and Mr. Pablo Spiller (of Compass Lexecon and submitted to the ICSID Arbitration), with a valuation date of 31 December 2016 (See, Abdala/Spiller ICSID Consolidated Valuation Model, **CLEX-086**). Similar to the BFVM (*supra*, § 582.ii), the valuation model prepared by Mr. Abdala and Mr. Spiller for the ICSID Arbitration fails to properly accommodate Parties' position as argued in the present proceedings. In particular, it lacks detail and is more restrictive than the AUVM. For instance, unlike the AUVM, the Abdala/Spiller ICSID Consolidated Valuation Model does not allow the Control Panel's user to: (i) adopt custom interest and discount rates; or (ii) independently toggle the price applicable to the Projects' by-products.

⁸⁸⁸ C-PHB, § 1027(o).

⁸⁸⁹ This notwithstanding, the Tribunal notes that despite the already considerable detail of the AUVM's Control Panel, certain of the Tribunal's determinations could not be implemented by toggling the available options. Accordingly, as seen below, and when necessary and appropriate, the Tribunal has edited the AUVM's underlying data in order to adequately reflect its findings (*infra* §§ 1128.i.b), 1128.iii). For the sake of clarity, the case would

request for relief, the amount awarded to the Claimants for the harm suffered as a result of the Income Tax Increase and the Expropriation is calculated as of 27 May 2016.

586. Having set out its conclusions in respect of the above preliminary issues pertaining to DA compensation, the Tribunal will now proceed to address the Parties' arguments regarding the various inputs based on which the DA compensation is to be calculated. As noted above, both Parties generally agree on the inputs that are applicable for calculating the indemnity payable under the DA provisions of the AAs.⁸⁹⁰ In essence, it is common ground that the indemnity is calculated on the basis of the Projects' lost cash flows, which in turn are obtained by "multiplying the Projects' **production volumes** by the **prices** at which the resulting products are sold; and **costs** and **taxes** are then subtracted, yielding net cash flows".⁸⁹¹
587. In the following sections, the Tribunal shall therefore assess the Parties' positions on each of these inputs, namely, production volumes (Section B), Oil Prices (Section C), Costs (Section D), and the applicable fiscal regime i.e. taxes (Section E). The Tribunal shall also determine the adequate interest rate to bring the lost historical cash flows forward to present value (Section F), as well as the reasonable discount rate to bring future cash flows back to present value (Section G). Finally, the Tribunal will decide upon some other issues that, while having certain impact on quantum, have not been subject to major contention between the Parties (Section H).

B. PRODUCTION VOLUMES

1. The Claimants' position

588. The first step in the Claimants' assessment of its damages is to determine the volume of oil that both Projects would have produced had the Claimants remained in possession of their investments, namely "but-for" the Expropriation. In predicting the EHCO production profiles for each of the Projects, the Claimants' valuation expert, Mr. Abdala, claims to have adopted the "most conservative of the **pre-expropriation**

have been no different had the Tribunal opted to rely on the BFVM or any other of the valuation models submitted by the Parties. In this respect the Tribunal notes that, by opting for an all-or-nothing approach, coupled with a lack of customization and the absence of a clear issue-by-issue quantification, the Parties' valuation models were somewhat restrictive.

⁸⁹⁰ *Supra*, §§ 550-551, 561.

⁸⁹¹ Abdala ER I, **CER-3**, § 37 (emphasis added); C-PHB, § 506; SoC, §§ 267-268; SoD, §§ 505, 541.

profiles produced by the Projects and their shareholders prior to the [E]xpropriation”.⁸⁹²

589. According to Mr. Abdala, the pre-Expropriation (and consequently pre-dispute) production figures reflect the shared expectations of the Project participants, including PDVSA, about the probable level of oil production and therefore constitute the best evidence of expected oil production volumes to assist in the application of a but-for analysis.⁸⁹³ He is of the view that it would be misleading to rely on actual production data available for the Projects because in his view, the actual performance of the Projects in the post-Expropriation period reflects the incentives of the Respondents, a state-owned entity, and such incentives would have differed from those of a private commercial entity like the Claimants. As such, he opines that the Projects’ actual performance after June 2007 is not representative of how the Projects would have performed in the absence of the Expropriation.⁸⁹⁴
590. In light of the above, Mr. Abdala makes the following forecasts regarding the expected production levels at the Projects applying the but-for test:
- a. for the Petrozuata Project, he projects the remaining EHCO recovery between June 2007 and 2036 to be 913.5 million barrels; and
 - b. for the Hamaca Project, he projects the remaining EHCO recovery between June 2007 and 2037 to be 1.864 billion barrels.⁸⁹⁵
591. The Claimants submit that various contemporaneous business-planning documents, and more importantly, the post-Expropriation Proved Reserves figures for the Petrozuata and Huyapari fields published by the Ministry,⁸⁹⁶ confirm the reliability of Mr. Abdala’s production forecasts.⁸⁹⁷

⁸⁹² C-PHB, § 603 (emphasis added).

⁸⁹³ C-PHB, §§ 616-624.

⁸⁹⁴ Abdala ER I, **CER-3**, § 42.

⁸⁹⁵ Abdala ER I, **CER-3**, §§ 66-78.

⁸⁹⁶ Both Projects were provided with a designated production field from which to produce the EHCO. The designated field of the Petrozuata Project comprised a Base Area and a Reserves Area both of which were ultimately exploited for EHCO. The Hamaca Project’s field comprised of a main area, known as “H” (short for Huyapari) Block, and a reserve area known as “M” (short for Maquiritare) Block. It appears that the M Block was relinquished by the Hamaca Project prior to the Expropriation. (Figuera, WS I, **RWS-2**, § 33) Hence, while referring to the Hamaca Project, the Tribunal shall use the phrase “Hamaca field” or “Huyapari field” interchangeably.

⁸⁹⁷ C-PHB, § 603.

592. Turning to the Respondents' case on production volumes, the Claimants submit that the Tribunal must reject the Respondents' production forecasts on a number of grounds. First, the Claimants argue that as a matter of principle, the Respondents' production forecast is not reliable because (i) the Respondents have failed to produce any post-Expropriation figures/documents that contradict the Claimants' case;⁸⁹⁸ (ii) the decline in production alluded to by the Respondents is not reconcilable with their own Proved Reserves figures; and (iii) any actual decline in production volumes post-Expropriation is attributable to the Respondents' mismanagement of the Projects and cannot be taken into account when applying a "but-for" analysis.
593. The Claimants also call into question the methodology followed by the Respondents' experts to arrive at the production figures for the Projects on various grounds.
594. Finally, the Claimants also address certain Project specific issues that according to the Respondents affect production volumes.
595. In sum, the Claimants contend that the Tribunal should reject the Respondents' "made-for-arbitration" production forecasts and should instead adopt the production forecasts presented by Mr. Abdala – these being a reasonable and conservative estimate of expected oil production volumes – for quantifying damages.

2. The Respondents' position

596. In contrast to the Claimants, the Respondents base their production profile on "what [actually] transpired in the historical period through 2015, as well as the assessment of the EHCO production capacity at the [Petrozuata and Huyapari fields] by their expert [for the future period]".⁸⁹⁹ In particular, their production profile is developed as follows:
- i. For the historical period i.e. 2007-2015, the Respondents rely on the "actual performance" of the Projects, namely:
 - a) for the period June 2007 to 31 December 2008, the Respondents rely on actual EHCO and Commercial Crude Oil ("CCO")⁹⁰⁰ produced by the Projects, as reported by their witness Mr. Figuera;⁹⁰¹

⁸⁹⁸ C-PHB, §§ 607-611.

⁸⁹⁹ R-PHB, § 668; Brailovsky & Flores ER I, **RER-3**, § 27.

⁹⁰⁰ CCO is also referred to as "synthetic crude oil" or "SCO" (i.e. the upgraded EHCO that is ultimately sold in the market). For the purposes of its Award, the Tribunal will employ CCO to refer to the upgraded product.

b) for the years 2009 through 2015, the Respondents rely on actual CCO volumes as presented by Mr. Figuera and on this basis, their expert Mr. Patiño estimates the EHCO volumes that would have been associated with such CCO volumes.

ii. For the projection period (i.e. 1 January 2016 till the expiry of the terms of the AAs), the Respondents rely on the EHCO production profiles forecasted for each Project by their expert, Mr. Patiño, by taking into account the factors affecting production specific to each Project.

597. On the Respondents' experts' analysis applying the but-for test, the following production volumes at the Projects are predicted:

c. for the Petrozuata Project, they project that from 26 June 2007 through the end of the original term of the Petrozuata AA, the Petrozuata Project would produce 522 million barrels of EHCO and sell 449 million barrels of CCO;⁹⁰² and

d. for the Hamaca Project, they project that from 26 June 2007 through the end of the original term of the Hamaca AA, the Hamaca Project would produce 1.051 billion barrels of EHCO and sell 990 million barrels of CCO.⁹⁰³

598. The Respondents contest the Claimants' reliance on pre-Expropriation production profiles. The Respondents submit that an *ex post* or date of Award quantum analysis – as undertaken by Mr. Abdala – must take into account “all of the information available at the date of analysis [...] and therefore [attempt] to reflect the actual development of events, rather than [...] forecasts made at the date of breach”.⁹⁰⁴ On this basis, the Respondents argue that the Claimants cannot act as if the decades old business plans on which their production forecasts were based, were “immutable” and insulated from the negative developments that took place in the post-Expropriation Projects. On the contrary, the Respondents assert that the 2006

⁹⁰¹ Brailovsky & Flores ER I, **RER-3**, § 27.

⁹⁰² Brailovsky & Flores ER I, **RER-3**, Table 5.

⁹⁰³ Brailovsky & Flores ER I, **RER-3**, Table 6.

⁹⁰⁴ Peter Ashford, HANDBOOK ON INTERNATIONAL COMMERCIAL ARBITRATION, Brailovsky & Flores ER I, **RER-3 App. BF-15**, pp. 331-332.

models on which the Claimants rely were “overly optimistic [even] when they were prepared.”⁹⁰⁵

599. Further, the Respondents dispute the Claimants’ reliance on the Ministry’s and PDVSA’s Proved Reserves figures as a basis for corroborating the reliability of the pre-Expropriation forecasts. They contend that these figures are not comparable with the figures used by the Claimants for their production forecast.
600. Finally, the Respondents also raise specific upstream (relating to oil production) and downstream (relating to upgrading of EHCO into CCO and other by-products) issues with respect to each of the two Projects, which in their view undermine the Claimants’ production forecast.
601. More specifically, in relation to the Petrozuata Project, the Respondents assert that the Petrozuata Project was already experiencing a downward trend pre-Expropriation and this was likely to have continued even after June 2007. As regards downstream issues, the Respondents assert that the Petrozuata upgrader faced several technical problems that reduced its performance.
602. In relation to the Hamaca Project, the Respondents primarily assert the existence of operational difficulties with the Hamaca upgrader and its coker unit. According to the Respondents, such problems would have arisen regardless of who was managing the Projects, resulting in reduced production and consequently reduced earnings for the Claimants.
603. In sum, the Respondents conclude that in carrying out their analysis on production, the Claimants have created a “make-believe world that never would have existed no matter who participated in the Projects”.⁹⁰⁶ Accordingly, the Respondents assert that the Tribunal should reject the “utopian environment” assumed by the Claimants in favor of the realistic analysis presented by the Respondents.

3. Analysis

604. Having studied the Parties’ submissions, the Tribunal finds that the disputed issues fall into two broad categories: (i) issues common to both Projects; and (ii) issues specific to each Project. With respect to issues common to both Projects, these concern the methodology adopted for arriving at the production volumes i.e. pre-

⁹⁰⁵ SoD, §§ 347-348; R-PHB, § 539.

⁹⁰⁶ R-PHB, § 614.

Expropriation figures relied on by the Claimants or the methodology adopted by the Respondents based on Mr. Figuera's and Mr. Patiño's analysis. One aspect of this issue is the Claimants' reliance on Proved Reserves figures for corroborating its proposed production forecast. As regards issues specific to each Project, the Tribunal has highlighted them at Sections IV.B.3.c and IV.B.3.d below.

605. The Tribunal will first address the common issues and then proceed to the issues that are specific to each Project. To the extent necessary, the Tribunal will highlight the specific questions that arise for its decision prior to commencing its analysis on the two broad categories of issues.

a. *What methodology should be adopted for determining the production volumes for the Projects?*

i. The Claimants' position

606. While setting out the Claimants' position on production volumes, the Tribunal will first elaborate upon the Claimants' own position (1) and subsequently set out the Claimants' responses to the production forecast proposed by the Respondents (2).

(1) *The Claimants' production forecast*

607. As discussed above, the Claimants' approach to establishing oil production applying the but-for test is to rely on the pre-Expropriation forecasts and project this into the *ex post* period. The Claimants submit that pre-Expropriation forecasts are regularly relied upon by international tribunals to determine expected production levels in the but-for application as they constitute the best evidence of the parties' expectations during a "business as usual" period.⁹⁰⁷

608. Accordingly, Mr. Abdala relies on the ConocoPhillips Composite Economic Model, as updated in late 2006 ("Composite Economic Model"), as the basis for forecasting production at the Petrozuata Project between June 2007 and 2036.⁹⁰⁸ For the Hamaca Project, Mr. Abdala relies on the Petrolera Ameriven Economic Model

⁹⁰⁷ Reply, § 313; C-PHB, §§ 617-620; *ADC v. Hungary*, Award, **CLA-13**, §§ 506-507 ("One of the Respondent's main criticisms concerns [the] reliance on the 2002 Business Plan of the Project Company [...] as a basis for the DCF calculations, [...] because it would not provide a reliable basis on which to base projections as to the future performance of the Project Company for the purposes of assessing damages [...]. The Tribunal disagrees since the 2002 Business Plan was approved by ATAA [...] a few days before the Decree was issued that led to the expropriation and after five drafts had been discussed between the Quota Shareholders. The 2002 Business Plan, therefore, constitutes the best evidence before the Tribunal of the expectations of the parties at the time of expropriation for the expected stream of cash flows"); Mobil ICC Award, **CLA-16**, § 771.

⁹⁰⁸ ConocoPhillips Composite Economic Model, **C-239**. Abdala ER I, **CER-3**, §§ 73-78.

("Ameriven Model") prepared by the operating company of the Hamaca Project and updated as of October 2006.⁹⁰⁹ The Claimants submit that Mr. Abdala's production forecast of 913.5 million barrels of oil for the Petrozuata Project and 1.864 billion barrels for the Hamaca Project based on the above Models is consistent with the contemporaneous pre-Expropriation business planning documents. In fact, the Claimants assert that Mr. Abdala's figures are more conservative than the projections in any of these documents, and should therefore be adopted.

609. As regards the Petrozuata Project, Mr. Abdala compares the Composite Economic Model to the following: (i) the 2006 Petrozuata Economic Model maintained by the Petrozuata Project itself, which predicted the Petrozuata Project's Proved Reserves at 1.192 billion barrels of EHCO;⁹¹⁰ (ii) the 2006 Petrozuata Business Plan, which forecasted total production of 1.235 billion barrels of EHCO from 2006 to 2036;⁹¹¹ and (iii) the Petrozuata 2005 Annual Report, which projected that the Project would produce more than 1.6 billion barrels of EHCO over its operating life.⁹¹² Mr. Abdala submits that the figures in the Composite Economic Model represent the most up-to-date information regarding production prior to the Expropriation. Moreover, the figures are compatible with those indicated in all of the above-mentioned business documents. Accordingly, Mr. Abdala asserts that his figures correctly estimate production volumes of the Petrozuata Project.⁹¹³
610. With respect to the Hamaca Project, Mr. Abdala states that the production forecast in the Ameriven Model is consistent with the production forecast in (i) the 2005 Hamaca Business Plan, which was the last business plan approved by all Project participants, including the Respondents, before the Expropriation;⁹¹⁴ (ii) the 2006 Hamaca Draft Business Plan, which projects the figures for 2007 to 2016 and was prepared while Mr. Figuera was still the President of Ameriven;⁹¹⁵ and (iii) the 2006 ConocoPhillips

⁹⁰⁹ C-149; Abdala ER I, **CER-3**, § 136(a)-(d); **CLEX-031**.

⁹¹⁰ 2006 Petrozuata Economic Model, 29 September 2006, **C-147**, p. 468.

⁹¹¹ 2006 Petrozuata Business Plan, 6 October 2005, **C-126**, slide 10. See also **C-268**. Moreover, the Claimants assert that all Business Plans prepared prior to the Expropriation also predicted future EHCO recoveries in excess of 913.5 million barrels (C-PHB, fn 1241).

⁹¹² **C-114**.

⁹¹³ Abdala ER I, **CER-3**, §§ 161-168.

⁹¹⁴ **C-127**; C-PHB, § 753(b); Abdala ER I, **CER-3**, § 136(c); **CLEX-058** (Meeting of BOD approving plan).

⁹¹⁵ C-PHB, fn. 1320; **C-283**, p.19. (Predicting the production of 2.1 billion barrels of EHCO over the Project's life).

Economic Model, which projects recovery of 1.894 billion barrels of EHCO over the life of the Hamaca Project.⁹¹⁶

611. The Claimants further assert that the Respondents themselves endorsed the above documents. For instance, they point to the fact that the Respondents' witness, Mr. Figuera, signed the Petrozuata 2005 Annual Report in his capacity as the President of Petrozuata C.A., approving the expected production of 1.6 billion barrels of EHCO over the life of the Project, as of 2005.⁹¹⁷ Similarly, in respect of the Hamaca Project, the Claimants contend that the Hamaca JVC itself prepared the Ameriven Model.⁹¹⁸ Thus, the Claimants submit that the Respondents' proposition that the pre-Expropriation production profile was "overly optimistic"⁹¹⁹ and "utopian"⁹²⁰ (and thus unreliable) is untenable.
612. In any event, the Claimants submit that for all their reliance on post-Expropriation developments, the Respondents have failed to produce any evidence in support of their assertion that after the Expropriation the "Projects promptly fell to pieces". For instance, despite the Tribunal's directions; the Respondents have allegedly not produced any current business plans or post-Expropriation production forecasts that contradict the Claimants' position.⁹²¹ Moreover, the Claimants also emphasize that the Respondents' witness on production volumes, Mr. Figuera, was not involved in the Projects since the Expropriation and thus does not have personal knowledge of their post-Expropriation production potential.⁹²²

(2) The Claimants' position on the Respondents' production forecast

613. The Claimants and their experts, Mr. Abdala and Mr. Strickland, challenge the competing production forecast advanced by the Respondents on various grounds. First, the Claimants assert that as a matter of principle, post-expropriation performance data cannot be taken as reflective of the Projects' performance in the but-for application as the Projects were under PDVSA's control (2.1).⁹²³ Second, the

⁹¹⁶ C-239, p.14.

⁹¹⁷ C-PHB, §§ 720-721.

⁹¹⁸ C-PHB, fn. 1055.

⁹¹⁹ Figuera ER 1, § 17

⁹²⁰ Rejoinder, § 376.

⁹²¹ C-PHB, § 627.

⁹²² C-PHB, § 629. In particular, the Claimants submit that Mr. Figuera had no direct involvement with the Petrozuata Project from December 2006 and with the Hamaca Project since December 2007. Tr. (Day 4), 1060:3-22; 1116:2-1117:8 (Mr. Figuera).

⁹²³ C-PHB, §§ 658 et seq.

Claimants' experts assert that there are numerous flaws in the methodology followed by Mr. Patiño to forecast production, which thoroughly undermine its reliability (2.2). Third, and in any event, the Claimants' experts also submit that there are errors in the principle components that Mr. Patiño uses for his analysis (2.3). Each of these are addressed in turn.

2.1. *The Respondents' production forecasts cannot be used in application of the but-for test*

614. As noted above, the Respondents rely on actual figures for the post-Expropriation performance of the Projects. The Claimants submit that these figures cannot be accepted as accurate and reflective of what could have been achieved by the Projects but for the Expropriation for the following reasons.
615. First, the Claimants submit that since the Expropriation, the Projects have been majority owned and controlled by PDVSA, which has entirely different priorities and capabilities from a private commercial entity such as the Claimants. In particular, the Claimants reiterate that PDVSA has become the Government's "cash cow" and most of its revenues are diverted to fund the "obscure" social programs and activities of the Government.⁹²⁴ The Claimants conclude that as a result, PDVSA's "priorities have shifted – and its performance [at the Projects] has suffered."⁹²⁵
616. Second, the Claimants submit that under the Chávez administration, PDVSA suffered from a "brain-drain", inasmuch as in 2003 the Chávez administration dismissed over 18,000 PDVSA employees, several of which were their most experienced engineers, and replaced them with "hired flunkies willing to toe the regime line."⁹²⁶ Moreover, "a further exodus of experienced employees commenced in 2007, with the [E]xpropriation of the [...] [P]rojects".⁹²⁷ According to the Claimants, this loss of its "oil intelligentsia" (comprising experienced Venezuelan personnel as well as personnel brought in by the foreign oil companies) was a "blow from which PDVSA has never recovered" and has left a permanent negative impact on oil exploration and project management.⁹²⁸

⁹²⁴ C-218, C-324.

⁹²⁵ C-PHB, § 661(a).

⁹²⁶ C-324; C-PHB, § 661(b).

⁹²⁷ C-PHB, § 661(b).

⁹²⁸ C-334; C-PHB, § 661(b).

617. Third, the Claimants emphasize that there have been repeated and widespread reports of mismanagement and corruption by PDVSA. In particular, the Claimants point to a 2015 Government report based on an inspection of PDVSA-operated facilities, including Petrozuata, which found *inter alia* “[g]eneral deterioration of the upgraders’ physical structure due to deficient maintenance.”⁹²⁹ Moreover, this report also noted that there were “[h]igh rates of insecurity and cases of extortion [in the Orinoco Oil Belt] [...] as shown by payments charged by organized mafias to allow the performance of daily duties of productive activities [...]”.⁹³⁰ Further, a 2016 report by the Permanent Auditing Committee of Venezuela’s National Assembly concluded that senior members of PDVSA’s management, including former President Rafael Ramírez and current President Eulogio Del Pino, were allegedly guilty of “administrative irregularities”.⁹³¹ This included allegations of bribery and the mismanagement of PDVSA funds that reportedly cost the company more than USD 11 billion between 2004 and 2014.
618. Overall, the Claimants assert that post-Expropriation, the “new PDVSA” was a substantially different entity in terms of its practices and competencies and this is precisely why the post-Expropriation performance of the Projects cannot be used to compute damages in a but-for test application.

2.2. *There are fundamental flaws in the Respondents’ methodology*

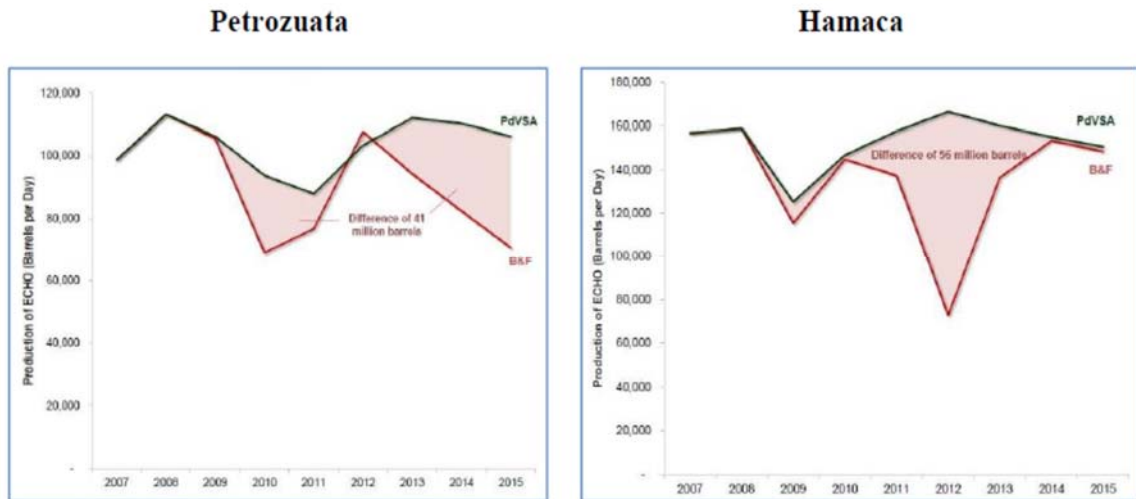
619. Next, the Claimants call into question the competing production forecasts advanced by the Respondents based on Mr. Figuera’s testimony and Mr. Patiño’s analysis. In this respect the Claimants’ submissions are two-fold: first, that the Respondents’ production profile for the historical period is “anti-historical” and ignores actual EHCO production without any basis; and second, that Mr. Patiño’s methodology for calculating the Projects’ production profiles for the future period is “demonstrably wrong” and is not confirmed by any “reality checks”.
620. As regards the production figures for the historical period (i.e. 2009 – 2015), the Claimants note that Mr. Patiño does not base his case on the volumes of EHCO actually extracted from the Petrozuata and Hamaca fields. Rather, he estimates the EHCO volumes that would be needed to produce the amounts of CCO actually sold

⁹²⁹ C-358, C-218.

⁹³⁰ C-358, p. 40.

⁹³¹ C-394, pp. 60-66, 91-96.

by the Projects.⁹³² In doing so, the Claimants assert that the Respondents omit from their production profile for this period approximately 97 million barrels of EHCO. The “lost oil” can be illustrated as follows:⁹³³



621. According to the Claimants, the reasons cited by the Respondents to justify their calculation is entirely without basis. The Claimants submit that, as admitted by Mr. Figuera during the Hearing, the pre-Expropriation Projects routinely produced and sold non-upgraded blended products and the Ministry was fully aware of this fact.⁹³⁴ Therefore, the EHCO that was allegedly commercialized in non-upgraded form cannot be excluded from production volumes when applying the but for test.
622. As regards the Respondents’ reliance on the Ministry’s letter of 23 June 2005, the Claimants contend that this letter did not prohibit the production and sale of blended non-upgraded products by the pre-Expropriation Projects. Rather, it was a “tax bill” that demanded the Projects to pay a higher royalty for the non-upgraded EHCO.⁹³⁵

⁹³² SoD, §§ 417, 473; Tr. (Day 9), 2358:9-2359:4 (Mr. Patiño) (Q. So, is it not correct that, for those years, by which I mean 2009 to 2015, your model simply uses the EHCO volumes that would be needed to produce the amounts of syncrude actually sold by the Projects, according to Mr. Figuera? A. I used the volumes indicated by Mr. Figuera that were produced during that period of time. Q. Right. So, when we look in your model for those years, what we see is not what the Projects actually produced, but, rather--the amount of EHCO they actually produced, but rather the theoretical EHCO volumes that would have been needed to produce the syncrude that they actually sold; is that right? A. Correct, yes. Q. And you tell us in your Reports that the volumes of EHCO that the Projects actually extracted over those years 2009 to 2015 are bigger than the numbers reflected in your Report corresponding to the syncrude sales; correct? A. That is correct, yes).

⁹³³ Abdala ER II, CER-8, pp. 44-45, Fig.8-9. The pink area reflects the “lost oil”.

⁹³⁴ Tr. (Day 5), 1214:1 – 1232:20 (Mr. Figuera); C-PHB, § 671(a)-(e).

⁹³⁵ C-PHB, § 672(a)-(b).

623. In light of the above, the Claimants contend that the Respondents' attempt to disregard the actual EHCO production between 2009-2015 i.e. the historical period, in the but-for test application must be rejected.
624. As regards the future period (i.e. 1 January 2016 onwards), the Claimants assert that Mr. Patiño's production forecasts are "demonstrably wrong".⁹³⁶
625. Mr. Patiño's production forecasts for the future period are premised on three main components:⁹³⁷ (i) decline rates, being the rate at which the wells drilled in the Petrozuata and Huyapari fields will decline; (ii) well targets or the drilling of additional wells, in order to determine how many new wells could be drilled from 2009 to maintain the necessary levels of production; and (iii) initial production potential, which estimates the initial rate at which each new well would produce oil till the decline began.⁹³⁸
626. The Claimants' expert Mr. Strickland explains that the above methodology is a "simple decline curve methodology" and states that it is "overly simplistic and ill-suited for the purposes of forecasting future [EHCO] production volumes" of the Projects.⁹³⁹ Instead, according to Mr. Strickland, based on the quantity and quality of data available for both Projects, the geophysical characteristics of the EHCO, and the development strategy employed by the Parties, "the use of reservoir modeling at Hamaca and advanced decline curve techniques at Petrozuata [...] were appropriate and reliable methods to employ".⁹⁴⁰
627. According to Mr. Strickland, simple decline curve analysis is inapposite for forecasting long-term oil production as it may *inter-alia* fail to account for changing operating conditions and as a result underestimate future production. Conversely, advanced decline curve analysis is more rigorous as it "go[es] beyond merely extrapolating the

⁹³⁶ C-PHB, § 675.

⁹³⁷ Described in greater detail at §§ 637-646, *infra*.

⁹³⁸ Patiño ER I, **RER-4**, §§ 23, 39, 26-27, 42-43, 30-31, 45-46.

⁹³⁹ Strickland ER, **CER-6**, §§ 5, 20-36.

⁹⁴⁰ Strickland ER, **CER-6**, §§ 20-35 (Mr. Strickland explains that the basis of Decline Rate analysis is the assumption that future production will continue to follow a past trend i.e. that the data is "well behaved" and not erratic and that there is sufficient historical data. Separately, he criticizes the use of the simple form of decline curve analysis not only because it is more rudimentary than the advanced decline curve (or reservoir modeling) approaches, but also because in his view the fields in the Orinoco Belt have certain characteristics that make the simple decline curve analysis susceptible to significant error. He explains that simple decline curves work best with reservoirs that have high oil mobility. However, given the high viscosity of the EHCO in the Orinoco Belt, including at Petrozuata and Hamaca Projects, the reservoirs have relatively low mobility. Production characteristics of low mobility reservoirs include long transient periods where the decline rate is high at first and then gradually changes to even lower decline rates. Hence, in his view, a simple decline curve cannot account for such variations).

rate of decline; [and] also account[s] for principles of thermodynamics and physics, and can take into account observed conditions in the field, [...] making the estimate of future production more accurate.”⁹⁴¹ Similarly, reservoir modeling is the most advanced technology available for forecasting recovery and can give a “level of precision and accuracy that the [...] other methods [...] cannot match.”⁹⁴²

628. Mr. Strickland also notes that advanced decline curve techniques were employed at the Petrozuata field and reservoir modelling was employed at the Huyapari field, and states that these are far more sophisticated and therefore capable of yielding more accurate results than the methodology applied by Mr. Patino.⁹⁴³

629. Mr. Strickland then proceeds to address what he considers to be the main flaws in Mr. Patino’s methodology:

- a. First, Mr. Patino did not have a sufficiently large sample set based on which to conduct his decline rate analysis. Mr. Strickland notes that Mr. Patino’s criteria for selecting his sample set⁹⁴⁴ and his exclusion of “outlier wells”⁹⁴⁵ left him with only “124 from Petrozuata’s 395 total existing wells, and 55 from Hamaca’s 346 total wells”, to conduct his analysis.⁹⁴⁶ According to the Claimants, it is obvious from the numbers that Mr. Patino’s methodology was unsuited for a vast majority of the wells at both fields.
- b. Second, Mr. Patino erred by applying the same decline rate to all wells – existing and future – included in his forecasts for both fields, without first confirming whether the average decline rate was even representative of the existing wells in the field.⁹⁴⁷

⁹⁴¹ Strickland ER, **CER-6**, §§ 28-30.

⁹⁴² Strickland ER, **CER-6**, §§ 32-33.

⁹⁴³ Strickland ER, **CER-6**, § 35.

⁹⁴⁴ Mr. Patiño examined wells that could provide six years of data devoid of erratic behaviour. It appears that by virtue of timing, these wells happened to be the earliest wells drilled and therefore likely to be the wells drilled in the best parts of the field.

⁹⁴⁵ i.e. wells which had a decline rate of more than 30% and were thus not representative of the fields.

⁹⁴⁶ Strickland ER, **CER-6**, § 41.

⁹⁴⁷ C-PHB, § 648; Second ICSID Report, Patiño ER I, **RER-4 Annex II**, §§ 25–26.

- c. Third, Mr. Patino's decline rate analysis conflates two different types of wells, i.e. those exhibiting an exponential decline⁹⁴⁸ and those exhibiting a hyperbolic decline⁹⁴⁹ and instead treats them all as exponential wells.
- d. Fourth, Mr. Patino failed to undertake the most obvious reality checks of his results in order to ensure that they were accurate. In particular, (i) he did not attempt to reconcile his forecast with the Ministry's Proved Reserves figures allegedly because "he was not asked to do [so]";⁹⁵⁰ (ii) he did not ask for and obtain long-term oil production forecasts produced by the post-Expropriation Projects. Moreover, although he asked for them, Mr. Patino was not provided with the post-Expropriation Projects' long-term forecasting tools and omitted to mention this in his Expert Report; and, finally, (iii) he did not test his forecasts against the actual EHCO production from the Petrozuata and Huyapari fields as reported by PDVSA.⁹⁵¹

630. Because of the above errors, the Claimants assert that Mr. Patino's methodology "overstates the decline rate of the fields and, relatedly, understates the expected ultimate recovery".⁹⁵² To reinforce their point, the Claimants emphasize that as a result of applying an incorrect methodology, Mr. Patino's production forecasts "represent[ed] about 51% of the volumes [...] upon which the damages calculated by the Claimants' damages experts are based".⁹⁵³ Accordingly, the Claimants conclude that no confidence can be placed in Mr. Patino's results.

2.3. There are errors in the principle components of Mr. Patiño's methodology

631. Lastly, the Claimants also point to what, in their view, are technical errors in the various components of Mr. Patino's methodology.

632. As set out above,⁹⁵⁴ Mr. Patino's methodology comprises three components: (i) decline rate analysis; (ii) determination of remaining wells; and (iii) the initial potential production analysis for the new wells. According to Mr. Strickland, Mr. Patino reaches

⁹⁴⁸ Strickland ER, **CER-6**, § 40(b) (an exponential decline is a constant rate of decline over time).

⁹⁴⁹ Strickland ER, **CER-6**, § 40(b) (an hyperbolic decline is a changing rate of decline over time)

⁹⁵⁰ Tr. (Day 9), 2330:7-15 (Mr. Patiño).

⁹⁵¹ C-PHB, §§ 689-696.

⁹⁵² Strickland ER, **CER-6**, § 40(b).

⁹⁵³ Strickland ER, **CER-6**, § 40.

⁹⁵⁴ *Supra*, § 625.

demonstrably erroneous conclusions on (i) and (ii) above. However, subject to his overarching objections to Mr. Patino's methodology, Mr. Strickland accepts the initial production figures used by Mr. Patino for his analysis.⁹⁵⁵

633. With respect to Mr. Patino's decline rate analysis, the Claimants assert that the most egregious error made by Mr. Patino is to conflate exponential and hyperbolic wells and apply the same exponential decline rate for forecasting production from all wells. According to the Claimants, because hyperbolic wells decline more gradually than exponential wells, they are likely to produce more oil than wells that decline exponentially, over the same period of time. The Claimants observe that in the sample set chosen by Mr. Patino nearly half the wells were hyperbolic. Thus, by virtue of his flawed analysis, the Claimants submit that Mr. Patino overstates the decline rates and understates production at "Petrozuata by approximately 367 million barrels of oil and at Hamaca by approximately 712 million barrels of oil".⁹⁵⁶ The Claimants assert that if Mr. Patino had undertaken his calculations correctly, the average decline rate for the Petrozuata Project would be 12.2% and 13% for the Hamaca Project.⁹⁵⁷ By way of a reality check, the Claimants submit that Mr. Patino's decline curves for both Petrozuata and Hamaca fall well below the actual production history of the post-Expropriation Projects.⁹⁵⁸

634. With respect to the determination of remaining well targets, Mr. Strickland states that first, Mr. Patiño's selection criteria for viable new well targets are unduly restrictive. In this respect, Mr. Strickland explains that Mr. Patino applies unrealistic standards to determine which areas of the field constitute targets that can be economically drilled. To support this conclusion, Mr. Strickland cross-checks Mr. Patino's criteria against the wells already drilled and demonstrates that if Mr. Patino's criteria were to be

⁹⁵⁵ Strickland ER, **CER-6**, § 76.

⁹⁵⁶ C-PHB, §§ 698-701; Strickland ER, **CER-6**, §§ 61-64, 75. The Tribunal notes that other errors in the Respondents' decline rate analysis have been highlighted by Mr. Strickland. In particular, Mr. Strickland asserts that Mr. Patiño incorrectly relies on "well test" data as opposed to "allocated production data" to perform the decline rate analysis. Mr. Strickland explains that at most oil fields the production of individual wells is not recorded. Rather, the volume produced for a group of wells is recorded and then periodic well tests are used to allocate volumes to each well within the group. This was presumably the procedure in place for both the Projects before and after Expropriation. Well-test data on the other hand measures the amount of oil that can be extracted under the test conditions and is therefore not reflective of production conditions. (Strickland ER, **CER-6**, §§ 44-46) Mr. Strickland is of the view that while well-test data can be used to calculate decline curves it requires additional analysis to account for operating conditions and operational changes, a step which Mr. Patiño fails to take into account. The other error with the decline rate analysis is to use the same decline rate for existing as well as new wells.

⁹⁵⁷ Strickland Consolidated ICSID Report, fn. 75. This translates to the estimated ultimate recovery from January 2009 until the end of the Project terms being 585 million barrels for Petrozuata and 1.402 billion barrels for Hamaca.

⁹⁵⁸ Strickland ER, **CER-6**, Figures 1 and 2; §§ 52-59.

applied, then several presently drilled wells would never have been drilled in the first place.⁹⁵⁹ Moreover, Mr. Patino allegedly restricts his forecast for the Petrozuata Project to only include single lateral wells. However, according to the Claimants, there is no basis for this assumption because the Petrozuata Project has drilled multi-lateral wells both before and after the Expropriation. Finally, it appears that Mr. Patino did not cross-check his figures with the well-drilling plans of the post-Expropriation Projects, thereby omitting the most basic “sense check”.⁹⁶⁰

635. Second, Mr. Strickland states that despite applying overly strict criteria, Mr. Patiño missed viable well targets.⁹⁶¹ In particular, Mr. Patino allegedly missed 22 viable targets at the Petrozuata Project and 20 at the Hamaca Project.⁹⁶² In the circumstances, Mr. Strickland is of the view that Mr. Patino’s conclusion that there are insufficient well targets to make up for the decline rate is incorrect. According to Mr. Strickland, the difference in production volumes of not including these well targets is approx. 18 million barrels of EHCO for both Petrozuata and Hamaca.⁹⁶³
636. In light of the above, Mr. Strickland submits that the total additional volumes that will be recovered according to Mr. Patino’s models once the errors are corrected are as follows:⁹⁶⁴

1	2	3	4	5	6
Time Period	Mid-2007 to end 2008	2009 to end of Projects’ terms		Mid-2007 to end of Projects’ terms	
Data Source	Reported Actual Production	Patiño Forecasting Model		Strickland Corrected Figures + Reported Actual Production	Comparison to COP Damages Model
		Patiño projected recovery	Strickland Corrected Figures		
Petrozuata	59	461	836	895	913.5
Hamaca	87	962	1667	1754	1863.5

⁹⁵⁹ Strickland ER, **CER-6**, §§ 82-84.

⁹⁶⁰ February 2017 ICSID Quantum Hearing Transcript, **C-395**, Day 9, 2678:14-2681:5.

⁹⁶¹ C-PHB, § 710.

⁹⁶² Strickland ER, **CER-6**, § 89, Appendix 12.

⁹⁶³ Tr. (Day 8), 2158:4-9 (Mr. Strickland).

⁹⁶⁴ Strickland ER, **CER-6**, Table 3

ii. The Respondents' position

637. In contrast to the Claimants' pre-Expropriation based production forecasts (which the Respondents deem "aspirational"), the Respondents base their production forecasts on the "years of actual performance data that post-date the 2006 models, and [which] show that the ideal world underlying the modeling in 2006 was completely unrealistic".⁹⁶⁵

638. First, the Respondents address the Claimants' insinuation that post-Expropriation figures cannot be relied upon because they reflect what has been achieved under the "new PDVSA" which would have thus been vastly different had the Claimants remained with the Projects. According to the Respondents:

[The] Claimants have never been able to explain why it should be assumed that at [the Projects], where PDVSA personnel held and would have continued to hold the highest management positions, including the position of President, where the PDVSA subsidiary would have held a blocking vote on all significant decisions, and where the vast majority of employees were locally hired Venezuelan nationals, the presence of a handful of ConocoPhillips secondees would have dramatically changed the results achieved in the post-nationalization period.⁹⁶⁶

639. The Respondents submit that the presence of a few ConocoPhillips employees assigned to the Projects would not have changed anything in the post-Expropriation Projects. This is because in both the pre- and post-Expropriation Projects, the PDVSA Subsidiaries would have held the position of control and the ability to steer the Projects. This was required by the 1975 Nationalization Law,⁹⁶⁷ as well as the Congressional Authorizations for the Projects⁹⁶⁸ and came to be reflected in the AAs. For instance, fundamental and significant decisions could not be adopted without the approval of the PDVSA Subsidiary⁹⁶⁹ and the Presidents of both Petrozuata CA and the Hamaca JVC were required to be PDVSA appointees.⁹⁷⁰ Given these circumstances, the Respondents assert that the mere participation of the Claimants in the Projects, however "active", would not have altered the course of events as they in

⁹⁶⁵ Figuera, WS I, **RWS-2**, § 15.

⁹⁶⁶ R-PHB, § 602.

⁹⁶⁷ 1975 Nationalization Law, **R-278**, Article 5,

⁹⁶⁸ PCA, **R-10**, Eleventh and Twelfth Conditions; First HCA, **R-11**, Sixth and Seventh Conditions.

⁹⁶⁹ Petrozuata AA, **C-1**, Sections 6.07, 6.14; Hamaca AA, **C-3**, Articles 4.5 – 4.8.

⁹⁷⁰ Petrozuata AA, **C-1**, Section 7.02; Hamaca AA, **C-3**, Article 4.4.

fact came to pass.⁹⁷¹ It would not have altered the problems faced by the Hamaca upgrader⁹⁷² or for that matter the geophysical characteristics of the Petrozuata and Huyapari fields, which would have suffered the same decline they did post-Expropriation.

640. As regards the Claimants' assertion that the post-Expropriation Projects had different incentives under the "new PDVSA", the Respondents submit that this argument "makes no sense". This is because PDVSA is no more "interested in throwing money at a project without at least attempting to improve performance", than any other commercial oriented international oil company like the Claimants.⁹⁷³ The above statement holds even greater relevance in respect of the Hamaca Project, where Chevron – an international oil company like the Claimants – remained a participant in the post-Expropriation Project.⁹⁷⁴
641. Having addressed the Claimants' main objections to using the Respondents' forecasts, the Respondents then proceed to explaining their production forecasts.
642. In that respect, the Tribunal notes that for the period June 2007 to 31 December 2008, the Respondents rely on actual EHCO and CCO produced by the Projects, as reported by their witness Mr. Figuera.⁹⁷⁵ According to Mr. Figuera:

In 2007, Petrozuata produced a total of 36,044,474 bbls of EHCO (an average of 98,752 BPD), sold 29,666,968 Bbls of upgraded crude oil (an average of 81,279 BPD), and received total revenues from such sales of US\$1.814 billion, for an average sales price of US\$61.51 per barrel.⁹⁷⁶

In 2008, Petrozuata produced a total of 41,398,549 Bbls of EHCO (an average of 113,111 BPD), sold 35,700,904 Bbls of upgraded crude oil (an average of 97,543 BPD), and received total revenues from such sales of US\$3.119 billion, for an average sales price of US\$87.38 per barrel.⁹⁷⁷

In 2007, the Hamaca Project produced a total of 57,150,178 Bbls of EHCO (an average of 156,576 BPD), sold 53,547,480 Bbls of upgraded crude oil (an average of 146,705 BPD), and received total revenues from such sales of US\$3.518 billion, for an average sales price of US\$65.71 per barrel.⁹⁷⁸

⁹⁷¹ R-PHB, §§ 593-602.

⁹⁷² Figuera, WS I, **RWS-2, Annex E**, § 14.

⁹⁷³ R-PHB, § 618; RWS-2, § 16.

⁹⁷⁴ R-PHB, §§ 593-602.

⁹⁷⁵ Brailovsky & Flores, ER I, **RER-3**, § 27.

⁹⁷⁶ Figuera, WS I, **RWS-2, Annex A**, § 11.

⁹⁷⁷ Figuera, WS I, **RWS-2, Annex A**, § 12.

⁹⁷⁸ Figuera, WS I, **RWS-2, Annex A**, § 37

In 2008, the Hamaca Project produced a total of 58,112,475 Bbls of EHCO (an average of 158,777 BPD), sold 52,430,724 Bbls of upgraded crude oil (an average of 143,253 BPD), and received total revenues from such sales of US\$4.792 billion, for an average sales price of US\$91.40 per barrel.⁹⁷⁹

643. Thereafter, for the remaining period, i.e. from 1 January 2009 to the end of the term of each of the AAs, the Respondents rely on the EHCO production capacity programs developed by their expert Mr. Patiño.
644. With respect to the historical period, i.e. 2009 through 2015, the Respondents point out that although actual well-drilling and EHCO production data is available, the same cannot be relied upon without suitable adjustments. This is because different considerations applied to the volume of EHCO produced before and after 2009. The Respondents submit that prior to January 2009, the Projects were allowed to sell only upgraded products, i.e. CCO. In other words, all EHCO produced at the fields was upgraded to CCO.⁹⁸⁰ However, starting in 2009, the post-Expropriation companies were allowed to commercialize EHCO in other non-upgraded blended forms as well. Consequently, the amount of EHCO produced by the post-Expropriation companies was much higher than the volume of EHCO that would have been required for the CCO actually sold in the historical period. The Respondents submit that in order to calculate the volume of EHCO produced in the historical period, the same conditions that had applied to the Projects under the AAs must be assumed. Considering that the Projects under the AAs would not have been allowed to commercialize non-upgraded products, any excess volume of EHCO must be excluded from production volumes in a but-for analysis.⁹⁸¹
645. In light of the Respondents' instructions, in order to determine the EHCO volumes produced by the Projects in the historical period but-for the Expropriation (i.e. accepting that there has not been any sales of non-upgraded EHCO), Mr. Patiño "estimate[ed] – not "forecast[ed]" or "predict[ed]" – the EHCO volumes that would have been needed for the [CCO] production achieved".⁹⁸² In order to arrive at this

⁹⁷⁹ Figuera, WS I, **RWS-2, Annex A**, § 38.

⁹⁸⁰ ICSID Consolidated Report, § 122.

⁹⁸¹ R-PHB, § 668; Patiño **RER-4**, fn.14; ICSID Consolidated Report, § 19, fn. 29 (The Respondents' expert explains that at the upgrading projects, EHCO is blended with a diluent (usually naphtha) at the field to facilitate its extraction and/or transportation. The blended product, known as diluted crude oil ("DCO"), is treated at a facility in the Orinoco Oil Belt, where water and gas are removed, after which the DCO is transported by pipeline to the upgrader at the Jose Industrial Complex on the northern coast of Venezuela. At the upgrader, the diluent is separated and recycled to the field to be re-used to extract and transport new batches of DCO, while the EHCO is upgraded to CCO. In addition to DCO, another non-upgraded product called Meroy 16 can be produced if, instead of blending the EHCO with naphtha diluent, the EHCO is blended with Mesa, a light crude oil produced by PDVSA.).

⁹⁸² Patiño ICSID Testimony, Patiño ER I, **RER-4 Annex II**, § 3, fn. 6, 7; B&F ICSID Consolidated Report, § 19.

figure, Mr. Patiño used the “yield factors” at the Petrozuata and Hamaca upgraders to make the necessary calculations. Simply put, the yield factor reflects the amount of CCO that will be produced per barrel of EHCO. Therefore, in order to calculate how much EHCO would be required to achieve the volume of CCO that was actually sold between 2009 to 2015, Mr. Patiño merely divided the CCO volume by the yield factor of the respective Projects.⁹⁸³ On this basis, Mr. Patiño arrived at the approximate volume of EHCO that would be required to achieve the volume of CCO that was sold in the historical period.⁹⁸⁴

646. Mr. Patiño then proceeds to determine the EHCO production capacity of each of the Projects for the future period i.e. 1 January 2016 through the end of the terms of each Project. In order to do so, Mr. Patiño utilizes the following elements:

- (a) First, he estimates the potential production capacity that existed at each of the fields as of 1 January 2009. In other words, he estimates the production of EHCO that could have been achieved as of 2009, in light of the active wells and wells that were inactive but could be reactivated quickly.⁹⁸⁵
- (b) Second, he estimates the rate at which the potential production capacity will decline i.e. the “Decline Rate”.
- (c) Third, he estimates remaining “well targets” in the fields with the objective of determining how many new wells can be drilled in the field, to replace the production capacity that has been lost because of either natural decline or any other reasons that prevent a well from producing desired levels of EHCO. For this purpose, he assumes that new wells will be drilled only if their initial

⁹⁸³ B&F ICSID Consolidated Report, §§ 19, 122 (Mr. Patiño explains that he uses a design yield factor of 0.947 for the Hamaca Project and 0.8621 for the Petrozuata Project based on the capacity of their respective upgraders. To determine how much EHCO would be required to achieve a known volume of CCO, he divided that volume by the yield factor. By way of example, if Hamaca produced 100,000 BPD of CCO over a specified period, 105,597 BPD of EHCO (i.e., $100,000 \div 0.947$) would have been necessary).

⁹⁸⁴ The Tribunal understands that the value so calculated would represent the actual volume of EHCO that was necessary to produce a given volume of CCO. Mr. Patiño explains however that there are always short-term problems at the field which can negatively affect production. As a result, oil projects always provide for a margin of error between their production capacity and the actual production. In other words, the production capacity of a field is always more than the actual production that a field achieves by a certain factor and forecasts will reflect the “production capacity” rather than the “actual production”. This is referred to as the “potential production capacity”. Mr. Patiño states that the “potential production capacity” is a theoretical figure, which reflects the potential production of all active wells and those inactive wells that can be repaired rapidly and put back into use. (See First Patiño ICSID Report, n.4). For the Orinoco Oil Belt, it appears that the potential production capacity is estimated at 10% more than actual production. Accordingly as a final step to estimating the production volume of EHCO in the historical period, Mr. Patiño multiplies the volume of EHCO by 110%. Accordingly, to take the previously offered example (*supra*, fn. 983) one step further, to determine the EHCO production capacity needed to produce 105,597 BPD of EHCO, one would multiply that figure by 110%, yielding an EHCO production capacity of 116,156 BPD (ICSID Testimony, Patiño ER I, **RER-4 Annex II**, § 3, fn. 6, 7).

⁹⁸⁵ Patiño ER I, **RER-4**, § 13; fn 8.

potential production meets a certain threshold i.e. 200 BPD, as otherwise it would not be viable.⁹⁸⁶ Because certain wells may fail and require replacement, he also accounts for “Re-drilled” wells.

- (d) Fourth, he estimates the production capacity that these new wells will add to the overall production capacity of the field. In order to do so, he estimates the actual “initial potential production” of the new wells and estimates the well’s plateau period, before production begins to decline.

647. Mr. Patiño’s analysis of the above elements in respect of each Project is set out below.

The Petrozuata Project

648. Production capacity as of 1 January 2009: Mr. Patiño determines that as of 1 January 2009, a total of 373 wells had been drilled, completed and connected at the Petrozuata field. Of these 289 were active wells and 29 were wells that could be brought back into service with minor repairs. Further, 12 additional wells were in the process of being drilled and would be completed and connected to the production facility in 2009. Based on the production data available, Mr Patiño concludes that as of 1 January 2009, the production potential of the above wells combined is 118,200 BPD.⁹⁸⁷ The Tribunal notes that Mr. Strickland does not dispute this figure.⁹⁸⁸

649. Production capacity after 1 January 2009: Having determined the production capacity at the start of his analysis, Mr. Patiño proceeded to determine the production capacity of the field from 1 January 2009 onwards. In order to do so he “analyzed the **decline rate** of the field and carried out an analysis to determine how many **additional wells could be drilled** in the Base Area and the Reserve Area, as well as the corresponding **initial production potential** of such wells.”⁹⁸⁹

a. Decline Rate

⁹⁸⁶ Patiño ER I, **RER-4**, fn. 21.

⁹⁸⁷ Patiño ER I, **RER-4**, §§ 17-18.

⁹⁸⁸ Tr. (Day 8), 2154:13-19 (Mr. Strickland).

⁹⁸⁹ **RER-4**, § 19; ICSID Consolidated Patiño Report, §§ 22 (emphasis added). The Tribunal notes that the Claimants’ expert Mr. Strickland is critical of the methodology followed as a whole as well as the estimations made in respect of the decline rates and the number of new wells. It appears however that Mr. Strickland does not dispute the initial potential production of the new wells. Strickland Second Report, §§ 3, 5, 11. Strickland ICSID Consolidated Report; §§ 91-95.

650. First, Mr. Patiño notes that the Claimants have not undertaken a decline rate analysis. Rather, they state that the Composite Economic Model assumes a decline rate of 10-12%. However, the Respondents' state that none of the contemporaneous documents prepared by the Petrozuata Project actually support this low decline rate. Rather they all predict a decline rate closer to 20%.⁹⁹⁰ Mr. Patiño states that based on his analysis of the Petrozuata field, the appropriate decline rate for the wells at the Petrozuata field is approximately 22%.
651. In order to arrive at the abovementioned decline rate, Mr. Patiño conducts a well-by-well decline study to determine which wells will be appropriate candidates for the decline rate analysis. Based on his study, Mr. Patino arrives at a sample size of 124 wells.⁹⁹¹ Then for each well, he determines whether the decline behavior of the well is exponential, hyperbolic or harmonic.⁹⁹² Based on this analysis, Mr. Patino concludes that the most appropriate decline function to use for all the wells that are likely to be drilled at the Petrozuata field over the entire term of the Project is the exponential function.⁹⁹³ Having determined the best decline function, Mr. Patino performs a statistical analysis and concludes that a decline rate of 22% is the most appropriate rate to use for all wells of the field for the entire term of the Project.⁹⁹⁴
652. In response to the Claimants' criticism that an advanced decline curves methodology should have been used to predict the production volumes at the Petrozuata field, Mr. Patino submits that he analyzed the various components of the advanced decline curve methodology and determined that the "accumulated production figures" that were derived using this analysis very closely matched the production figures arrived at using Mr. Patino's methodology and an exponential decline rate of 22%.⁹⁹⁵ The

⁹⁹⁰ R-PHB, §§ 648-649; Figuera, WS 1, **RWS-2, App. 102**; Figuera, WS 1, **RWS-2, App. 103**; Figuera, WS 1, **RWS-2, App. 152**; Figuera, WS 1, **RWS-2, App. 153**.

⁹⁹¹ For this purpose, Mr. Patiño selects wells that have been in production for six years or more and do not present erratic behavior. **App. 23**, Summary of Wells for the Decline Analysis of Petrozuata Production, June 2014; **Appendix 45**, Graphs and Data for each Well at Petrozuata in the Decline Study. It appears that his analysis focused on only 124 of the 145 wells because 21 of the wells showed decline rates greater than 30%, which in his view was indicative of very specific characteristics that could not be generalized across all wells. He further notes that almost 15% of the wells that met the initial criteria for his decline study (the vast majority of which were drilled prior to the nationalization) exhibited decline rates that exceeded 30%. See **Annex I**, First ICSID Expert Report, § 91, n. 51. He further notes that wells that were drilled and connected to production in 2009 now have six years worth of production history, and 20 of those wells did not behave erratically. The data relating to those wells reflect that 19 decline exponentially at an average decline rate of 25.2%. See **Appendix 74**, Graphs and Data for the Decline Study for the Wells Connected in 2009 at Petrozuata.

⁹⁹² Exponential decline rate is represented by a steady rate of decline whereas a Hyperbolic decline rate is an initial steep decline followed by a more gentle slope decline (i.e. represented on a graph as a hyperbolic curve).

⁹⁹³ Consolidated Report, § 28.

⁹⁹⁴ *Id.* He applies the decline rate to the production capacity as opposed to plotting the decline rate of each well that contributes to production, as this figure is variable at any particular moment in time.

⁹⁹⁵ Patiño ER I, **RER-4**, Patiño App.52.

Respondents point to the fact that Mr. Strickland confirmed at the Hearing that Mr. Patino's calculations in this respect were accurate.⁹⁹⁶

653. In response to the criticism that Mr. Patino allegedly conflated exponential and hyperbolic wells, the Respondents submit that the entire point of Mr. Patino's analysis – which Mr. Strickland missed – was to derive a decline rate that could be applied to all of the wells at the field over the entire term of the Petrozuata Project.⁹⁹⁷
654. Moreover, Mr. Patino also seeks to demonstrate that even if Mr. Strickland's above criticism were to be accepted and different decline rates were applied to existing and new wells – i.e. lesser decline rates for the existing wells as they were drilled in the best locations and higher decline rates for the new wells as they were drilled in less favorable locations – the average decline rate would result in total production volume which was only 13.8 million barrels more than the production volume obtained through a 22% exponential decline rate.⁹⁹⁸
655. In sum, the Respondents conclude that:

No amount of technical jargon relating to “advance decline curves” or the differences between exponential and hyperbolic decline functions can change the reality that the Petrozuata field was declining at a steep rate and that every contemporaneous document prepared by the Project estimated that rate to be in the range of 20% per annum.⁹⁹⁹

b. Additional wells

656. Another aspect of the production capacity profile is to determine how many additional well targets were available as of 2009. In that regard, Mr. Patino first reviewed and confirmed that all the wells that were actually drilled and connected from 1 January 2009 to 31 December 2013 actually needed to be built and therefore would have been included in his calculations as well. He then proceeded to determine whether it was possible to drill additional wells beyond those actually drilled by 31 December 2013. In carrying out such an analysis, Mr. Patino considered geological and petrophysical data relating to the field, existing places where such wells could be drilled and finally if these potential wells would have an initial potential production of at least 200 BPD. On this basis, Mr. Patino estimates that there are 262 new well targets available.

⁹⁹⁶ Tr. (Day 8), 2183:1-2184:20 (Mr. Strickland).

⁹⁹⁷ RER-8, § 33.

⁹⁹⁸ RER-8, §§ 37-38; Tr. (Day 8), 2317-2319 (Mr. Patiño).

⁹⁹⁹ R-PHB, § 660.

657. Mr. Patino further notes that “[i]n total, with the 373 wells drilled and connected to production through January 1 2009, the 12 wells drilled in 2008 that [presumably] would have been completed and connected at the beginning of 2009, the 262 new wells located in his review of the data and maps, the 68 single-lateral wells that [he] determined could be drilled to exploit production blocks previously being drained by failed multilateral wells and the 42 “re-drill” single lateral wells, [his] production capacity program assumes a total of 757 wells”.¹⁰⁰⁰

c. Initial potential production

658. Mr. Patino assessed the geological and petrophysical characteristics of the Petrozuata Field, the particular locations where new wells could be drilled as well as the production tests of neighbouring wells, and arrived at initial potential production rates for each of the new wells that he had identified would be constructed during the life of the Project.¹⁰⁰¹

659. The Claimants’ expert, Dr. Strickland originally claimed that the initial potential production rate for the new wells at Petrozuata had been underestimated by about 16%. However, it appears that Dr. Strickland now concedes that Mr. Patino’s calculations were accurate.¹⁰⁰²

660. Based on the above data, Mr. Patino’s findings are summarized below:¹⁰⁰³

Year	Wells Directed at New Targets	Replacement Wells	Total New Wells	Beginning of Year Production Capacity (BPD)	EHCO Production to Upgrader		CCO	
					(BPD)	(MBBL)	(BPD)	(MBBL)
2009	29	14	43	118,189	105,501	38,508	90,953	33,198
2010	17	18	35	119,975	69,021	25,192	59,503	21,718
2011	13	5	18	116,261	76,637	27,972	66,068	24,115
2012	18	5	23	114,108	107,674	39,409	92,826	33,974
2013	18	5	23	108,827	94,262	34,405	81,263	29,661
2014	17	6	23	104,813	82,351	30,058	70,995	25,913

¹⁰⁰⁰ Patiño ER I, **RER-4**, § 29, fn. 63; R-PHB, § 679 (He states that this figure is the sum of the 373 wells that were drilled and connected as of January 1, 2009, the 12 carry-over wells, and the 320 wells mentioned in the text. It should also be noted that over the life of the Petrozuata Project, approximately 420 single lateral horizontal wells would be drilled. Some of those wells would fail and a replacement well could be drilled using the same surface hole. In the case of Petrozuata, one can assume that approximately 10% of the single-lateral wells (42 in total) would be re-drilled over the life of the project, from 2009 through about 2025, at which point any wells that failed would likely not be re-drilled because of their low (below 50 BPD) production. Thus, with the single-lateral re-drills, the grand total of wells drilled over the life of the Petrozuata Project, was 747 wells).

¹⁰⁰¹ Patiño ER I, **RER-4**, §§ 30-31.

¹⁰⁰² Strickland ER, **CER-6**, § 76; Strickland ICSID Consolidated Report, §§ 91-95.

¹⁰⁰³ Patiño ER I, **RER-4**, § 54.

2015	22	5	27	97,626	70,592	25,766	60,858	22,213
2016	21	5	26	99,267	74,533	27,279	64,255	23,517
2017	22	5	27	98,285	86,829	31,692	74,855	27,322
2018	25	-	25	93,010	81,946	29,910	70,646	25,786
2019	29	-	29	84,470	74,525	27,202	64,248	23,451
2020	31	-	31	77,809	56,630	20,727	48,821	17,868
2021	-	-	-	72,583	60,036	21,913	51,757	18,891
2022	-	-	-	58,866	48,445	17,682	41,765	15,244
2023	-	-	-	47,110	38,689	14,121	33,353	12,174
2024	-	-	-	37,610	26,218	9,596	22,602	8,272
2025	-	-	-	31,052	25,511	9,312	21,993	8,028
2026	-	-	-	24,815	20,383	7,440	17,572	6,414
2027	-	-	-	19,807	16,250	5,931	14,009	5,113
2028	-	-	-	15,766	10,955	4,010	9,444	3,457
2029	-	-	-	12,853	10,423	3,804	8,986	3,280
2030	-	-	-	9,907	7,931	2,895	6,837	2,496
2031	-	-	-	7,424	5,869	2,142	5,060	1,847
2032	-	-	-	5,414	3,626	1,327	3,126	1,144
2033	-	-	-	3,981	3,105	1,133	2,677	977
2034	-	-	-	2,826	2,203	804	1,899	693
2035	-	-	-	2,000	1,556	568	1,342	490
2036	-	-	-	1,411	1,444	149	1,245	128
Total	262	68	330			460,950		397,385

661. He concludes that the volume of EHCO that would be produced at the Petrozuata Project using cold production techniques would total 848.4 million barrels from the outset of the Project through the end of its original term in April 2036, with 461 million barrels being produced starting on January 1, 2009.¹⁰⁰⁴

The Hamaca Project

662. The Respondents undertake a similar analysis in relation to the Hamaca Project.

663. Production capacity as of 1 January 2009: Mr. Patiño determines that as of 1 January 2009, a total of 325 wells had been drilled, completed and connected at the Huyapari field of the Hamaca Project. Of these 266 were active wells and 43 were wells that could be brought back into service with minor repairs. Further, 32 additional wells were in the process of being drilled. These 32 wells would be completed and connected to the production facility in 2009. Based on the production data available, Mr. Patiño concludes that as of 1 January 2009, the production potential of the above wells is 201,200 BPD.¹⁰⁰⁵ Mr. Strickland does not dispute this figure.¹⁰⁰⁶

¹⁰⁰⁴ Patiño ER I, **RER-4**, § 10; R-PHB, § 680.

¹⁰⁰⁵ Patiño ER I, **RER-4**, §§ 36-37; R-PHB, § 758.

¹⁰⁰⁶ Tr. (Day 8), 2154:20-2155:22 (Mr. Strickland).

664. Production capacity from 1 January 2009 onwards: as with the Petrozuata Project, Mr. Patiño proceeded to determine the production capacity of the field from 1 January 2009 onwards by determining the (i) decline rate; (ii) the additional new wells that would need to be drilled; and (iii) initial production capacity of these wells.

a. Decline Rate

665. Mr. Patino performs the same well-by-well decline analysis and arrives at a sample set of 65 wells that meet his relevant criteria, namely, six years or more of production history without erratic behaviour.¹⁰⁰⁷ Next, he identifies the points in time when the decline period of each well would begin and whether the decline would be exponential, hyperbolic or harmonic in nature. As with the Petrozuata Project, Mr. Patino concludes that the appropriate decline function to be applied to all the wells would be exponential and the appropriate decline rate for the wells at the Huyapari field is 24%.¹⁰⁰⁸

666. As with the Petrozuata Project, Mr. Patino sought to determine the decline rate for all the wells at each field. In any event, Mr. Patino submits that if he were to apply different decline rates to old wells and new wells, then the accumulated production over the life of the Hamaca Project would actually be 1.8 million barrels less than the production volumes arrived at using his methodology of a single exponential decline rate.¹⁰⁰⁹

b. Additional wells

667. In the same manner in which he had analyzed the data for the Petrozuata field, Mr. Patino analyzed the data for the Huyapari field to determine how many additional wells could be drilled during the term of the Hamaca Project in order to maintain overall production capacity at the field at 110% of the actual or projected CCO sales. Mr. Patino concluded that in addition to the 357 wells that were drilled through December 2008, an additional 754 new wells could be drilled at the Huyapari fields, with varying initial production potential rates.¹⁰¹⁰

c. Initial potential production

¹⁰⁰⁷ He however eliminated around 10 wells, which exhibited a decline rate of more than 30%. Thus, the sample size is actually 55 wells.

¹⁰⁰⁸ Patiño ER I, **RER-4**, § 39; Appendix 44; **RER-8**, § 33.

¹⁰⁰⁹ Patiño ER II, **RER-8**, §§ 37-38, 672; Tr. (Day 9), 2318:1-2319:20.

¹⁰¹⁰ Patiño ER I, **RER-4**, §§ 43-44, 57-59.

668. Lastly, Mr. Patino determined the initial potential production of the wells at the Huyapari field. His analysis revealed that they fell into three broad groups: “(i) the 2001-2009 wells were located in the best sands of the field, and therefore tended to have the highest average initial potential production; (ii) the 2010-2013 wells had a lower average initial potential production; and (iii) the remaining wells as of December 31, 2013 were projected to have an average initial potential production that was lower still.”¹⁰¹¹ As with the Petrozuata Project, Mr. Strickland does not dispute Mr. Patino’s initial potential production calculations.¹⁰¹²

669. Based on the above data, Mr. Patino’s findings are summarized below:¹⁰¹³

Year	Wells Directed at New Targets	Beginning of Year Production Capacity (BPD)	EHCO Production to Upgrader		CCO	
			(BPD)	(MBBL)	(BPD)	(MBBL)
2009	-	201,200	115,385	42,116	109,270	39,884
2010	29	177,768	144,706	52,818	137,036	50,018
2011	41	156,771	137,275	50,105	130,000	47,450
2012	43	159,843	72,747	26,625	68,891	25,214
2013	43	159,074	136,353	49,769	129,127	47,131
2014	44	158,419	153,203	55,919	145,084	52,955
2015	42	158,097	148,377	54,158	140,513	51,287
2016	42	159,668	119,134	43,603	112,344	41,118
2017	51	160,647	143,432	52,353	135,256	49,368
2018	63	158,676	137,930	50,344	130,068	47,475
2019	63	161,139	143,432	52,353	135,256	49,368
2020	84	161,650	119,134	43,603	112,344	41,118
2021	84	159,828	143,432	52,353	135,256	49,368
2022	82	159,999	137,930	50,344	130,068	47,475
2023	43	158,209	143,432	52,353	135,256	49,368
2024		159,187	117,058	42,843	110,386	40,401
2025	-	144,175	118,473	43,243	111,720	40,778
2026	-	115,082	93,278	34,046	87,961	32,106
2027	-	91,927	75,344	27,501	71,050	25,933
2028	-	73,009	50,540	18,498	47,659	17,443
2029		59,923	48,907	17,851	46,119	16,833
2030		47,096	38,293	13,977	36,110	13,180
2031		36,660	29,675	10,831	27,983	10,214
2032		28,236	19,092	6,988	18,004	6,589
2033		21,821	17,221	6,286	16,240	5,928
2034		15,823	12,334	4,502	11,631	4,245
2035		11,144	8,608	3,142	8,117	2,963
2036		7,717	5,932	2,171	5,594	2,047
2037		5,288	4,913	928	4,633	876
Total	754			961,622		908,136

¹⁰¹¹ Patiño ER I, **RER-4**, §§ 45-46; Appendix 6, Appendix 15, App. 18, App. 11. App. 12; App. 78

¹⁰¹² Strickland ER, **CER-6**, § 76; Strickland ICSID Consolidated Report, §§ 91-95.

¹⁰¹³ Patiño ER I, **RER-4**, § 61.

670. Mr. Patino concludes that “from the inception of the Hamaca Project through [2037], when its term would have expired under the Hamaca Association Agreement a total of 1,269.8 million barrels of EHCO would be produced using cold production techniques” with approx. 961 million barrels being produced starting 1 January 2009.¹⁰¹⁴

iii. The Tribunal's determination

671. In light of the Parties' above submissions, the Tribunal considers that with respect to the production profiles proposed by each of the Parties, the following issues arise for its consideration:

- i. Which of the two competing production forecasts better reflects the production volumes that could have been achieved but-for the Expropriation?
- ii. If the answer to the above is the Respondents production profile, then what production volumes should be adopted for the period June 2007 to December 2008?
- iii. What production volumes should be adopted for the historical period i.e. 1 January 2009 – December 2015?
- iv. What production volumes should be adopted for the projection period i.e. 1 January 2016 onwards?
 - a) What is the applicable decline rate for each of the Petrozuata and Hamaca Projects?
 - b) What are the total number of additional wells that would have been drilled at the Petrozuata and Hamaca Project and what would their production have been?

(1) Which production forecast should be adopted?

672. As to this issue, the Tribunal is of the view that a post-Expropriation production profile that takes into account actual production figures should be adopted in the instant case.

¹⁰¹⁴ R-PHB, § 761; Patiño ER I, **RER-4**, §§ 49, 63.

673. First, the Tribunal agrees with the Respondents that a date of award or *ex post* valuation should take into account actual post-nationalization information about the Projects, unless the Tribunal finds for any reason that such information is either unreliable or has not been sufficiently proved. The Tribunal considers that in large oil exploitation projects such as the present, there are likely to be several variables that cannot be accounted for in any business projection and which would impact the Project as a matter of course. As such, the Tribunal is unable to agree that the 2006 production figures are the best evidence of the Projects' production capacity for the next 20-30 years. Thus, generally, the Tribunal is not persuaded by the Claimants' reliance on pre-Expropriation forecasts to establish their production figures. However, it remains to be seen whether any of the Claimants' other objections are capable of impugning the Respondents' production forecasts. In particular, the Tribunal shall assess whether the Claimants have demonstrated that the Projects performed less profitably because of the Respondents.
674. In this respect, the Tribunal finds that the Claimants' arguments do not withstand scrutiny. Largely, the Claimants have once again sought to raise the specter of the "new PDVSA" to challenge the trustworthiness of the Respondents' forecasts. However, as established elsewhere in this Award, there is no "new PDVSA" any more than there was an "old PDVSA".¹⁰¹⁵ Namely that, as the Claimants themselves recognize, PDVSA was and remains a wholly State-owned entity, which pursuant to its By-laws is required to comply with and implement the policies and decision of the Government.¹⁰¹⁶ The Claimants' attempt to suggest that under the Chávez administration, PDVSA acquired a new persona that had different and purportedly non-commercial objectives is unsubstantiated. In fact, the Tribunal finds the argument rather counter-intuitive. Indeed, if PDVSA's objective was to be a "cash cow" and fund the Government's various social programs as the Claimants allege, it would be incentivized to maximize its profits from the Projects, as opposed to putting the very source of its revenues into jeopardy.
675. Similarly, the argument that PDVSA suffered a loss of its oil intelligentsia is also far-fetched. No doubt, several employees were dismissed in 2003. However, the Tribunal finds it difficult to agree with the Claimants that the dismissal of these employees was a cause for drop in production. It appears that from 2003 to 2007, the Projects continued to function with PDVSA personnel and at no point during these years have

¹⁰¹⁵ *Supra*, §§ 398-399.

¹⁰¹⁶ *Supra*, §§ 470-472.

the Claimants complained of any incompetence on the part of such personnel involved in the Projects.

676. As regards the Claimants' reliance on the investigation carried out at the instruction of the National Assembly of Venezuela and the findings made in the Report, the Tribunal determines that these findings were not specific to any purported transgression at either the Petrozuata or Hamaca Projects. In the circumstances, the Tribunal cannot draw an adverse inference as to the reliability of the Respondents' production figures.
677. Thus, the Tribunal concludes that the Respondents' production profile, i.e. one which takes into account actual volumes, should be adopted. However, the Tribunal notes that the Claimants have raised several objections to various aspects of the Respondents' production profile and the methodology adopted by the Respondents' experts in order to forecast production for the historical and projection periods. Thus, if the Tribunal were to find that the Claimants' arguments in this respect withstand scrutiny, it would have to consider the implications thereof on the production figures proposed by the Respondents.
678. Therefore, the Tribunal shall next consider these objections with a view to determining whether the Respondents' production figures can be adopted for each of the historical and projection periods, namely:
- a. The period from 26 June 2007 – December 2008;
 - b. The period from 1 January 2009 – December 2015;
 - c. The period from 1 January 2016 till the end of the term of each Project.

(2) Which production volumes should be adopted for the period 26 June 2007 – December 2008?

679. With respect to the production volumes for the period June 2007 to December 2008, the Tribunal finds that the Claimants have not raised any specific objections to the actual volumes of EHCO proposed by Mr. Figuera in his testimony. Rather, the general objections to adopting post-Expropriation figures apply in respect of this period as well. Given that the Tribunal has already concluded that these objections do not withstand scrutiny,¹⁰¹⁷ the Tribunal is persuaded by the Respondents' position and

¹⁰¹⁷ *Supra*, §§ 672-677.

thus finds that the actual production volumes for June 2007 to December 2008 as proposed by the Respondents should be adopted.

(3) Which production volumes should be adopted for the remaining historical period?

680. For the remaining historical period, the Claimants object to the Respondents' exclusion of approximately 97 million barrels of actually produced EHCO on the basis that these volumes constituted non-upgraded and blended products that the Associations were allegedly not permitted to produce.¹⁰¹⁸ According to the Claimants, such exclusion is worth approximately USD 7.5 billion.¹⁰¹⁹
681. Relying on the testimony of Mr. Figuera and two letters of 23 June 2005 from the then Minister of Energy (one addressed to each Project),¹⁰²⁰ the Claimants argue that there is no basis for excluding such additional volumes of EHCO because the pre-Expropriation Projects produced and sold non-upgraded products.¹⁰²¹
682. Having examined Mr. Figuera's testimony, as well as the 23 June 2005 letters to the Projects, the Tribunal is unable to accept the Claimants' arguments. It is not disputed by the Respondents that, pre-Expropriation, the Projects produced and sold non-upgraded products.¹⁰²² However, as developed further below, this does not mean that the Projects were entitled to legally characterize the sale of non-upgraded or blended products as sales falling under the AAs.
683. In his testimony at the Hearing, Mr. Figuera confirmed that, although the Projects did produce and commercialize non-upgraded products, they did so in very specific and limited circumstances, namely (i) prior to the commissioning of the upgrader, i.e. during the development or pre-operation phases of the Projects (which ended in April

¹⁰¹⁸ *Supra*, §§ 620-621.

¹⁰¹⁹ C-PHB, fn. 1137.

¹⁰²⁰ Letters from the Minister of Energy to Petrozuata and Hamaca, 23 June 2005, **RWS-1 Mommer App. 1**.

¹⁰²¹ C-PHB, § 671.

¹⁰²² SoD, fn. 348; Mommer WS I, **RWS-1**, §§ 4-7, 46-51 (The Projects did not allow production and blending of extra-heavy crude oil without upgrading, known as "early" or "development" production. Notwithstanding the lack of authorization for such early or development production, the Project did produce and blend extra-heavy crude oil for sale without upgrading, thereby improving Conoco's economics by providing the Project with cash flow before the upgrader was completed). Mommer WS I, **RWS-1**, §§ 34-39; Letter from Vice Minister Mommer to Mr. Berry of ConocoPhillips, 26 April 2005, **RWS-1 Mommer App. 26**, p. 1 (Dr. Mommer put Conoco on notice that the Ministry considered such development production to have been illegal, stating: "We can negotiate in good faith a settlement of these claims, and you can either pay a one-time bonus or the settlement amount can be recovered through an increased royalty going forward"). See also Tr. (Day 5), 1214:12 – 1230:11 (Mr. Figuera).

2001 and October 2004 for Petrozuata and Hamaca, respectively); or (ii) subject to governmental approval, during the upgraders' maintenance turnaround periods.¹⁰²³

684. The above is hardly surprising. Lacking a functioning upgrader, the need to produce and sell non-upgraded and blended EHCO appears to be quite sensible. For instance, the Hamaca AA notably provides that, before the completion of the upgrader, the RNCF necessary to determine the MAE resulting from a DA must consider a limited "Development Production" (i.e. non-upgraded EHCO).¹⁰²⁴ Further, the Claimants expressly requested authorization to the Ministry of Energy to produce and commercialize non-upgraded blended crude during the turnaround periods.¹⁰²⁵
685. Aside from these two specific circumstances, neither of the Projects were authorized to obtain revenues from the production and sale of non-upgraded and blended EHCO. The June 2005 Ministry letters to the Projects were clear in this regard. In relevant parts, the letter to the Hamaca Project states:¹⁰²⁶

I hereby inform you that this Office has proceeded to review the terms of the exploitation of the Orinoco Oil Belt's extra-heavy crude, by [the Hamaca Project]. From the aforementioned review, emerge the following conclusions, as well as the adoption of the measures they require:

FIRST: The [...] Congress of the Republic of Venezuela, [...] in its First and Tenth Conditions, granted to th[e Hamaca] Association the **exploitation of the reserves of extra-heavy crude and its upgrading**, as well as the **marketing of the upgraded crude** and the use, sale or distribution of all associated gas and other products. Likewise, in the Tenth Condition, it agreed to the blending of extra-heavy crude with other appropriate hydrocarbons for its **transport and handling in the Production of Development**.

SECOND: In the Bicameral Commission's Report, **HAMACA's production was planned at 197 MBD**, [...].

THIRD: The blending of extra-heavy hydrocarbons is only envisaged in the pre-operating phases, **but not in subsequent exploitation phases**. The blending of extra-heavy hydrocarbons during the periods which correspond to the plant shut-down is not authorized in the decision of the Congress [...] and in the Bicameral Commission's Report.

¹⁰²³ Tr. (Day 5), 1214:1 – 1232:30 (Mr. Figuera)

¹⁰²⁴ Hamaca AA, **C-3**, Articles 6.2, 14.2(f); R-PHB, fn. 1731; Tr. (Day 2) 290:4 – 292:3, 388:18 – 389:14 (Mr. Manning).

¹⁰²⁵ Figuera, WS 1, **RWS-2**, **App. 174** (Letter from Domingo Rodríguez, President of Petrolera Ameriven, S.A. to Rafael Ramírez, Minister of Energy and Petroleum, 31 March 2006). "Considering that during the turnaround, the production of diluted crude oil does not contemplate upgrading activities, therefore, I am requesting, on behalf of the Participants of the Project, your authorization to formalize this strategy in our business plan, and proceed with the required activities, which we are convinced, will generate benefits for all parties".

¹⁰²⁶ Letter from the Minister of Energy to Petrozuata and Hamaca, 23 June 2005, **RWS-1 Mommer App. 1** (emphasis added).

FOURTH: The activities carried out or the situations created during the exploitation of extra-heavy crude in the Orinoco Oil Belt that exceed the limit of the decision of the Congress of the Republic, shall be considered outside the framework of that decision. Accordingly, it shall be understood that the aforementioned activities and situations are subject to the provisions of the law in force, especially to those [provisions] of [2001 Hydrocarbons Law].

FIFTH: In accordance with what has been stated above, the volumes of **hydrocarbons that exceed the monthly average production of 197 MBD are subject to the thirty per cent (30%) royalty** set forth in Article 44 of the above [2001 Hydrocarbons Law]. The same royalty amount shall be paid in cases of the volumes related to the blending of extra-heavy crudes.

[...]

Payment of the above mentioned royalty does not legitimize the excesses identified and, accordingly, does not imply an authorization for the indicated activities or created situations.

686. In materially identical terms, the letter to the Petrozuata Project reads as follows:¹⁰²⁷

I hereby inform you that this Office has proceeded to review the terms of the exploitation of the Orinoco Oil Belt's extra-heavy crude, by [the Petrozuata Project]. From the aforementioned review, emerge the following conclusions, as well as the adoption of the measures they require:

FIRST: The then Congress of the Republic of Venezuela, on August 10, 1993, in its First Condition, granted to that association the exploitation and upgrading of the Orinoco Oil Belt's extra-heavy crudes and the marketing of such upgraded crudes.

SECOND: In the Bicameral Commission's Report, PETROZUATA's production **was planned at 120 MBD** [...].

THIRD: The blending of extra-heavy hydrocarbons in any of the exploitation phases, including the plant shut-down, is not envisaged in either the decision of the Congress of the Republic or the Bicameral Commission's Report. [...].

FOURTH: The activities carried out or the situations created during the exploitation of the Orinoco Oil Belt's extra-heavy crude that exceed the limit of the decision of the Congress of the Republic, **shall be considered outside the framework of that decision**. Accordingly, **it shall be understood that the aforementioned activities and situations are subject to the provisions of the law in force, especially to those [provisions] of the [2001 Hydrocarbons Law]**.

FIFTH: In accordance with what has been stated above, **the volumes of hydrocarbons that exceed the monthly average production of 120 MBD are subject to the thirty per cent (30%) royalty set forth in Article 44 of the [2001 Hydrocarbons Law]**. The same royalty amount shall be paid in cases of the volumes related to the recovered associated gas and the blending of extra-heavy crudes.

The periods of plant shut-down shall not be used for the calculation of the aforementioned monthly average.

¹⁰²⁷ Letter from the Minister of Energy to Petrozuata and Hamaca, 23 June 2005, **RWS-1 Mommer App. 1** (emphasis added).

Payment of the above mentioned royalty does not legitimize the excesses identified and, accordingly, does not imply an authorization for the indicated activities or created situations.
[...]

687. According to the Claimants, the above letters were only a “tax bill” which recognized and accepted that the Projects were producing non-upgraded products. In their view, these letters implicitly recognize that the Projects could produce non-upgraded products.
688. The Tribunal cannot follow the Claimants’ interpretation. While the two 23 June 2005 letters may be said to impose a “tax bill”, they certainly did not provide an authorization or recognition of the Projects’ right to produce non-upgraded or blended products. Importantly, the letters clearly recognize that the Congressional Authorizations only authorized the Projects to exploit EHCO and to market upgraded crude (i.e. CCO). Blending was only permitted in the *pre-operating* phases and not in the subsequent *exploitation* phases. Additionally, the production volumes were limited to 197,000 BPD of EHCO for the Hamaca Project and 120,000 BPD of EHCO for the Petrozuata Project.
689. In light of these restrictions, the excess EHCO produced would not fall within the ambit of either the PCA or the HCA and thus could not be considered as crude produced pursuant to the rights under the AAs or subject to the fiscal regime applicable to the AAs. To the contrary, it appears that the excess EHCO would be subject to general applicable law and not subject to the special protection created by the AAs. To paraphrase the language used in the 23 June 2005 letters, the acknowledgment by Venezuela that there were excess EHCO volumes produced, did “not legitimize the excesses [nor] imply an authorization for the indicated activities or created situations” under the AAs.
690. In the circumstances, the Tribunal finds that the Projects were only allowed to produce a certain quantity of EHCO, which was then to be upgraded to CCO. Apart from the development phase (which ended in 2004 at the latest), the Projects were not allowed to produce excess volumes of EHCO or sell it in non-upgraded form. In the event they did so, such EHCO cannot be considered as EHCO produced pursuant to the AAs. Accordingly, even if the Projects indeed produced and sold excess blended EHCO prior to the Expropriation, such production cannot be deemed production under the AAs. As such, it cannot therefore contribute to the production

volumes under the AAs in a but-for application. This is particularly the case under the Hamaca AA, which explicitly states that only the production volumes of upgraded crude oil (i.e. CCO or “Commercial Production”) must be compensated to the Claimants pursuant to DA provisions.¹⁰²⁸ Thus, in respect of the historical period, the Tribunal considers it appropriate to adopt Mr. Patino’s estimates of EHCO volumes.

(4) What production volumes should be adopted for the projection period?

691. The Parties agree that the crux of the dispute concerning the projection period pertains to the decline rate analysis.¹⁰²⁹
692. In this regard, the Claimants object to the fact that Mr. Patino conflated exponential and hyperbolic wells and applied the same exponential decline rate for forecasting production from all wells. The Claimants’ expert, Mr. Strickland accounts for decline rates of exponential and hyperbolic wells separately.
693. In light of the testimony of the Parties’ experts at the Hearing however, the Tribunal finds the Claimants’ objection to the Respondents’ decline rate analysis overstated. First, during the Hearing, the Claimants’ expert, Mr. Strickland admitted that if the Tribunal were to apply his decline rates and the additional wells proposed by him (i.e. 22 for Petrozuata and 20 for Hamaca), the production volumes would increase by an additional 18 million barrels for each Project.

Q. [...] if we include your additional 22 wells at Petrozuata, and the same thing at Hamaca, with 20 wells, it's an additional 18 million barrels of production?

A. That's correct.

¹⁰²⁸ R-PHB, § 812. The Tribunal notes that Mr. Manning recognized that the compensation formula of the Hamaca AA is based exclusively on “Commercial Production”; Tr. (Day 2) 388:18 – 389:14 (Mr. Manning) (“**Q.** Well, let's look at Article 14.2(f). Do you see that? **A.** Yes. **Q.** Okay. You see that formula? **A.** Uh-huh. **Q.** Is that what would that apply? **A.** 14.2(f). Yes. **Q.** Okay. And you see a definition of SR? **A.** Yes. **Q.** Okay. And that's--Development Production we established a long time ago--remember?--was that production of extra-heavy during that period. Do you remember that? **A.** Mm-hmm. **Q.** Okay. We're not in that period right now. **A.** Right. **Q.** So, now we're talking about Commercial Production. **A.** Okay. [...] **Q.** Right. So, you see the formula is based exclusively on Commercial Production, isn't it? **A.** Well, we're past Development Production, so it has to be Commercial Production”);

In turn, the Tribunal also notes that Mr. Heinrich conceded that the term “Commercial Production” means the “production at the tail end of the upgrader” (i.e. “upgraded crude oil”); Tr. (Day 2) 665:17 – 666:13 (Mr. Heinrich) (“**Q.** Do you have any understanding of Section 14.2(f), 18 which is the basic Threshold Cash Flow formula and 19 Reference Cash Flow formula that your Planning Group was 20 undoubtedly modeling? **A.** Yes. **Q.** You do have an understanding? **A.** Yes. **Q.** Okay. Do you have an understanding that SR, the first step in this formula, is, at this point in time, based on--that's the revenue part--based on Commercial Production? You understand that; right? **A.** Yes. **Q.** And you know what Commercial Production is **A.** Yes. **Q.** What is it? **A.** That's the production--at the tail end of the upgrader. **Q.** So, it's upgraded crude oil; right? **A.** Yes.”)

¹⁰²⁹ Tr. (Day 8), 2156:3-10 (Mr. Strickland) (**Q:** [...] And at the end of the day, the biggest difference between you and Mr. Patiño is decline rate; right? **A.** That's correct. [...] [T]hat's half of it. Then the other half is the methodology--well, I guess you could lump it all into decline rate).

Q. And all that is based upon your decline rates as opposed to Mr. Patiño's decline rates?

A. [...] Yes.

Q. So, if Mr. Patiño's decline rates were to be accepted by the Tribunal and applied to additional wells that they accepted from you, it would be less than 18 million barrels for each of those fields?

A. That's correct.¹⁰³⁰

694. Moreover, Mr. Patino also assessed the production volumes on the basis of Mr. Strickland's approach and determined that the accumulated production for the life of the Petrozuata Project would be only 13.8 million barrels higher than the production obtained using a single exponential decline rate of 22% proposed by Mr. Patino.¹⁰³¹ Similarly, with respect to the Hamaca Project, the accumulated production based on Mr. Patino's decline rate of 24% was in fact 1.8 million barrels more than the production volumes arrived at on the basis of Mr. Strickland's methodology.¹⁰³² The Tribunal finds that these figures are not drastically different such that they would call into question the methodology followed by the Respondents and the productions volumes which they propose for the projection period.
695. In these circumstances, the Tribunal deems it appropriate to adopt the Respondents' production figures even for the future period.
696. All in all, the Tribunal finds that for both the Petrozuata and the Hamaca Projects, the production volumes as modeled by the Respondents' experts may be adopted.

¹⁰³⁰ Tr. (Day 8), 2158:4-18 (Mr. Strickland).

¹⁰³¹ R-PHB, § 672.

¹⁰³² R-PHB, §§ 756; Tr. (Day 9), 2318:6-2319:14 (Mr. Patiño). At the Hearing, with reference to slides 35 and 36 of his presentation, Mr. Patiño explained as follows: "In this case, I addressed Dr. Strickland's criticism that I conflated exponential and hyperbolic decline rates with an additional analysis. First, I calculated equivalent exponential decline rates for all the wells in my analysis that declined hyperbolically. Then, I averaged those equivalent exponential decline rates with exponential decline rates and the result was 17.3 for Petrozuata and 18.7 for Hamaca, both exponentially. Finally, I applied this average to all the wells in my Production Capacity Programs as I did in my initial analysis. Logically, this increased accumulated production; however, it also ignored the fact that the wells drilled at the outset exhibit a more favorable decline behaviour and would not be representative of the wells that would be subsequently drilled at the fields. For these reasons, I also carried out a hybrid method. In this case, I applied the average I referred to above, 17.3 percent at Petrozuata and 18.7 at Hamaca, to the wells that were in production as of January 2009. To new wells connected to production thereafter, I applied the decline rate that I derived from my analysis of the wells that were connected to production in 2009. And I estimated 25 percent at Petrozuata and 27.3 percent at Hamaca. As can be seen in this table, the result of the hybrid methodology regarding accumulated production is basically the same to the one I obtained using my original analysis, that is, using a single decline rate of 22 exponential at Petrozuata and 24 percent at Hamaca. This exercise corrects the mistake indicated by Dr. Strickland, and these results confirm the rates that I originally derived using my petroleum engineering judgment."

b. Reserves figures

i. The Claimants' position

697. It is the Claimants' case that the reliability of their pre-Expropriation production forecasts is corroborated by the Respondents' own Proved Reserves figures for each Project. The Claimants first explain that Proved Reserves figures constitute the most important data for determining expected production volumes.¹⁰³³ Adopting the Respondents' own definition of Proved Reserves, the Claimants submit that Proved Reserves are "hydrocarbon volumes estimated with **reasonable certainty** and recoverable from known oil fields according to the available geological and engineering information and under **prevailing** operating and economic conditions and government regulations".¹⁰³⁴ To put it simply, Proved Reserves are a measure of the volume of oil that can be expected to be recovered **with reasonable certainty** [a probability of 90% or higher] from specific oil fields under existing and known geological and technical circumstances.¹⁰³⁵
698. In light of the above understanding, the Claimants contend that first, according to the statistical data published by the Ministry, the Proved Reserves for the Petrozuata Project ("Petrozuata Proved Reserves") have been substantially increasing since 2006. In 2007, the Ministry reported the Petrozuata Proved Reserves to be 3.1 billion barrels and as of 2010 the figure had increased to 3.9 billion barrels of EHCO.¹⁰³⁶ Both these figures are substantially higher than the oil volume proposed by Mr. Abdala.

¹⁰³³ Reserves are divided into 3 categories: Proved (1P), Proved plus Probable (2P), and Proved plus Probable plus Possible (3P). Proved Reserves represent the estimate for "actual production" from a given field and hence, by their nature are conservative figures. **C-213**.

¹⁰³⁴ **CLEX-91**; According to the Claimants, the US Securities and Exchange Commission, the OPEC (of which Venezuela is a member) and the Respondents adopt functionally identical definitions of Proved Reserves. Accordingly, the Claimants submit that the Proved Reserves reported by ConocoPhillips to the US SEC as part of its regulatory obligations and those estimated by the Respondents are arrived at on the basis of a substantially similar understanding and are therefore comparable for the purposes of validating the Claimants' production forecasts.

¹⁰³⁵ C-PHB, § 633.

¹⁰³⁶ **C-221, C-295, CLEX-052**. Second, DeGolyer and MacNaughton, an independent consulting firm, certified Petrozuata's Proved Reserves at 1.02 billion barrels of EHCO as of 31 December 2005. Using the 2005 D&M reserves estimate, Abdala calculates implied year-end 2006 proved reserves by subtracting 2006 production from the 2005 D&M reserves. Implied proved reserves as of year-end 2006 were 977 MMBO, which is higher than the composite model's reserves (Abdala ER I, **CER-3**, § 161). Third, in accordance with their regulatory obligations, ConocoPhillips reported Proved Reserves of 936.4 million barrels to the US SEC as at 31 December 2006.

699. Similarly, the Proved Reserves for the Hamaca Project (“Hamaca Proved Reserves”) have increased from 3.69 billion barrels in 2006, to 4.6 billion barrels as of 2015.¹⁰³⁷ These figures are also evidently higher than the oil volume of 1.864 billion barrels proposed by Mr. Abdala. Moreover, the Claimants submit that the forecast is also consistent with the Reserves figures of 1.96 billion barrels as of year-end 2006, reported by ConocoPhillips to the US SEC in 2007.¹⁰³⁸
700. On this basis, it is the Claimants’ case that the Respondents’ and the Ministry’s own Proved Reserves figures undermine their allegations regarding the Hamaca and Petrozuata Project’s post-Expropriation production prospects. Instead, these figures confirm “with reasonable certainty” that there is sufficiently recoverable EHCO such that the Claimants’ pre-Expropriation production forecast is accurate and achievable.
701. Turning to the Respondents’ arguments, the Claimants assert that the “Respondents’ attempts to undermine the critical significance of their own Reserves figures is unavailing”.¹⁰³⁹
702. As regards the Respondents’ contention that the Ministry’s Proved Reserve figures were for the life of the field and not the term of the Project, making them non-comparable, the Claimants submit that the above distinction fails on the Ministry’s own definition of “Proved Reserves”.¹⁰⁴⁰ In particular, they assert that as per this definition Proved Reserves are EHCO volumes that are virtually certain to be recovered under “prevailing operational, economic and governmental regulatory conditions”.¹⁰⁴¹ According to the Claimants, this definition thus refers to volumes that can be recovered *now* and signifies that there is more than sufficient oil in the fields to satisfy the pre-Expropriation production forecasts.¹⁰⁴²
703. As regards the Respondents’ contention that the Ministry and PDVSA’s Proved Reserves figures include additional oil volumes that would be recoverable using enhanced oil recovery (“EOR”) techniques, and therefore cannot be compared to the

¹⁰³⁷ **C-221, C-295, CLEX-052.** Second, DeGolyer and MacNaughton, an independent consulting firm, certified Petrozuata’s Proved Reserves at 1.02 billion barrels of EHCO as of 31 December 2005. Using the 2005 D&M reserves estimate, Abdala calculates implied year-end 2006 proved reserves by subtracting 2006 production from the 2005 D&M reserves. Implied proved reserves as of year-end 2006 were 977 MMBO, which is higher than the composite model’s reserves (Abdala ER I, **CER-3**, § 161). Third, in accordance with their regulatory obligations, ConocoPhillips reported Proved Reserves of 936.4 million barrels to the US SEC as at 31 December 2006.

¹⁰³⁸ Abdala ER I, **CER-3**, §§ 127-128; **C-192**, p.9; **CLEX-050, CLEX-032.**

¹⁰³⁹ C-PHB, § 654.

¹⁰⁴⁰ C-PHB, § 644

¹⁰⁴¹ **CLEX-91**

¹⁰⁴² C-PHB, §§ 644-645.

volumes extracted using only cold production or primary extraction techniques which form the basis of the Claimants' calculation,¹⁰⁴³ the Claimants assert that this distinction is baseless and irrelevant.¹⁰⁴⁴

704. They contend that the distinction is baseless because if EOR was being implemented at the present time (i.e. in the post-Expropriation actual world); then it would have also been implemented in the but-for world. Moreover, they assert that if the Projects had not been expropriated, the Claimants themselves would have promoted the use of EOR techniques and increased production.¹⁰⁴⁵

ii. The Respondents' position

705. According to the Respondents, the Claimants are in fundamental error when they rely on the Ministry and PDVSA's Proved Reserve figures to support their pre-Expropriation production profiles for the Hamaca and Petrozuata Projects.

706. The Respondents assert that the Ministry's Proved Reserves figures project production over the entire life of the **field** and using all viable extraction techniques, namely i.e. cold production as well EOR techniques. By contrast, the Claimants' calculations are based on the production over the life of the **Project** using only cold production techniques.¹⁰⁴⁶ The Respondents submit that consequently the two are not comparable and the Ministry's figures will always be higher.¹⁰⁴⁷

707. Mr. Figuera explains that:

the Ministry-approved reserves are for the life of the field, not the life of the Project. They therefore assume that over a long period of time, well past the termination date of a project, the well will continue to produce oil, even at lower and lower rates, until an assumed recovery factor is achieved. In addition, the Ministry-approved reserves assume that additional wells that are economically attractive to the country will be drilled in due time, even though those wells

¹⁰⁴³ Figuera, WS I, **RWS-2**, fn. 20 ("Steam-enhanced production techniques (or thermal techniques) are also referred to as secondary recovery or enhanced oil recovery ("EOR") techniques. They are to be distinguished from "cold production" or primary recovery techniques. In the case of the latter, production depends on the field's own energy, which dissipates over time. In the case of the former, steam is injected in the field to create energy, reduce viscosity and generate a higher recovery factor (*i.e.*, the recovery of a higher percentage of the field's original oil in place [...]) over time. As discussed in my ICSID Testimonies, drilling and fitting wells for eventual use in a steam-enhanced EOR program is more expensive than drilling cold production wells. The capital and operating costs associated with a steam-enhanced EOR project – which includes steam-generating facilities and water removal and treatment facilities – are also significantly higher than those for a cold production project. See **Annex A**, First ICSID Testimony, n. 11; **Annex B**, Second ICSID Testimony, ¶ 27; **Annex D**, Fourth ICSID Testimony, ¶ 52 and nn. 171, 202; **Annex E**, Fifth ICSID Testimony, ¶ 17").

¹⁰⁴⁴ C-PHB, § 646.

¹⁰⁴⁵ First Brown Statement, § 53-55; C-PHB, § 648.

¹⁰⁴⁶ Tr. (Day 12), 3058-3060 (Respondents' Closing Submissions) (emphasis added).

¹⁰⁴⁷ R-PHB, § 762.

would not be economically attractive to a project with a finite life. Finally, ministry approved reserves now also include production based on the assumption that EOR techniques ultimately will be employed over the life of the field. Once again, such methods of production, which may be unattractive economically for a foreign investor in a project with a finite term, would be attractive to the country in the long run.¹⁰⁴⁸

708. The Respondents assert that Mr. Figuera's above testimony has gone uncontested.¹⁰⁴⁹
709. To Mr. Figuera's above testimony, the Respondents' expert Mr. Patiño adds that the increase in the Ministry's Reserves figures post-Expropriation, was due to "the use of secondary recovery techniques":¹⁰⁵⁰ From 2009, Ministry Reserves for the Petrozuata field included expected production from EOR, while for the Hamaca field this revision was added from 2010 onwards.¹⁰⁵¹
710. In response to the Claimants' argument that the distinction between the Projects' Reserves and the fields' Reserves is illusory and meaningless as it contradicts the definition of "Proved Reserves", the Respondents assert that "Reserves volumes calculated over some period of time, whether it is for thirty years, covering the term of a project, or one hundred years, covering the life of a field, cannot be recovered "now"; they can only be recovered over time, as the implementation of a development programme at a field (with or without EOR) cannot be achieved all at once."¹⁰⁵²
711. Finally, the Respondents assert that it is no argument to say that the Claimants too could have implemented EOR techniques and increased production had they remained participants in the Project, inasmuch as such techniques were never seriously considered for the Hamaca Project and were rejected as uneconomical for the Petrozuata Project.¹⁰⁵³ In this respect, the Respondents assert that an EOR project was determined to be cost prohibitive in 2005, when its use was first suggested by the Claimants, in light of the existing tax regime and the fact that the Claimants would have to pay for the natural gas to generate the steam required. The Respondents therefore conclude that if the EOR project was not economic in 2005

¹⁰⁴⁸ Figuera, WS 1, **RWS-2, Annex D**, § 85 (Fourth Figuera ICSID Testimony).

¹⁰⁴⁹ R-PHB, § 683.

¹⁰⁵⁰ Tr. (Day 9), p. 2323: 21 (Mr. Murillo).

¹⁰⁵¹ Patiño Hearing Presentation, slide 50.

¹⁰⁵² R-PHB, § 693.

¹⁰⁵³ Figuera, WS I, **RWS-2**, fn. 44

under the fiscal regime existing at the time, it is unlikely to have been economical in the post-Expropriation period given the increase in the tax and royalty rates.¹⁰⁵⁴

712. In sum, the Respondents conclude that the Claimants' argument that the increase in the Proved Reserves figures reported by the Ministry and PDVSA for the Petrozuata and Hamaca fields since the nationalization "demolishes Respondents' production estimates"¹⁰⁵⁵ as frivolous.¹⁰⁵⁶

there is no connection between the Ministry reserves, which include oil that will be produced in the very long term using all available techniques with a recovery factor of 20%, and the production volumes that can be achieved using only cold production during the terms of the Petrozuata and Hamaca Projects. While Claimants' desire to avoid the pre-nationalization evidence demonstrating that the production profiles they hoped to achieve at the outset of the Projects was unrealistic under cold production is understandable, their reliance on Ministry Reserves is nothing more than a smokescreen.¹⁰⁵⁷

iii. The Tribunal's determination

713. At the outset, the Tribunal notes that the reliance on Proved Reserves is only to corroborate the Claimants' production profile and call into question the purportedly low production profile proposed by the Respondents. In this respect, the Tribunal has already concluded that of the two, it is adopting the Respondents' production profile.
714. In any event, the Tribunal is not convinced by the Claimants' arguments on this issue. This is because as the Respondents rightly point out, the Claimants are in effect "comparing apples to oranges".
715. The Tribunal notes that regardless of the period of time the Proved Reserves figures covered (i.e. the life of the field as argued by the Respondents or the life of the Project as argued by the Claimants), the real issue is whether the volumes indicated in the Proved Reserves figures could have been achieved through the cold production techniques used by the Projects or whether it required EOR techniques. Assuming that the figures could only have been achieved using EOR techniques, the second stage of the inquiry is whether the Claimants would have implemented such EOR techniques.

¹⁰⁵⁴ R-PHB, §§ 694-696.

¹⁰⁵⁵ Tr. (Day 1), 99 (Claimants' Opening Submissions).

¹⁰⁵⁶ R-PHB, § 762.

¹⁰⁵⁷ R-PHB, § 698.

716. As regards the first issue highlighted above, it is common ground that the Ministry's Proved Reserves figures included volumes based on the implementation of EOR techniques from 2009 onwards for the Petrozuata Project and from 2010 onwards for the Hamaca Project.¹⁰⁵⁸ Moreover, the Claimants have not sought to argue that the Proved Reserves figures could have been achieved through the implementation of only cold production techniques.¹⁰⁵⁹ Thus, arguably the upward trend in the Ministry's Proved Reserves figures is due to the proposed implementation of EOR techniques.
717. This takes the Tribunal to the following question: given that EOR was in fact contemplated, have the Claimants demonstrated that they too would have implemented EOR but-for the Expropriation. In this regard, the Claimants' witness Mr. Brown stated that "ConocoPhillips – a world leader in an EOR method known as Steam Assisted Gravity Drainage (SAGD) – would have promoted the use of EOR had the Projects not been confiscated".¹⁰⁶⁰ The Tribunal finds that the Claimants' statement has not been substantiated in any manner. The Claimants have failed to present any evidence to show that they would have considered EOR economically viable and implemented it in order to achieve their pre-Expropriation production profiles. In these circumstances, the Claimants' argument comes across as unconvincing and does not provide a sufficient basis for calling into question the Respondents' production figures.

c. *Production issues specific to the Petrozuata Project*

718. Turning to issues specific to the Petrozuata Project, the Respondents raise certain upstream and downstream issues which in their view affect the production forecast for the Petrozuata Project. The Tribunal will first set out the Parties' positions, before setting out its determination with respect to each issue. Given that the Respondents raised the issues, the Tribunal will set out the Respondents' arguments first.

i. The Respondents' position

719. The Respondents raise the following issues in respect of the production forecast of the Petrozuata Project, each of which shall be elaborated upon in turn:

- (1) The alleged pre-Expropriation downward trend in production;

¹⁰⁵⁸ Brown WS 1, CWS-8, § 70; R-PHB, § 690.

¹⁰⁵⁹ C-PHB, §§ 646 et. seq.

¹⁰⁶⁰ C-PHB, § 648.

(2) The alleged issues with the upgrader.

(1) The alleged downward trend in production

720. The Respondents' witness, Mr. Figuera argues that there was a downward trend in production at the Petrozuata Project even prior to the Expropriation in 2007 and this trend would likely have continued thereafter. Mr. Figuera explains that at the time of its authorization, the Petrozuata Project was allotted two designated areas from which EHCO could be extracted. A "Base Area" of 231 km² and a "Reserve Area" aggregating 69 km². The Project was supposed to be developed from the Base Area and the Reserve Area was to be utilized only if the Project partners agreed and if authorization to do so was received from the Ministry.¹⁰⁶¹
721. Mr. Figuera contends that at the outset, it was believed that the Project would achieve production of an average 120,000 BPD for the entire term of the AA with a total of only 571 **single lateral wells** [which were expected to initially produce 1,500 BPD with relatively long plateau periods¹⁰⁶²] using **cold production techniques**.¹⁰⁶³ This approach was allegedly premised on the understanding that the oil in the Petrozuata fields was easy to extract and that its geological properties would not hamper such extraction.
722. The Respondents assert however that the reservoir/field was complex and its geological properties resulted in much lower initial productions rates, lower plateau periods and higher decline rates than originally anticipated.¹⁰⁶⁴ As a consequence the Petrozuata Project re-evaluated its drilling programme and in order to achieve aggregate production of 1.56 billion barrels of EHCO over the term of the Project, envisaged the construction of approx. 754 **multilateral wells** i.e., wells with a number of branches (or "laterals") that could drain different parts of the reservoir simultaneously.
723. Mr. Figuera states that the multilateral well-drilling programme only achieved short term success. Although it helped the Project achieve the production targets necessary to satisfy the lenders, it was not a long-term solution that addressed the production problems plaguing the Petrozuata Project. According to Mr. Figuera, the

¹⁰⁶¹ Figuera, WS I, **RWS-2**, § 18.

¹⁰⁶² The plateau period is the period during which the well produces at an optimal, stable level before production decline commences. Figuera, WS I, **RWS-2**, fn 25.

¹⁰⁶³ Figuera, WS I, **RWS-2, Annex D**, § 52 and fns. 171, 202 (Figuera Fourth ICSID Testimony).

¹⁰⁶⁴ Figuera, WS I, **RWS-2**, §§ 19-20.

fact that this was not a long-term or feasible solution is borne out by the business plans for the Petrozuata Project, which kept envisaging the drilling of an increased number of wells. In particular:

- (a) The 2002 business plan contemplated production of approx. 1.59 billion barrels of EHCO at the rate of 120,000 BPD through 2036. The plan envisaged the drilling of 745 wells in total, with no new wells being required until mid 2003.
- (b) However, the 2003 business plan, which was issued 6 months later, allegedly envisaged the drilling of additional wells in the first quarter of 2003 itself, in order to meet the projected total production of 1.6 billion barrels of EHCO through 2035, at 120,785 BPD. According to Mr. Figuera the acceleration in the drilling programme indicates that the field was declining at a faster rate than expected. Also in 2003, it appears that the Projects' reservoir personnel stated that access to the Reserve Area would be required in the near term if the production rate of 120,000 BPD had to be achieved for the life of the Project.¹⁰⁶⁵
- (c) The 2004 business plan projected total EHCO production of 1.58 billion barrels at the rate of 120,000 BPD through to 2033, after which production would decline. However, the plan projected a total of 777 wells, or 29 more than the 2003 business plan.¹⁰⁶⁶
- (d) The 2005 business plan projected total EHCO production of 1.56 billion barrels over the term of the Project at the rate of 131,100 BPD in normal years. However, it appears that the decline would start much earlier in 2029. The Respondents also emphasize that the plan envisaged the drilling of 56 new wells over a 5-year period to support the above production levels.¹⁰⁶⁷
- (e) The draft 2006 business plan projected total EHCO production of 1.502 billion barrels at 118,200 BPD in normal years. Decline was estimated to start in 2031. To meet this target, the drilling of allegedly 83 new wells between 2005-

¹⁰⁶⁵ **CER-3, CLEX-63.** See also Figuera WS I, **RWS-2, App 15** (2003 Petrozuata Business Plan). The 2003 Business Plan envisages the drilling of 748 wells over the life of the Project.

¹⁰⁶⁶ **C-102**

¹⁰⁶⁷ **C-104.** However, the Tribunal notes that the total well count reflected in this Business Plan is 727 wells for the life of the Project, which is a drop in the number of wells by 50, from the last Business Plan.

2009 was contemplated i.e. more than the 56 wells envisaged in the 2005 business plan.¹⁰⁶⁸

- (f) Finally, in the same year, the Respondents assert that in a presentation made by ConocoPhillips, they deflated the above figures. The Claimants predicted a total production of 1.246 billion barrels of EHCO over the life of the Project at 118,200 BPD. Moreover, the production was predicted to start declining as early as 2023. Also, the presentation allegedly envisaged the need to drill 116-119 more wells between 2005-2009.¹⁰⁶⁹

724. According to Mr. Figuera, the above numbers clearly indicate that the situation at the Petrozuata Project had changed dramatically year-on-year. Moreover, the precariousness of the production situation just prior to the 2007 Nationalization was obvious. In sum, according to the Respondents, the above figures demonstrate that the Petrozuata production forecast were not set in stone and the 2006 production profile is not reliable.

(2) Alleged issues with the upgrader

725. The Respondents' witness, Mr. Figuera challenges the Claimants' assumption that the upgrader at the Petrozuata Project operated with no problems whatsoever, such that the only limitation to its functioning was the amount of EHCO being extracted from the field. Mr. Figuera asserts that if the Claimants' production figures are adopted, this assumption is possibly accurate because the Claimants assume that production would never exceed 120,000 BPD i.e. more than the maximum capacity of the upgrader. Therefore, at any point in time, the upgrader would always have excess capacity available.¹⁰⁷⁰

726. However, according to Mr. Figuera, this assumption does not hold good if actual post-Expropriation data is taken into account, as is the Respondents case. Mr. Figuera states that in the post-Expropriation period, "the upgrader experienced significant periods of downtime [in 2010, 2011 and 2013] resulting from equipment failures and operational errors" such that it placed a constraint on the production of CCO.¹⁰⁷¹ In

¹⁰⁶⁸ **C-126.** The total number of wells envisaged for the life of the Project was 746, i.e. 1 more than the number contemplated in 2002. Moreover, this number is not much lesser than the total number of wells predicted by Mr. Patiño for the Petrozuata Project as part of his decline rate analysis.

¹⁰⁶⁹ Figuera, WS I, **RWS-2, App. 151.**

¹⁰⁷⁰ Figuera, WS I, **RWS-2, § 30.**

¹⁰⁷¹ Figuera, WS I, **RWS-2, § 31, Annex D, §§ 87-95** (Mr. Figuera describes issues that arose with the upgrader prior to December 31, 2013. Also, in 2014 and 2015, additional problems have allegedly arisen at the upgrader.

particular, the upgrader allegedly suffered from the following problems: (a) a number of boiler failures, which reduced or eliminated the production of steam required in the process; (b) a number of failures at the air compressors, which reduced or eliminated compressed air required for, *inter alia*, the pneumatic actuators for the automatic valves; (c) a failure at the atmospheric tower in 2010 due to the presence of excessive water, resulting in damage to a number of the trays; and (d) a failure at the DCU.¹⁰⁷²

727. Mr. Figuera explains each of the above in greater detail as follows:¹⁰⁷³

- i. He states that at Petrozuata, steam is required for the proper functioning of critical processes. Such steam is produced at the Steam Unit which comprises three boilers. As per the original operating design, it was intended that two boilers would function while the third would be kept on standby for emergencies. However, it appears that early in the Project – which Mr. Figuera specifies was prior to the migration – it was decided that all three boilers would operate simultaneously at 50% of their capacities, such that if one failed, the other two would already be operating. It appears that in 2005 one of the boilers failed and has only operated intermittently since then, leaving the upgrader with only two functioning boilers.
- ii. Further, these boilers require fuel gas to operate, which provides the heat necessary to convert water to steam. The fuel gas is generated in the upgrading process but needs to be purified of its high concentration of corrosive Hydrogen Sulphide gas. Such purification is achieved in the Amine unit. However, in the event the Amine unit underperforms, the Hydrogen Sulphide gas and its equally corrosive byproducts (i.e. sulphuric acid) remain in the fuel gas and causes corrosion of the boilers' tubes and chambers. According to Mr. Figuera, while corrosion takes place even during the normal operations of the boilers, it is even more acute when the boilers are shut down.
- iii. In addition to the above acid corrosion, the boilers also face issues due to the presence of hydrocarbons in the “boiler feed water that flows through the

During 2015, the upgrader experienced significant unscheduled shutdowns that the Project attributes in part to the deferral of the turnaround that had been scheduled for mid-2015.)

¹⁰⁷² Figuera, WS I, **RWS-2, Annex D**, § 88. Mr. Figuera also asserts that there was a planned shutdown for a 67-day turnaround in 2011.

¹⁰⁷³ Figuera, WS I, **RWS-2, Annex D**, §§ 89-96.

tubes". Mr. Figuera asserts that while hydrocarbons can enter the steam system, there are usually valves that should prevent such entry. However, the valves installed at the Petrozuata upgrader were simple "check valves" that on occasion did not respond fast enough to prevent the entry of hydrocarbons into the steam system. Mr. Figuera states that such hydrocarbon laden water, when heated in the boilers generates coke which builds up into the walls of the tubes and can result in them fracturing. It appears that starting in December 2009 and into 2011, there were a number of tube failures at the boilers resulting from high Hydrogen Sulphide concentration in the fuel gas and presence of hydrocarbons in the steam that resulted in partial and total shutdowns of the upgrader, thereby affecting upgrader performance. As a result of these issues, PDVSA was allegedly contemplating replacing various parts of the upgrader with better systems/technology.

- iv. In 2010 and 2011, there were allegedly a number of failures at the air compression units that caused unplanned shutdowns. Such shutdowns occurred as a result excessive calcium carbonate deposits in the compressor's tubes which then had a cascading effect on various parts of the compression units.
- v. In 2010 there was an emergency shutdown at the feed furnace due to the loss of flow caused because of an obstruction in the filters. After the column was restarted, certain problems still remained. In the process of fixing these issues, those operating the upgrader caused damage to other parts of the atmospheric column as a result of which the same was out of service for 28 days until repairs were completed.
- vi. Lastly, in 2013 there was an incident at the coker unit due to operator error that caused a shutdown of the upgrader for 45 days.

728. On the basis of the above, Mr. Figuera asserts that even if the field produced excess EHCO, due to the problems at the upgrader, not all of it was converted to CCO which could be commercialized. Accordingly, he asserts that reductions in the production figures on account of the problems at the upgrader need to be factored into

Petrozuata's production profile and this has been done by Mr. Patiño in his analysis.¹⁰⁷⁴

ii. The Claimants' position

729. The Claimants' responses to each of the issues raised above are set out below:

(1) The alleged downward trend in production

730. The Claimants submit that the Respondents arguments as regards the alleged downward trend in Petrozuata's pre-Expropriation production profile are misleading.

731. First and foremost, the Claimants submit that Mr. Figuera, who now impugns these production figures – endorsed them contemporaneously. For instance, Mr. Figuera allegedly signed the 2005 Annual Report in his capacity as the President of Petrozuata Project's operating company i.e. Petrozuata C.A. and therein endorsed that the Project would produce over 1.6 billion barrels of EHCO over its operating life.¹⁰⁷⁵ Further, in a presentation given in November 2006, Mr. Figuera allegedly projected the recovery of 1.56 billion barrels of EHCO over the life of the Project and the drilling of around 727 wells.¹⁰⁷⁶ According to the Claimants, this figure significantly exceeds the total recovery assumed by Mr. Abdala.

732. As regards the alleged increase in well count over the years, the Claimants submit that the Respondents comparison is misleading in as much as it only reflects the number of wells that were proposed to be drilled between 2005 and 2009 and fails to give the total well count predicted in each business plan. Comparing the total well count in each of the business plans, the Claimants assert that if the total well count between the 2002 business plan and the 2006 business plan were to be compared, the total number of wells increased only by 1 i.e. from 745 to 746. As regards the Respondents' reference to their October 2006 presentation, they assert that the change in figures has occurred due to the deferral in access to the Reserve Area from 2007 to 2009.¹⁰⁷⁷

(2) Alleged issues with the upgrader

¹⁰⁷⁴ He also caveats that EHCO itself could not have been sold because the AAs in their original forms were not allowed to sell blended products but only CCO. Hence, in the but for world, if actual figures are used, then the actual CCO volumes that are sold must be used. Figuera, WS I, **RWS-2**, § 31; Figuera, WS I, **RWS-2, Annex D**, § 96.

¹⁰⁷⁵ C-PHB, §§ 720-721.

¹⁰⁷⁶ C-PHB, § 721; **C-217**.

¹⁰⁷⁷ C-PHB, § 722(a)-(c).

733. The Claimants submit that the Respondents' arguments regarding alleged problems with the upgrader have been conjured up for the sole purpose of reducing the Claimants' damages and are entirely meritless.
734. First, the Claimants submit that the Respondents' allegations regarding the upgrader rest solely on the testimony of Mr. Figuera who had no direct involvement with the Petrozuata Project since November 2006. Accordingly, the Claimants submit that Mr. Figuera's testimony cannot support the Respondents' allegations regarding problems at the upgrader.
735. Second, the Claimants assert that prior to the Expropriation, the Petrozuata upgrader enjoyed an exemplary operating record and had achieved an average on-stream factor ("OSF") of roughly 97%.¹⁰⁷⁸ The Claimants point out that with one notable exception, all the problems highlighted by Mr. Figuera have occurred in 2009 or thereafter, i.e. in the post-Expropriation period when the upgrader was operated entirely by PDVSA. In the circumstances, the Claimants assert that any deficiencies and problems at the upgrader reflect PDVSA's own negligent operation of the upgrader and cannot be attributed to the Claimants in the but-for analysis.
736. On this basis, the Claimants assert that, "the simple truth is that Respondents took possession of an upgrader at Petrozuata that had attained "world class" status. To the extent that any claims of diminished performance since the expropriation can be credited, it is clear that the Respondents have only themselves to blame".¹⁰⁷⁹

iii. The Tribunal's determination

737. In respect of the first issue raised by the Respondents i.e. the alleged downward trend in Petrozuata' pre-Expropriation production figures, the Tribunal notes that the Respondents' objective behind making this argument was to call into question the Claimants' pre-Expropriation production forecasts. In light of the fact that the Tribunal has decided to adopt the Respondents' production forecasts, the Tribunal need not reach any final decision on this argument.

¹⁰⁷⁸ C-PHB, §§ 738-739. The Claimants explain that on-stream factor or OSF is a metric that describes the operational efficiency of an upgrader or refinery. Simply put, it reflects the ratio of actual CCO production to the upgrader's capacity. For example, if an upgrader which has a capacity to convert 100,000 BPD actually produces an average of 95,000 BPD of CCO over a given period of time, its OSF will be 95%. Earnest Report, § 50; Tr. (Day 8) 2217:8-22 (Mr. Earnest). The Respondents' witness also agrees with this definition. Figuera, WS I, **RWS-2**, fn 83 (OSF in this context is expressed as a percentage equal to the total CCO produced during a period of time divided by the design capacity of the upgrader).

¹⁰⁷⁹ C-PHB, § 748.

738. As regards the second issue i.e. the alleged problems at the Petrozuata upgrader, even in this case the Respondents appear to be raising this issue with the objective of demonstrating that the assumptions underlying the Claimants' production forecast are incorrect. In particular, the Respondents seek to assert that not only the production capacity of the field, but also the production capacity of the Petrozuata upgrader acted as a constraint on production.¹⁰⁸⁰ In their view, the Claimants ignore both these factors. First, as with their previous argument, the Tribunal need not reach a final decision on this issue in light of the fact that it has decided to adopt the Respondents' production forecasts. That said, the Tribunal finds the Respondents' allegations regarding the Petrozuata upgrader entirely without merit. The Tribunal notes that the Respondents rely on the testimony of Mr. Figuera in support of their allegations regarding the Petrozuata upgrader. Moreover, they state that "the Claimants have previously been provided with documentation relating to a number of the more serious problems at the Petrozuata upgrader in the post-nationalization period".¹⁰⁸¹

739. However, having examined the documents on record, the Tribunal finds that the Respondents have failed to produce any such "documentation" relating to the "serious problems at the Petrozuata upgrader".¹⁰⁸² The only basis for their allegations is Mr. Figuera's unsubstantiated testimony. In the absence of such evidence, the Tribunal finds the Respondents' allegation regarding the upgrader's role in any perceived reduction in production volumes at the Petrozuata Project are untenable.

d. *Production issues specific to the Hamaca Project*

740. As with the Petrozuata Project, the Respondents raise certain downstream issues which in their view affect the production forecast for the Hamaca Project. Even in this instance, the Tribunal finds it apposite to set out the Respondents' arguments first, given that the Respondents have raised these issues.

i. The Respondents' position

741. With respect to the Hamaca Project, the Respondents raise the following issues, each of which shall be elaborated upon in turn:

¹⁰⁸⁰ SoD, § 416

¹⁰⁸¹ See SoD, fn 945.

¹⁰⁸² When stating that they have provided the Claimants with necessary documentation, the Respondents only refer to §§ 87-96 of Mr. Figuera's Fourth ICSID Testimony (Figuera, WS I, **RWS-2, Annex D**, §§ 87-96) However, in these paragraphs, Mr. Figuera only describes the alleged myriad problems at the Petrozuata upgrader without referring to a single document in support of the same.

- (1) The Hamaca upgrader's On-Stream Factor ("OSF");
- (2) Issues faced by the Coker unit; and
- (3) Other operational issues

(1) The Hamaca upgrader's OSF

742. As explained previously, the OSF or on-stream factor is a measure of the total CCO produced during a period of time divided by the design capacity of the upgrader.¹⁰⁸³ In other words it is reflective of the performance capacity or utilization of the upgrader. Based on actual data, the Respondents propose a long-term OSF of 72.85% for the Hamaca upgrader. In contrast, the Claimants propose an OSF factor of 91%. It is the Respondents' case that the 91% OSF underlying the Claimants' production forecasts for the Hamaca Project is absolutely unachievable given the condition of the Hamaca upgrader and thus, entirely without basis.

743. The Respondents' witness, Mr. Figuera, states that between 1999 and 2006 the Hamaca Project participants commissioned four reliability, availability and maintainability ("RAM") studies to be undertaken by independent analysts, in order to assess the upgrader's performance.¹⁰⁸⁴ Each RAM study was undertaken at different stages of the construction process of the upgrader and therefore was able to assess additional technical information about the upgrader's performance. According to Mr. Figuera, "[t]he history of the RAM reports [...] shows that as the upgrader proceeded from conceptual design to operation, its reliability, as measured by its predicted OSF, deteriorated significantly".¹⁰⁸⁵

744. The findings of the four RAM studies are summarized below:¹⁰⁸⁶

RAM Study (Year)	Upgrader Status	Components Addressed	Mean OSF (%)
RAM I (1999)	FEED Package	Unknown	93.00
RAM II (2002)	Detailed Engineering	~ 600	86.40
RAM III (2003)	60% Constructed	619	85.37
RAM IV (2006)			84.38

¹⁰⁸³ *Supra*, fn 1078.

¹⁰⁸⁴ R-PHB, § 706.

¹⁰⁸⁵ Figuera, WS 1, **RWS-2**, §§ 34-35.

¹⁰⁸⁶ R-PHB, § 706; Figuera, WS 1, **RWS-2**, § 35.

Post-Metallurgy Improvements	1+ Year After Upgrader Start-Up	1,354	86.32
Post-Metallurgy Improvements w/Potential Upstream Failures			84.26

745. The Respondents submit the above RAM studies demonstrate that:

- (i) the projected OSF steadily declined as more information became available;
- (ii) the probability analyses for RAMs II, III and IV all indicate no chance of achieving either the 93% long-term OSF target established at the beginning of the Project or the 91% plus long-term OSF that forms the basis of Claimants' projections; and
- (iii) the OSFs for the most representative scenario established in RAM IV were 84.38% before metallurgical improvements and 86.32% following those improvements, reduced to 82.35% and 84.26% respectively, when potential upstream failures are taken into account.¹⁰⁸⁷

746. To this, Mr. Figuera adds that with the exception of 2005 when the upgrader was brand new, the OSF has never even reached the level predicted in the RAM studies, much less a value of 91%. The actual performance of the upgrader and the OSF achieved year-on-year is summarized below:

Year	OSF (Based on CCO Production)	OSF (Based on CCO Sales)
2005	87.63%	86.25%
2006	74.96%	74.90%
2007	82.79%	81.68%
2008	78.77%	79.76%
2009	60.52%	60.84%
2010	75.45%	76.30%
2011	71.37%	72.38%
2012	40.74%	38.36%
2013	72.61%	71.90%
2014	81.14%	80.78%
2015	77.72%	78.24%
Average	73.06%	72.85%

747. Accordingly, it is the Respondents' case that the upgrader could have never achieved the 91% OSF adopted by the Claimants.

748. In response to the Claimants' various allegations, the Respondents submit that:

- a. The Claimants' allegation that the RAM reports "predict an average long-term OSF of between 84% and 93%,"¹⁰⁸⁸ is misleading. They submit that these numbers are not indicative of a range of OSFs that can be achieved as sought

¹⁰⁸⁷ R-PHB, § 706.

¹⁰⁸⁸ Reply, § 405.

to be implied by the Claimants. Rather, they show a progressive downward trend in the OSF as more information about the upgrader became available. The Respondents assert that with the exception of RAM I, none of the other RAM studies predict a maximum OSF which exceeds 88.38% and this number is still lesser than the OSF value on which the Claimants seek to rely.¹⁰⁸⁹

- b. The Claimants' assertion that the Board of Directors of the Hamaca Project endorsed a long-term OSF of 91% at a Board Meeting of 18 May 2006 is entirely misleading and incorrect. In this regard, the Respondents first assert that the Claimants have relied on the presentation made at a different Board Meeting i.e. the Board Meeting of 17 November 2005, and that this presentation was never discussed at the 18 May Board Meeting. Second, they assert that the Claimants have produced an incomplete translation of the minutes alleging that the Spanish original is illegible, when in fact it is not.¹⁰⁹⁰ The Respondents submit that the two phrases in the original Spanish version of the Board Minutes which the Claimants purport are illegible in fact read as follows: "*el Plan General de Negocios establece un factor de utilización de 91,4% [...] pero se indicó que sería un reto para Ameriven durante los próximos años satisfacer esa expectativa. [...]El Factor de Utilización del Mejorador para el período de los próximos 10 años es 91,4%, en relación con este asunto Ameriven mencionó que tenían que resolver cómo alcanzarían este número, sino el Plan de Negocios necesitaría una revisión*". When translated to English, according to the Respondents they state that achieving a 91% OSF "would be a challenge for Ameriven during the next few years [and that the Project] needed to figure out how they would reach this number, otherwise the Business Plan would need to be revised."¹⁰⁹¹ In sum, the Respondents assert that the Board minutes directly contradict the Claimants' case.
- c. The Claimants' contention that the post-Expropriation performance of the upgrader should be rejected in light of the fact that during this period the upgrader was under the direction of a PDVSA controlled mixed enterprise, ignores the distinction between "hopes and reality".¹⁰⁹² In that, while the

¹⁰⁸⁹ R-PHB, § 709; Figuera, WS 1, **RWS-2, App. 20** (RAM II) (max OSF of 88.38%); Figuera, WS 1, **RWS-2, App. 21** (RAM III) (max OSF of 87.29%); Figuera, WS 1, **RWS-2, App. 9** (RAM IV) (max OSF of 86.77%).

¹⁰⁹⁰ **CER-3, CLEX-58.**

¹⁰⁹¹ Figuera, WS 1, **RWS-2, App. 22.**

¹⁰⁹² R-PHB, § 723.

Claimants may have “hoped” that the upgrader’s performance could have been improved, this has no bearing on the “reality” that the upgrader’s performance would have been no different even if the Claimants had remained participants in the Hamaca Project. The performance of the upgrader that was actually achieved and on which the Respondents rely, in their view represents the performance that would in all likelihood have been achieved, regardless of the presence of the Claimants.¹⁰⁹³

- d. The Claimants’ contention that the OSF should be higher than 72.85% in light of the billions of dollars spent by the Respondents on upgrader turnarounds and improvements is confusing because it once again conflates hopes and reality. The reality is that the OSF has averaged at 72.85% for eleven years of operation through 2015. The reality also is that PDVSA and Chevron have spent “hundreds of millions of dollars in an effort to improve upgrader performance”.¹⁰⁹⁴ The reality equally is however that the expenditures have not yielded sustained results. The attempt by the Claimants’ witness Mr. Earnest, to predict an increased OSF based on the various maintenance and improvement projects that were envisaged for the Hamaca Project ignores this reality.¹⁰⁹⁵

749. In sum, the Respondents conclude that, “the figures do not lie, and the 72.85% OSF [posited by the Respondents] is supported by the entire record in these proceedings. While the Claimants would like to believe that a project in which ConocoPhillips, along with Chevron and PDVSA, was a partner would have performed better, there is no basis whatsoever for the assertion that the “but for” world would have been any brighter for the Hamaca upgrader.”¹⁰⁹⁶

(2) Issues faced at the Coker unit

750. In addition to the aforesaid problems with the Hamaca upgrader’s OSF, Mr. Figuera asserts that the upgrader also suffers from serious vibration problem at its coking structure. It appears that in February 2006, “[a]ll parties agree[d] the problem is very complex and not easy to solve. [...] Of particular concern has been the fact that the vibrations cause[d] cracks in the coke drum overhead vapour lines that carry the

¹⁰⁹³ R-PHB, § 723.

¹⁰⁹⁴ R-PHB, § 726.

¹⁰⁹⁵ R-PHB, § 727; Earnest Report **CER 7**, § 64.

¹⁰⁹⁶ R-PHB, § 728.

entire content of the high-temperature, highly combustible effluent of the delayed coking reaction process.”¹⁰⁹⁷ The Respondents submit that while short term and low level usage may not create a high risk, regular usage could result in “a leak or failure in these [vapour] lines [and would] have catastrophic consequences for the continued viability of the upgrader”¹⁰⁹⁸ as it would require the total shutdown of the upgrader for an extended period of time.¹⁰⁹⁹

751. According to the Respondents, the foregoing problems led to an enormous number of loss of opportunity events over the life of the Project.¹¹⁰⁰ For example between 2005 and 2013 alone, the average number of loss of opportunity events was 40.8. The overall loss of production was 5,258,000 barrels between 2005-2006 and 7,063,000 barrels between 2008-2013.

752. Further, the Respondents submit that they made every effort to find a solution to the above vibration problem. In particular, Mr. Figuera asserts that:

The severity and uniqueness of the vibration problem resulted in the establishment by the Project of a Vibration Mitigation Management Team prior to the nationalization. This team was comprised of experts from each of the Project participants, and headed up by personnel from Chevron Energy Technology Company (“CETC”). Claimants have argued in the past that this team came up with a solution. [...] Despite the efforts of CETC to develop a solution, the best that its most recent proposed mitigation project is expected to achieve is a reduction of the vibrations from eight times the target level to three times the target level. In other words, even after all of the time and effort that has gone into the study and analysis of the vibration problem, no real solution has been developed for this unique problem, and the Project remains at extreme risk.¹¹⁰¹

753. Thus, the Respondents submit that the problems with the coker unit were of sufficient magnitude to affect the upgrader’s performance for an extended period and create the risk of catastrophic failure. In their view, the same should be accounted for in the assessment of the Claimants damages.

754. Accordingly, to account for “a total shutdown of the upgrader, which would effectively end the [Hamaca] Project,” the Respondents experts, Mr. Brailovsky and Mr. Flores,

¹⁰⁹⁷ R-PHB, § 730; Figuera, WS 2, **RWS-4**, §§ 18-20. See also **RWS-2, Annex A**, § 52 (First Figuera ICSID Testimony); Figuera, WS 1, **RWS-2, Annex B**, §§ 90-96 (Second Figuera ICSID Testimony); Figuera, WS 1, **RWS-2, Annex D**, §§ 34-44 (Fourth Figuera ICSID Testimony); Figuera, WS 1, **RWS-2, Annex E**, §§ 40-44 (Fifth Figuera ICSID Testimony); Figuera, WS 1, **RWS-2**, §§ 44-46.

¹⁰⁹⁸ R-PHB, § 730; Figuera, WS 2, **RWS-4**, §§ 18-20; Figuera, WS 1, **RWS-2, Annex D**, § 38.

¹⁰⁹⁹ Figuera, WS 1, **RWS-2, Annex D**, § 34.

¹¹⁰⁰ The Tribunal understands that loss of opportunity events are only those events that are not anticipated and therefore not otherwise already included in the expected levels of CCO production and sales.

¹¹⁰¹ Figuera, WS 1, **RWS-2, Annex D**, §§ 36-44; Figuera, WS 1, **RWS-2, App. 72**, pp. 3-4 (CETC Report).

“assume in each year a 90% probability that the Hamaca upgrader will keep operating and a 10% probability that the Hamaca upgrader will stop operating and that, consequently, the Hamaca Project will cease operations”.¹¹⁰² They acknowledge however that this issue has relatively little impact on their compensation calculations in light of the Hamaca Project’s costs and oil price projections.

(3) Other operational issues

755. In addition to the above issues the Respondents assert that the following issues also had an impact on production:

Corrosion: Claimants say that corrosion “was a recognized issue prior to the expropriation and was being addressed” and that it “is a common problem at refineries and has straightforward remedies.” The answer to Claimants’ first point is that recognition of a problem and its favorable resolution are two very different things. [...] [W]ith the exception of the work of a Chevron (CVX) team to “[update] corrosion assessment of plant” and initiate the “[a]pplication of specialized techniques for early detection of corrosion mechanisms,” the only thing that had been done was to place a purchase order for heat exchangers with upgraded metallurgy, equipment that had been identified much earlier as requiring upgrades. What is clear is that, while the Project recognized the problem and had identified certain corrective measures, neither the scope nor the estimated expenditures bore any relationship to reality. Claimants’ second point – that refineries everywhere confront corrosion problems and such problems can be remedied – is meaningless in the context of this case, where PetroPiar implemented the metallurgy upgrades that were thought to be the remedy prior to the nationalization, where the Chevron team responsible for corrosion assessment has continued to find corrosion [in places] where it was not expected to occur and new corrosive mechanisms, such as chlorine corrosion, in still additional circuits, and where the problem has remained a complex, moving target.

Low EHCO Quality: Respondents have also pointed out that contrary to the original assessment, it has been expected from the outset that the API gravity of the EHCO would drop from an average of about 8.6° API to about 7° API. It was well understood that such a drop would have an impact on the yield rate at the upgrader and, accordingly, the ultimate recovery of CCO. The [...] Claimants denied that the lower API gravity was an issue, claiming that even though the API in the southern portion of the [...] field was lower than originally expected, most of the Hamaca reserves are in the northern part of the field, where the API is higher than expected, such that the northern and southern crudes can be blended before upgrading, with the result that the API gravity would not be impacted. That argument was incorrect because, while it is true that the southern part of the field has lower API gravity EHCO, the northern part does not contain most of the reserves and the API gravity is not higher than expected. Claimants did not repeat that baseless argument in this case, replacing it with the assertion that “there is no evidence” that the lower API “has affected syncrude production.” This new argument is misleading because (i) EHCO production has been lower than anticipated due to the very poor performance of the upgrader (and despite the fact that non-upgraded EHCO has been sold), meaning that the overall average API gravity has not dropped as sharply as might have been the case had the upgrader been performing at

¹¹⁰² Brailovsky & Flores ER I, **RER-3**, § 224; Brailovsky & Flores ER I, **RER-3**, **App. BF-6** (Compensation Calculations – Hamaca, Table 1).

the OSF Claimants project, (ii) the API gravity in recent times has frequently fallen below (sometimes far below) 8.0° API, which is lower than the 8.6° API specification for the upgrader and (iii) the problem will get worse as exploitation continues and the reserves in the northern part of the field are depleted and replaced with larger volumes from the south. In short, Claimants have no real answer to the API gravity problem at the Huyapari field and its impact on production at the Hamaca upgrader.¹¹⁰³

Tank 12: Finally, with respect to Tank 12, a major intermediate tank at Hamaca, Claimants state that the tank “apparently collapsed in 2011 due to a fire on PDVSA’s watch.” That is an oversimplification. From the outset, the operating procedures for start-up of the upgrader allowed light hydrocarbons to be routed to Tank 12, even though its usual contents were the far less volatile heavy fractions from the crude unit. Despite the fact that this upset condition should have been anticipated, the tank venting system as designed was inadequate to accommodate an overpressure situation when light hydrocarbons were routed to the tank. A series of pre-nationalization overpressure incidents resulted in deformations to the tank’s roof and cracks in the walls, which were contributors to the seriousness of the 2011 event. Because there was neither a redundant tank nor a sufficiently sized bypass, the tank could not be taken out of service for repairs without shutting down upgrader operations, and rather than taking it out of service for a lengthy period and incurring the accompanying loss of production, it was decided to monitor the situation. In 2011, another overpressure event resulted in a fire and the collapse of the tank’s roof, which in turn caused significant loss of production in 2012. Claimants cannot rationally contend that this incident – not unlike incidents at ConocoPhillips’ own refineries and projects – could have been avoided simply because a ConocoPhillips subsidiary, in addition to PDVSA and Chevron, would have been a participant in the project in a “but for” world.¹¹⁰⁴

756. In sum, the Respondents conclude that, “[the] Claimants want to leave the false impression that the levels of production that have actually been achieved, when compared to their claim of what the upgrader could achieve at a 91-92% OSF, are due to the lack of ability or experience of the current operator. However, the fact of the matter is that the upgrader was poorly designed on ConocoPhillips’ watch and has suffered substantial problems throughout its existence. A 91-92% long-term OSF has never been achieved. During its nine-year history, the upgrader’s actual OSF was only 71.37% and, given the serious ongoing problems at the upgrader, a long-term average OSF of 71.37% represents an appropriate projection.”¹¹⁰⁵

ii. The Claimants’ position

¹¹⁰³ Figuera, WS 1, **RWS-2, App. 47** (internal email from members of Hamaca Ops Committee); Figuera, WS 1, **RWS-2, App. 27 and 28** (Technical Note circulated by Process Engineer Production Coordination re: lower quality API); See also fiscalization reports which set out the API gravity of the DCO before it is sent to the Upgrader (Figuera, WS 1, **RWS-2, App. 168, 179**).

¹¹⁰⁴ R-PHB, § 739.

¹¹⁰⁵ Figuera, WS I, **RWS-2, Annex D**, § 50.

757. The Claimants submit that the Respondents' arguments regarding the downstream issues that allegedly affect the future performance of the Hamaca upgrader are contrary to the evidence on record.

(1) OSF of the Hamaca upgrader

758. At the outset, the Claimants state that their expert Mr. Abdala, uses an average production figure of 175,000 BPD of EHCO through the term of the Project and in this process arrives at an average OSF of 91%. According to the Claimants, this OSF is reasonable, meets the expectation of all Project partners prior to the Expropriation, and is suitable for use in the but-for analysis.¹¹⁰⁶

759. The Claimants submit that the RAM studies commissioned by the Project partners allegedly projected OSF figures between 84% and 93%.¹¹⁰⁷ Upon receiving the last study i.e. RAM IV, the Project partners evaluated the same and endorsed a long term OSF of 91% at a Board Meeting of the Hamaca JVC on 18 May 2006.¹¹⁰⁸ Pertinently, the Claimants rely upon a presentation made to the Board of Directors on 17 November 2005.¹¹⁰⁹ The Claimants submit that the aforesaid conclusion made by the Hamaca Board of Directors is supported by the actual performance of the Hamaca Project in the pre-Expropriation period. In particular, the Claimants point to the fact that in 2005, the first year in which the upgrader went online, it achieved an OSF of approximately 89% which was in excess of the RAM IV prediction. Similarly, in the first five months of 2006, the OSF averaged over 91%.

760. The Claimants assert that based on the above figures, the Hamaca Business Plans over successive years from 2006 to 2015 envisaged an OSF that would remain at rates above 90%.¹¹¹⁰ Moreover, the Project partners intended to make significant capital investments to enhance and sustain the upgrader's OSF. In the view of the Claimants' expert Mr. Earnest, such investment could be expected to yield a long term OSF of 91.76%, which is consistent with the figure adopted in the Ameriven Model and with the Claimants' damages model.¹¹¹¹

¹¹⁰⁶ C-PHB, §§ 759-760.

¹¹⁰⁷ Figuera, WS 1, **RWS-2, App.19** (RAM I), and **App. 9** (RAM IV).

¹¹⁰⁸ **C-278**.

¹¹⁰⁹ C-PHB, fn. 1343 citing Figuera, WS 1, **RWS-2, App. 22**. The Claimants also acknowledge that the Board of Directors viewed attaining a 91% OSF as a challenge.

¹¹¹⁰ **C-127, C-283**.

¹¹¹¹ **C-149**.

761. As regards the Respondents' arguments that the OSF of the Hamaca upgrader should be fixed at 72.85%, the Claimants submit that these arguments should be rejected as "a self-serving attempt to impose an artificial cap on the long-term OSF", for the following reasons:¹¹¹²
762. First, these allegations are based on Mr. Figuera's testimony, who had no involvement with the Project from December 2007. Accordingly his statements are uninformed and cannot provide a basis for making any findings.
763. Second, the Respondents' position is based on the performance of the upgrader under the direction of a new operating company which is entirely controlled by PDVSA. According to the Claimants, there is strong evidence to suggest that PDVSA's post-Expropriation operation of the Projects suffered from severe deficiencies and mismanagement, none of which can be attributed to the Claimants when applying the but-for test.¹¹¹³
764. Third, the Respondents acknowledge that the mixed enterprise that has taken over the Hamaca field is permitted to sell and has been selling large quantities of non-upgraded products since 2009. Assuming that the upgrader was capable of processing these additional volumes, bypassing the upgrader causes an artificial reduction in the OSF.¹¹¹⁴
765. Fourth, the Respondents' OSF of 72.85% is incredible on its face and it implies that the upgrader is not functioning nearly 30% of the time. However, if this were the case, there would be no need for the Respondents to allegedly spend billions of dollars on maintenance, improvements and turnarounds of the upgrader, the very purpose of which is to achieve enhanced OSF. The OSF suggested by the Respondents is inconsistent with the amounts spent by them to maintain and more pertinently, to improve the upgrader's performance.¹¹¹⁵
766. In light of the above, the Claimants conclude that "the evidence solidly supports the collective expectation of the Hamaca Project partners including Respondents here, that a long-term OSF of 91% would be attained. Respondents desultory OSF figure of 72.85% based on their own alleged post-Expropriation performance, is irrelevant,

¹¹¹² C-PHB, §§ 768 et. seq.

¹¹¹³ Earnest Report, § 59;

¹¹¹⁴ ICSID Consolidated Earnest Report, § 59.

¹¹¹⁵ R-PHB, §§ 772.

unreliable and unrealistic. Even if true, it would at best reflect post-Expropriation deficiencies on the Respondents' part, which could not be imputed to Claimants in the but-for application. Both Mr. Figuera's long-term OSF figure and Mr. Patino's reliance on this figure should be rejected by the Tribunal".¹¹¹⁶

(2) The Coker unit

767. The Claimants submit that the Respondents' allegation regarding the coker unit are "no more than a transparent attempt to avoid paying what they rightly owe [the] Claimants."¹¹¹⁷
768. First and foremost, the Claimants point to Mr. Figuera's testimony where he acknowledges that the vibrations at the coker unit have not impacted CCO production, and thus that there can be no impact on the valuation of the Project.¹¹¹⁸ Moreover, the Claimants assert that prior to the Expropriation, the Hamaca Board of Directors had identified and agreed upon a list of appropriate corrective measures to remedy or mitigate the problems of the coker vibrations.
769. Therefore, for the Respondents to now argue that the coker vibration poses a "risk of catastrophic failure that would permanently disable the upgrader complex as a whole" is "facially incredible".¹¹¹⁹ In any event the Claimants submit that PetroPiar's conduct belies the Respondents' above claim. Because, nearly 10 years after the expropriation, PetroPiar has not taken any steps to correct the problem. Rather it was only in 2012 that the Project company commissioned a third party i.e. Chevron Energy Technology Company (CETC) to undertake an assessment of the vibration issue and propose solutions. More to the point, it appears that despite CETC's proposal to carry out certain changes that will reduce such risk of vibrations, it appears that none of these solutions have been implemented on the coker unit till date.¹¹²⁰
770. In the circumstances, the Claimants submit that the Respondents' allegations regarding the operational problems at the coker unit and in particular, the suggestions of its catastrophic failure are entirely baseless. As a consequence, the Claimants

¹¹¹⁶ C-PHB, § 777.

¹¹¹⁷ C-PHB, § 788.

¹¹¹⁸ Figuera, WS I, **RWS-2, Annex D**, fn 93; C-PHB, § 779.

¹¹¹⁹ C-PHB, §§ 781, 783.

¹¹²⁰ C-PHB, §§ 781-787.

argue that the 10% annual compounded risk of Project destruction factored into the Respondents' production forecast for the Hamaca Project is an artifice.

(3) Other operational issues

771. In respect of the operation issues raised by the Respondents pertaining to corrosion, lower EHCO quality and the collapse at Tank 12, the Claimants' expert, Mr. Earnest submits that these issues are either minor or are attributable to the Respondents' own poor performance and therefore cannot be included in the production analysis. The Claimants' and Mr. Earnest's views on these operational issues are summarized as follows:

- (a) **Naphthenic acid corrosion:** The record shows that corrosion was an expected phenomenon issue prior to the expropriation and was being resolved. Indeed, corrosion is a common issue at refineries and has straightforward, well-understood remedies. Notably, one of Mr. Figuera's own exhibits contains a chapter entitled "corrosion: [a] natural but controllable process"—which he conveniently omitted from the exhibited version.
- (b) **EHCO quality:** There is no evidence that the alleged "quality" issues Mr. Figuera raises—*i.e.*, lower API gravity of the EHCO and higher carbon and Sulphur content—have had any effect on syncrude production. As Mr. Earnest explains, Respondents have vastly overstated any potential impact on syncrude production in any event.¹¹²¹
- (c) **"Tank 12":** This storage tank apparently collapsed in 2011 due to a fire on PDVSA's watch, caused by operator error. That is PDVSA's responsibility, and in any event would have been covered by Petropiar's insurance policy (which covers business interruption losses).¹¹²²

772. In summary, the Claimants submit that none of the above issues should affect the Hamaca Project's production profile in the but-for analysis.

iii. The Tribunal's determination

773. The focus of the Parties' submissions for the Hamaca Project is the Hamaca upgrader. In particular, Parties are in disagreement as to (a) the Hamaca Project's OSF and (b) the possibility of the upgrader catastrophically failing due to attendant problems with the upgrader's coker unit. Accordingly, the Tribunal shall first address

¹¹²¹ Earnest Report, §§ 129-140. There appear to be multiple issues with the EHCO quality, chief among them is the alleged reduced API of the EHCO produced at the fields. According to the Claimants' expert, the problem is overstated. Oil quality varies over time as a matter of principle/fact and refineries and oil manufacturers are used to this fact. Also, the technical report on which Respondents rely has provided a solution. Namely, it states that "the combination of maximizing the diluent API gravity through operational changes and the recovery of purge naphtha in the new 10-C-005 Diluent Scrubber will reduce the volumetric impact of lower EHCO gravity to about 1.5 kb/d." See Earnest App. MUSE 15.

¹¹²² Earnest Report, §§ 85-88, 89-101, 129-140

these issues raised by the Parties, before turning to the other operational issues, to the extent that they are relevant.

a. The Hamaca upgrader's OSF

774. With respect to the OSF, in the Claimants' case the Hamaca upgrader was of a "best in the world quality" and would have achieved an OSF of around 91%. They submit that a 91% OSF was the shared expectation of the Project participants before the Expropriation. In support of their projection, the Claimants primarily rely on the RAM studies and the Hamaca Board of Director's endorsement of a 91% OSF in the Board Meeting of the Hamaca Board of Directors. The Respondents' dispute the Claimants interpretation of both of the above documents and contend that the OSF could never have reached 91%.
775. Having examined the documents on record, the Tribunal is of the view that none of the documents relied on by the Claimants support their thesis of a 91% OSF.
776. In particular, the Tribunal notes that it was the original goal of the Hamaca Project to achieve an OSF of 93%.¹¹²³ The objective of RAM I was to determine, based only on the current design of the upgrader, whether this goal could be achieved. RAM I verified that based on the current design of the upgrader, an OSF of 93% was achievable.¹¹²⁴ RAM II was issued 2 years later and re-examined the information and assumptions forming the basis of RAM I. RAM II verified that the mean achievable OSF was 86.4%. Further RAM II also stipulated that "According to Figure 5.2, the project can be 95% confident of achieving at least an 85.6% OSF in a twenty year duration [but that] [t]he confidence curves indicate that there is no chance (i.e. zero confidence) of achieving the targeted 93% availability level"¹¹²⁵ RAM III examined the upgrader when it was 60% complete and provided the OSF that could be achieved in seven different scenarios. It is worth noting that in none of these scenarios did the OSF ever reach close to 90%.¹¹²⁶ Moreover, RAM III also predicted that the OSF could range between 84% and 86.75% with a mean value of 85.38%.¹¹²⁷ RAM IV,

¹¹²³ Figuera, WS 1, **RWS-2, App. 19**.

¹¹²⁴ Figuera, WS 1, **RWS-2, App. 19**, p. 3.

¹¹²⁵ Figuera, WS 1, **RWS-2, App 20**, pp.23-24.

¹¹²⁶ Figuera, WS 1, **RWS-2, App 21**, p. 14.

¹¹²⁷ Figuera, WS 1, **RWS-2, App 21**, p. 207.

which was issued after the upgrader came online in 2005, predicted that the OSF could range between 81% and approx. 87% with a mean value of 84.386%.¹¹²⁸

777. Thus, contrary to the Claimants' contention that the RAM studies predicted an OSF range between 93% and 84%, the Tribunal finds that each RAM study predicted the OSF that could be achieved over a 20 period based on the status of the upgrader at the time of the study. As the Respondents rightly point out, with each successive RAM study, the predicted OSF reduced and a 93% OSF was considered aspirational at best. These studies were undertaken prior to the Expropriation and by independent third parties. Neither the Claimants' nor their experts have provided any plausible explanation as to why the OSF continuously declined. Thus, the Tribunal is unable to accept the Claimants' interpretation of the results of the RAM studies or the fact that this supports their prediction of a 91% OSF for the Hamaca upgrader.
778. Turning to the alleged endorsement of a 91% OSF by the Board of Directors of the Hamaca Project, the Tribunal is of the view that the Claimants' interpretation of the Minutes of the Board Meeting does not withstand scrutiny. The Tribunal notes that the presentation on which the Claimants seek to rely was admittedly presented at the Board Meeting of 17 November 2005.¹¹²⁹ The original Minutes of the Meeting state as follows:

*El resultado de los estudios Ram fueron presentados señalando que dichos estudios empezaron muy temprano; se presentaron los estudios Ram I, Ram II y Ram III, indicando que este último fue un estudio más detallado considerando rangos específicos utilizando información de otras partes del mundo con el resultado de un rango de 85.6% a 91,5% como factor de utilización. Ameriven señaló que en el Ram I fueron muy optimistas indicando como factor de utilización 93% y mencionó que tomando en consideración lo que se construyó, en un periodo de tres años podría alcanzarse un factor de utilización de 91,4%. Ram IV fue realizado con la información y el desempeño de Ameriven del año 2005 dando como resultado un factor de utilización de 84,4%, adicionalmente se mencionó que el Plan General de Negocios establece un factor de utilización de 91,4% **cifra esta que es compatible con el pensamiento de ser la mejor planta en el mundo; pero se indicó que sería un reto para Ameriven durante los próximos años el satisfacer esta expectativa.** [...] El factor de utilización del Mejorador para el período de los próximos 10 años es 91,4%, en relación con este asunto **Ameriven mencionó que tenían que resolver cómo alcanzarían este número, si no el Plan de Negocios necesitaría revisión.** [...]*¹¹³⁰

779. When translated to English, the above reads as follows:

¹¹²⁸ Figuera, WS 1, **RWS-2, App. 9**, p. 68.

¹¹²⁹ C-PHB, § 762, fn. 1343.

¹¹³⁰ Figuera WS I, **RWS-2, App. 022**, pp. 5-6.

The results of the Ram studies were presented, indicating that the studies began very early; the results of Ram I, Ram II, and Ram III were presented, indicating that the last one was a more detailed study which considered specific ranges, using information from other parts of the world, with the result of a range of 85.6% to 91.5% as an On-Stream Factor. Ameriven said that in Ram I, they were very optimistic, indicating a 93% On-Stream Factor and mentioned that taking into consideration what has been built, in three years an On-Stream Factor of 91.4% could be reached. Ram IV was carried out with the information and performance of Ameriven from 2005, providing a 84.4% On-Stream Factor; in addition, it was stated that the General Business Plan establishes an On-Stream Factor of 91.4%, **number that is compatible with the thought of being the best plant in the world; but it was stated that it would be a challenge for Ameriven during the next years to meet this expectation.** [...] The On-Stream Factor of the Upgrader for the next 10 years is 91.4%, regarding this, **Ameriven stated that they needed to figure out how they would reach this number, otherwise the Business Plan would need to be revised.** [...] ¹¹³¹

780. In light of the above, the Tribunal finds that the Minutes merely take on record the various findings of the RAM studies, and once again reiterate their “goal” of achieving an OSF of 91%. At no point do the Minutes state that the Hamaca upgrader was capable of achieving an OSF of 91%. Quite to the contrary, the Minutes state that: (i) “[reaching an OSF of 91%] is compatible with the thought of being the best plant in the world [...] but [...] that it would be a challenge for Ameriven during the next years to meet this expectation”; and (ii) “Ameriven [...] needed to figure out how they would reach [an OSF of 91%], otherwise the Business Plan would need to be revised”. ¹¹³² In the circumstances, the Tribunal is equally unable to accept that a 91% OSF was endorsed by the Board of Directors and should therefore be adopted by the Tribunal.
781. In sum, the Tribunal concludes that the Claimants have failed to establish that a 91.4% OSF was achievable by the Hamaca upgrader and that it should be used to calculate production volumes.
782. In addition to the above, the Tribunal also finds that the Claimants have been unable to disprove the OSF proposed by the Respondents. In particular, the Claimants primary reason for questioning the Hamaca OSF is that the Project was under the management and control of the Respondents and that the Respondents’ alleged incompetence was in some way responsible for the low OSF. To this effect, the Claimants state that “the performance of the upgrader in the post-nationalization period [...] is based on the purported performance of the upgrader under the direction of a new operating company managed and controlled by PDVSA.” ¹¹³³

¹¹³¹ Figuera WS I, **RWS-2, App. 022**, pp. 5-6.

¹¹³² Figuera, WS 1, **RWS-2, App. 022**.

¹¹³³ Reply, § 412.

783. However, the Tribunal finds that the Claimants' allegations of mismanagement are not sufficiently substantiated by evidence, oral or documentary. More to the point, the Hamaca Project was not solely managed and operated by the Respondents, as the Claimants allege. Chevron was equally involved in the management of the Project. It appears that the Technical and Operations Manager of the Hamaca Project, who was in charge of managing the upgrader, was in fact a Chevron appointee. Given the involvement of another "commercial minded party", the Tribunal is not persuaded by the Claimants' allegations of mismanagement of the upgrader.
784. The Tribunal notes that in order to arrive at their projected OSF the Respondents have relied on the average of the actual OSF achieved at the Hamaca Project for the 11 full years of operation from 2005 through 2015. As per the actual performance of the upgrader, the highest OSF was achieved only in 2005, when the upgrader was brand new. Thereafter, in the approximately 2 years that the Claimants remained participants in the Projects, i.e. 1 January 2006 to 26 June 2007, the OSF was approx. 74% and then 81%. Thus, even when the Claimants were part of the Project, the OSF did drop as low as 74% and in any event did not reach 91%. Thus, the average value of 72.5% proposed by the Respondents is not inconceivable.¹¹³⁴
785. In sum, the Tribunal is of the view that the Respondents' OSF estimate for the Hamaca upgrader is more reliable than that proposed by the Claimants and should therefore be accepted.

b. The Coker unit

786. The Tribunal notes that the Respondents' submissions regarding the vibrations plaguing the Coker unit are interlinked with their submissions regarding the capacity of the Hamaca upgrader.
787. In particular, Mr. Figuera states that, "In light of the upgrader's very poor OSF due to other issues, the vibration problem at the coker unit has not had a substantial impact on CCO production to date. However, if the throughput capabilities at the upgrader were to improve significantly (which I do not believe is likely [...]), the coker unit would have to operate at higher severity, exacerbating the risks associated with the vibrations."¹¹³⁵

¹¹³⁴ Figuera WS I, **RWS-2**, §§ 37 *et seq.* Table 4.

¹¹³⁵ Figuera WS I, **RWS-2**, § 46.

788. The implication of Mr. Figuera's above statement is that if the Tribunal accepts the Respondents' OSF value, the "catastrophic failure" of the coker unit would no longer persist. In light of the fact that the Tribunal has decided to adopt the OSF value proposed by the Respondents, the possibility of "catastrophic failure" of the coker need not be accounted for and it will not impact the production of CCO at the Hamaca upgrader.
789. As to the other operational downstream issues (i.e. corrosion, damage to Tank 12), the Tribunal finds that these do not materially impact the decision to prefer the Respondents' production forecast and hence, the Tribunal need not decide upon the same. For the sake of completeness however, and because it impacts the decision on other inputs, the Tribunal will briefly address the issue of the purported low quality of EHCO being produced at the Hamaca field and whether this impacted CCO production.
790. The Tribunal notes that, according to the Respondents, the Hamaca field started producing lower quality EHCO which, in combination with the problems at the upgrader, reduced the volume and/or quality of the CCO being produced. As a result, the Projects had to start selling a lower quality CCO (referred to as the "Special Hamaca Blend"), as opposed to the higher quality CCO marketed by the Hamaca Project prior to the Expropriation.¹¹³⁶ The Claimants' technical expert does not dispute that, in principle, changes in the quality of the EHCO to be upgraded "would generally tend to the make the EHCO either more difficult to process or would reduce the quality of the CCO produced by the Hamaca Upgrader".¹¹³⁷
791. The Tribunal notes that the Respondents' witness, Mr. Figuera, admits that, "given the OSF that has been achieved, less EHCO feed to the upgrader than had been projected at the outset has been required. The project has therefore been able to maintain EHCO feed at about 8.2° API until now."¹¹³⁸ This statement was made on 15 August 2014. Given this observation and its timing, and coupled with the fact that the projected OSF of the upgrader is rather low (i.e. approx. 72%), the problem of EHCO quality is likely overstated in that lower production and/or quality of the CCO

¹¹³⁶ Rejoinder, fn. 1203; R-PHB, § 808; Figuera WS I, **RWS-2**, fn. 9; Figuera WS I, **RWS-2, Annex D**, fn. 18; Figuera WS I, **RWS-2, Annex B**, §§ 64-79. Mr. Figuera relies on certain Reports prepared by the Project engineers of the Hamaca Project as well as subsequent technical reports generated by the Hamaca Project. Figuera WS I, **RWS-2 Annex B**, fn. 155, 159; Petrolera Ameriven S.A., Processing of Extra Heavy Crude Oil (EHCO) of Low API Gravity, Technical Note, 11 July 2007, **C-405**.

¹¹³⁷ Earnest, ER, **CER-7**, § 130.

¹¹³⁸ Figuera, WS I, **RWS-2, Annex D**, § 22.

produced post-Expropriation seems to be attributable more to the upgrader than to the quality of the EHCO feed. The Tribunal has concluded that the reduced OSF is not attributable to any actions by the Respondents. Accordingly, any changes in CCO quality due to problems with the upgrader's performance would not be attributable to the Respondents either.

C. OIL PRICES

1. The Claimants' position

792. The second step in the Claimants' quantum assessment is to apply a "market price" to the "foregone production volumes" because of the DAs at issue.¹¹³⁹ For historical losses (i.e. from 2007 to the AUVM's valuation date) the Claimants use the "actual market price of crude oils" which are "publicly available".¹¹⁴⁰ For the future period (i.e. from the AUVM's valuation date onwards), crude oil prices are projected "based on currently available market information".¹¹⁴¹

793. Relying on their quantum expert, Mr. Abdala, the Claimants calculate the *ex post* market price for the CCO of both Projects pursuant to the following inquiry:

- i. First, the Claimants ascertain the "actual historical and projected future market prices of a primary price marker", namely, Brent.¹¹⁴² To do so, the Claimants elaborate a "single composite forecast for future Brent prices" until the expiration of the Petrozuata and Hamaca AAs (i.e. yrs. 2036 and 2037, respectively) by taking the "median" of "all available reputable Brent forecasts".¹¹⁴³
- ii. Second, the Claimants determine the price differential between Brent and a regional marker that, due to its associated higher refining costs, has historically traded lower than Brent,¹¹⁴⁴ such as Maya crude oil, a sour and heavy crude sold in the Mexican Gulf ("Maya") often benchmarked against Venezuelan crude given the commonalities between both.¹¹⁴⁵ The Claimants

¹¹³⁹ SoC, § 302; *supra*, § IV(B).

¹¹⁴⁰ SoC, § 302.

¹¹⁴¹ SoC, § 302.

¹¹⁴² SoC, § 303.

¹¹⁴³ SoC, § 304; Abdala ER I, **CER-3**, §§ 82-83.

¹¹⁴⁴ Abdala ER I, **CER-3**, § 84.

¹¹⁴⁵ SoC, §§ 303, 305.

reach this variable by “calculating the average differential forecasted by [independent analysts who forecast both Brent and Maya prices] throughout [the] relevant forecast period”.¹¹⁴⁶ A median of 13.78% is then obtained from the average differentials across the considered analyses. As such, Maya is projected to trade at a 13.78% discount to Brent over the assessed period. Conversely, Maya is projected to trade at 86.22% of the previously calculated Brent forecast.¹¹⁴⁷

- iii. Third, the Claimants determine the price differential between Maya and the Projects’ CCO in order to project the latter into the future period.¹¹⁴⁸ Here, the Claimants compare the historical market prices of the CCO produced by the Petrozuata and Hamaca Projects with the historical market price of Maya.¹¹⁴⁹ The Claimants then apply the identified differential to the Maya forecast thus arriving to the future forecast for each of the Projects’ CCO.¹¹⁵⁰ In this regard, the Claimants submit that the Petrozuata CCO “has historically traded at, or close to the price of Maya”.¹¹⁵¹ Hence, for the future period the Petrozuata CCO is projected to trade on par with Maya (i.e. at a 100% of the calculated Maya forecast).¹¹⁵² In turn, the Claimants observe a 5.56% premium in terms of the Hamaca CCO-Maya historical price differential. The Claimants therefore project the Hamaca CCO to trade at a 5.56% premium with respect to the calculated Maya forecast.¹¹⁵³ Pursuant to Articles 14.2(g) of the Hamaca AA, the foregoing 5.56% surplus differential accounts for an Adjusted Price calculated commensurate to a Brent price set at USD 27 per barrel in yr. 1996 USD (indexed for inflation).¹¹⁵⁴

794. The Claimants further submit that, in addition to the Projects’ CCO, the market price projections of by-products such as coke, sulfur, and liquefied petroleum gas (“LPG”)

¹¹⁴⁶ Abdala ER I, **CER-3**, § 85. Mr. Abdala justifies the foregoing approach, “as opposed to deriving a Maya forecast directly from the [available] Maya forecasts”, arguing that: (i) it allows incorporating as much information as possible regarding crude oil price expectations; and (ii) using the median of the direct forecasts of the reviewed Maya analysis “would have led to an almost identical Maya price series” (Abdala ER I, **CER-3**, fn. 63). The Respondents’ adopt the same methodology (Brailovsky & Flores ER I, **RER-3**, §§ 132-133).

¹¹⁴⁷ Abdala ER I, **CER-3**, § 86; Abdala ER II, **CER-8**, §§ 92-93.

¹¹⁴⁸ SoC, § 303.

¹¹⁴⁹ SoC, § 306.

¹¹⁵⁰ Abdala ER I, **CER-3**, § 87.

¹¹⁵¹ SoC, § 306.

¹¹⁵² Abdala ER I, **CER-3**, § 87(b); Abdala ER II, **CER-8**, fn. 108.

¹¹⁵³ Abdala ER I, **CER-3**, § 87(a); Abdala ER II, **CER-8**, § 95; AUV, C-PHB **Appendix E**, DA Price, Cell F-15.

¹¹⁵⁴ Abdala ER I, **CER-3**, § 81.

should also be accounted for in computing Projects' revenues on an annual basis.¹¹⁵⁵ In relation to coke and sulfur, the Claimants examine the "historical price information [...] available until the date of nationalization and calculate a Brent differential" to project said prices into the future period.¹¹⁵⁶ In relation to LPG price, the Claimants calculate a specific differential of Brent, which is applied to both the historical and future periods.¹¹⁵⁷

2. The Respondents' position

795. In order to establish the market price for the Projects' foregone production volumes, the Respondents undertake a similar three-step inquiry as the Claimants.¹¹⁵⁸ Thus:

- i. First, the Respondents project Brent oil prices into the future based on the median obtained from multiple publicly available forecasts;¹¹⁵⁹
- ii. Second, they establish the price differential between Brent and Maya to then apply the said differential to the projected Brent price (therefore obtaining the warranted Maya projection);¹¹⁶⁰ and
- iii. Third, they determine the price differential between Maya and the Project's CCO to obtain the projected price for both the Petrozuata and the Hamaca CCO.¹¹⁶¹ With respect to the latter, the Respondents account for the calculation of an Adjusted Price pursuant to Article 14.2(g) of the Hamaca AA. Thus, the Hamaca CCO is determined commensurate to a Brent price set at USD 27 per barrel in yr. 1996 USD (indexed for inflation), whilst applying both the Brent-Maya and Maya-Hamaca CCO differentials to said USD 27 Brent price benchmark.¹¹⁶²

796. However, the Respondents also submit that, in estimating the Projects' CCO price projections, the Claimants' historical and future periods are premised on: (i) unsubstantiated assumptions; and (ii) non-representative data of the Projects' actual

¹¹⁵⁵ C-PHB, **Appendix F**, § 36(d);.

¹¹⁵⁶ Abdala ER I, **CER-3**, § 192.

¹¹⁵⁷ Abdala ER I, **CLEX-002**, Price Forecast, Cell D-29; AUVIM, C-PHB **Appendix E**, DA Price, Cell D-29.

¹¹⁵⁸ R-PHB, § 800; *supra*, § 793.

¹¹⁵⁹ Brailovsky & Flores ER I, **RER-3**, §§ 123-129; *supra*, § 793.i.

¹¹⁶⁰ Brailovsky & Flores ER I, **RER-3**, §§ 131-134; *supra*, § 793.ii

¹¹⁶¹ Brailovsky & Flores ER I, **RER-3**, §§ 104-105; *supra*, § 793.iii.

¹¹⁶² Brailovsky & Flores ER II, **RER-7**, § 128; Brailovsky & Flores ER I, **RER-3**, §§ 137-139.

economics or of the crude oil market's recent conditions.¹¹⁶³ In particular, relying on their quantum experts, Mr. Brailovsky and Mr. Flores, the Respondents argue the following:

- i. From the year 2021 onwards (until the expiration of the AAs), Brent must be assumed to remain equal in nominal terms to its median forecasted price in 2020 without adjusting for inflation.¹¹⁶⁴ According to the Respondents, this approach factors in the current environment of crude oil prices. On the one hand, it accounts for, *inter alia*, the decision by the Organization of Petroleum Exporting Countries ("OPEC") not to cut crude output despite plummeting oil prices in 2014 (and continuing low prices ever since) along with a weakening global demand.¹¹⁶⁵ On the other hand, it alternatively considers OPEC's recent waning role in terms of control over global production, which is likely to shift investor focus on economic growth, inventory data, and political disruptions (as opposed to OPEC production quotas), thus generating greater volatility in oil prices.¹¹⁶⁶ In this context, long-term Brent projections beyond 2020 are unreliable and thus it is equally incorrect to accept "simplistic rules such as increases with inflation".¹¹⁶⁷ In turn, it is more appropriate to assume an "equal likelihood that [Brent] prices will end up being above or below those forecasted to 2020".¹¹⁶⁸
- ii. The pool of analyses forecasting both Brent and Maya prices used by the Claimants' quantum expert to determine the Brent-Maya differential must be expanded.¹¹⁶⁹ Accordingly, Mr. Brailovsky and Mr. Flores assess additional forecasts to the ones already considered by Mr. Abdala. By doing so, Mr. Brailovsky and Mr. Flores arrive to a median of 14.11% obtained from the average differentials across all the relevant analyses.¹¹⁷⁰ Differently stated, the Maya-Brent differential is set at 14.11%. As such, Maya is projected to trade

¹¹⁶³ R-PHB, §§ 800-809; *supra*, § 598.

¹¹⁶⁴ Brailovsky & Flores ER I, **RER-3**, § 129.c; *supra*, § 793.i.

¹¹⁶⁵ Brailovsky & Flores ER II, **RER-7**, §§ 129, 134-135.

¹¹⁶⁶ Brailovsky & Flores ER II, **RER-7**, §133.

¹¹⁶⁷ Brailovsky & Flores ER II, **RER-7**, § 140.

¹¹⁶⁸ R-PHB, § 801.

¹¹⁶⁹ *Supra*, § 793.ii.

¹¹⁷⁰ R-PHB, § 806; Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, § 283; Brailovsky & Flores ER I, **RER-3**, § 133; Brailovsky & Flores ER II, **RER-7**, § 150.

at a 14.11% discount to Brent or, conversely, at 85.89% of the previously calculated Brent forecast.

- iii. It is not entirely accurate to assume that Maya and Petrozuata CCO will trade on par.¹¹⁷¹ A more comprehensive analysis suggests that the “historical differential between actual Petrozuata CCO and Maya prices” for the relevant period yields an average differential of 0.08%.¹¹⁷² Therefore, Petrozuata CCO prices ought to be projected as trading at “100.08% to Maya, indicating that Petrozuata CCO will sell slightly above Maya”.¹¹⁷³
- iv. The alleged 5.56% of Hamaca CCO over Maya calculated by Mr. Abdala does not take into account all the available historical data from the Hamaca Project.¹¹⁷⁴ Mr. Abdala “takes actual Hamaca CCO price data only from October 2004 through May 2007”.¹¹⁷⁵ However, since 2008 the Hamaca Project has been selling a “lower-quality [CCO] instead of the higher-quality [CCO] that it had previously sold”.¹¹⁷⁶ On average, actual historical data indicates that the Hamaca CCO (i.e. the post-Expropriation lower quality CCO) has sold at 98.36% of Maya,¹¹⁷⁷ namely, at a 1.64% discount to Maya which, “consistent with the historical experience”, should be projected into the future period until the original expiration of the Hamaca AA.¹¹⁷⁸ By not considering the foregoing caveat for the historical period, the Claimants’ 5.56% premium “artificially inflat[es]” the compensation owed by the Respondents.¹¹⁷⁹

797. In terms of revenues obtained from the sales of oil by-products,¹¹⁸⁰ the Respondents make a distinction between each Project. With respect to the Petrozuata Project, the Respondents rely: (i) on historical data through 2015 for coke and sulfur and on

¹¹⁷¹ *Supra*, fn. 1151-1152.

¹¹⁷² Brailovsky & Flores ER I, **RER-3**, § 135; R-PHB, § 807.

¹¹⁷³ Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, § 286.

¹¹⁷⁴ *Supra*, fn. 1153.

¹¹⁷⁵ Brailovsky & Flores ER I, **RER-3**, § 141.

¹¹⁷⁶ Brailovsky & Flores ER I, **RER-3**, § 135; R-PHB, § 808.

¹¹⁷⁷ R-PHB, § 808.

¹¹⁷⁸ Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, § 294.

¹¹⁷⁹ R-PHB, § 808.

¹¹⁸⁰ *Supra*, § 312.

projections based on historical differentials to Brent thereafter;¹¹⁸¹ and (ii) on Brent differentials obtained from the ConocoPhillips Composite Economic Model and project those from 2007 onwards for LPG.¹¹⁸² With respect to the Hamaca Project, the Respondents submit that revenues from by-products should not be accounted for given that Article 14.2(f) of the Hamaca AA “exclude[s] such revenues” from the compensation calculation for the Hamaca Project.¹¹⁸³

3. Analysis

798. The market price for the Projects’ production prospects is certainly an essential item under the DA compensation provisions of both AAs. Its determination defines the Projects’ revenues — an input that both Parties agree constitutes the starting point for calculating the indemnity owed to the Claimants under the Petrozuata AA.¹¹⁸⁴ Similarly, be it to calculate the Reference Price or the Adjusted Price, Articles 14.2(f) and (g) of the Hamaca AA are clear in that the “SR” input of either the RNFC or the TCF requires the determination of the price applicable to the Hamaca Projects’ production volumes.¹¹⁸⁵

799. In this regard, the Tribunal notes that the Parties and their respective quantum experts coincide on the mechanics behind the calculation of the Projects’ price variable. Indeed, both Parties: (i) refer to Brent and Maya as the two main pricing benchmarks; (ii) elaborate a Brent price projection until the expiration of the Projects; (iii) calculate a Brent-Maya differential in order to project the price of Maya into the future period; and (iv) finally, calculate a Maya-Petrozuata CCO differential and a Maya-Hamaca CCO differential to determine the price at which the Projects’ production volumes would have sold had the DAs at issue not been enacted. In doing so, the Parties account for the quantum constrains imposed by the pertinent DA provisions, namely, the requirement by the Hamaca AA to determine an Adjusted Price commensurate to a fixed Brent of USD 27 per barrel.¹¹⁸⁶ The Parties also

¹¹⁸¹ Brailovsky & Flores ER I, **RER-3**, § 143; Brailovsky & Flores ER I, **RER-3 App. BF-008**, § 25-27; Brailovsky & Flores ER II, **RER-7**, p. 7 (Table 2), § 164.

¹¹⁸² Brailovsky & Flores ER I, **RER-3**, § 143; Brailovsky & Flores ER I, **RER-3 App. BF-008**, §§ 22-24; Brailovsky & Flores ER II, **RER-7**, p. 7 (Table 2), § 164.

¹¹⁸³ Brailovsky & Flores ER II, **RER-7**, fn. 213; Brailovsky & Flores ER I, **RER-3**, § 143.

¹¹⁸⁴ *Supra*, §§ 551-552.

¹¹⁸⁵ *Supra*, §§ 553, 557

¹¹⁸⁶ *Supra*, §§ 558-561. Article 14.2(g) of the Hamaca AA states that the formula for determining the Adjusted Price must be established either by the “Board” or by a “reputable” expert (*supra* § 557). The Tribunal is unaware of said formula ever being determined by the “Board”. In turn, the Tribunal considers that the Parties’ quantum experts in this arbitration are more than sufficiently “reputable” to determine the formula for the Adjusted Price. Further, the Tribunal recalls that the Parties’ quantum experts agree on how to calculate the Adjusted Price

provide their respective calculations as to the surplus that could have been obtained by the Claimants through the sale of oil by-products, such as coke, sulfur, and LPG. Overall, the application of the DA formulae is not controversial.

800. The differences in the Parties' contentions concern the scope of the data considered in the application of the DA formulae, the justifications for the respective choices, and certain underlying assumptions in relation to some of the relevant variables. In particular, the Parties disagree on the following:

- i. Whether the price of the Brent crude benchmark should be assumed to remain nominally flat from 2021 onwards (until the original expiration date of the Projects) without adjusting for inflation;
- ii. Whether the Respondents' assessment of additional forecasts is adequate in determining the Brent-Maya differential;
- iii. Whether it is accurate to set the Maya-Petrozuata CCO differential at 100% (i.e., that the Petrozuata CCO will trade on par with Maya);
- iv. Whether the price of the lower quality CCO sold by the Hamaca Project from 2008 onwards should be considered in the calculation of the Maya-Hamaca CCO differential; and
- v. Whether the sources employed by one Party to define the historical and future periods germane to oil by-products are preferable to those used by the opposing Party, and, finally, whether the DA provisions of the Hamaca AA exclude the revenues of by-products.

801. The Tribunal now addresses each issue in turn.

a. *The Brent price benchmark*

802. The crux of the problem regarding the determination of the Brent price benchmark is whether, as argued by the Respondents, it is appropriate to assume that, from 2020

(*supra*, fn. 1154, 1162). In view of this, the Tribunal deems that the requirement of Article 14.2(g) has been complied with. On the other hand, the Tribunal notes that the Petrozuata AA does not contain a similar constrain as the Hamaca AA in terms of requiring compensation commensurate to a fixed Brent price. Instead (given that the historical and expected price of Brent has been above USD 25 per barrel in Yr. 1994 USD), it limits the Respondents' indemnity obligation to: (i) 25% of the harm suffered by the Claimants, as long as said harm for any given year exceeds USD 75 million in yr. 1994 USD; or (ii) 0% of the corresponding harm, if said harm for any given year fails to exceed USD 75 million in yr. 1994 USD. This is common ground between the Parties' experts (*supra* § 549).

onwards, the price of Brent will remain equal in nominal terms without adjusting for inflation.¹¹⁸⁷

803. The Claimants contend that there are no grounds to sustain such an assumption. In their view:

Brailovsky & Flores seek to justify this constant price assumption by claiming that there are not enough market oil-price forecasts beyond 2020. But that is incorrect: as demonstrated in Dr. Abdala's Second Report, there are a sufficient number of market forecasts extending beyond 2020 to construct a reliable sample, including a forecast from the U.S. Department of Energy's Energy Information Administration. In any event, even if that were not so, there would be no excuse for refusing to recognize price inflation after 2020, as the Brailovsky & Flores forecast irrationally does.¹¹⁸⁸

804. Particularly with respect to the Respondents' position not to account for inflation, the Claimants further emphasize that "Brailovsky & Flores [do] apply inflation of 2% per year to Project costs. As a result, [...] crude oil becomes less and less valuable over time in real terms, while extracting it becomes ever more costly".¹¹⁸⁹ According to the Claimants, the Respondents' valuation requires accepting that "price of oil stays the same beyond 2020, while the price of everything else goes up";¹¹⁹⁰ a premise that, according to Mr. Abdala, "implies that profit margins become consistently lower over time",¹¹⁹¹ and this, in the Claimants' view, "is neither economically nor historically plausible".¹¹⁹²

805. The Claimants accurately describe the Respondents' position. Indeed, in light of an identified high volatility of oil prices, the Respondents contend that "forecasting long-term oil prices is a particularly speculative exercise".¹¹⁹³ According to the Respondents' quantum experts, that explains why "most forecasters simply do not forecast prices more than a few years ahead".¹¹⁹⁴ Moreover, with respect to the non-inflation of Brent prices *vis-à-vis* a projected 2% inflation of the Projects' costs, Mr. Brailovsky and Mr. Flores find "nothing odd about profit margins decreasing for particular industries, both historically and in the present".¹¹⁹⁵ This is particularly so in

¹¹⁸⁷ *Supra*, §§ 800.i., 796.i, 793.i.

¹¹⁸⁸ C-PHB, § 796.

¹¹⁸⁹ C-PHB, § 795.

¹¹⁹⁰ C-PHB, § 795.

¹¹⁹¹ Abdala ER I, **CER-3**, § 90.

¹¹⁹² C-PHB, § 795.

¹¹⁹³ R-PHB, § 801.

¹¹⁹⁴ Brailovsky & Flores ER I, **RER-3**, § 125.

¹¹⁹⁵ Brailovsky & Flores ER II, **RER-7**, § 145.

the oil industry, where profit margins in akin traditional industries are reportedly “being squeezed”.¹¹⁹⁶ In this context, the Respondents’ quantum experts note that, amidst OPEC’s possible market power decline, its hindered capacity to “set crude oil prices above competitive levels” is likely to prompt reduced profit margins as in all other “fully competitive markets”.¹¹⁹⁷

806. The Tribunal finds the Respondents’ and their experts’ concerns and allegations to be justified. First, the Tribunal notes that neither the Claimants nor Mr. Abdala challenge the Respondents’ assessment of the recent developments in the oil market industry underlying the Respondents’ Brent assumptions.¹¹⁹⁸ In particular, the Claimants have not challenged the Respondents’ arguments in relation to, *inter alia*: (i) the recent oil price plummet, which Mr. Brailovsky and Mr. Flores describe as a “structural change” in oil pricing;¹¹⁹⁹ (ii) the statement that the number of Brent forecasts projecting prices beyond 2021 tend to narrow by over 60%;¹²⁰⁰ and (iii) the possible impact in oil demand of alternative technologies within the automobile industry.¹²⁰¹ In fact, Mr. Abdala himself recognizes the “difficult[ies]” of “predict[ing]” oil prices.¹²⁰²

807. Second, the sample of long-term Brent pricing forecasts considered by the Claimants and their quantum expert seems insufficient and unconvincing. The Tribunal has noted that, contrary to Mr. Brailovsky’s and Mr. Flores’ assertion that “there are too few long-term forecasts upon which to rely”, Mr. Abdala affirms that there are “many long-term Brent forecasts beyond 2020”;¹²⁰³ thus Mr. Abdala purports to rely on “15 sources of Brent forecasts to 2025”.¹²⁰⁴ However, in the Tribunal’s view Mr. Abdala’s response does not withstand scrutiny.

¹¹⁹⁶ Brailovsky & Flores ER II, **RER-7**, § 145; McKinsey Global Institute, *Playing To Win: The New Global Competition for Corporate Profits*, September 2015, Brailovsky & Flores ER II, **RER-7 App. BF-268**, pp. 6, 33 (McKinsey Global Institute is the business and economic research arm of McKinse & Company). McKinsey Global Institute, About MGI, Brailovsky & Flores ER II, **RER-7 App. BF-269**.

¹¹⁹⁷ Brailovsky & Flores ER II, **RER-7**, §146.

¹¹⁹⁸ Brailovsky & Flores ER II, **RER-7**, §132; Abdala ER I, **CER-3**, §§ 107-122; *supra*, § 796.i.

¹¹⁹⁹ Brailovsky & Flores ER II, **RER-7**, §§ 130-132; R-PHB, § 804.

¹²⁰⁰ Brailovsky & Flores ER I, **RER-3**, § 125; Brailovsky & Flores ER II, **RER-7**, § 139.

¹²⁰¹ Brailovsky & Flores ER II, **RER-7**, § 134.

¹²⁰² Abdala ER II, **CER-8**, § 90.

¹²⁰³ Abdala ER II, **CER-8**, § 90.

¹²⁰⁴ Abdala ER II, **CER-8**, § 90. The Tribunal notes that Mr. Abdala refers to the forecasts issued by AJM, Sproule, GLJ Petroleum Consultants, McDaniel & Associates, Turner Mason & Co, HIS, Wood Mackenzie, EIA, Moody’s Analytics, Investec, Credit Suisse, Morgan Stanley, and Banco de Credito del Peru. See Abdala ER II, **CLEX-079**, p. 1; see also, Abdala/Spiller ICSID Consolidated Report, § 68

808. On the one hand, as pointed out by the Respondents' quantum experts, out of the fifteen forecasts assessed by Mr. Abdala "seven [...] do not provide annual projections of crude oil prices beyond 2020; rather, they provide only a single estimated average price for the five year period from 2021 through 2025".¹²⁰⁵ This is the case of the forecasts issued by Moody's Analytics, Investec, Credit Suisse, Morgan Stanley, GKI Research, Commonwealth Bank, and Banco de Crédito del Perú.¹²⁰⁶
809. On the other hand, perhaps to level out the aforementioned seven forecasts with those remaining in his sample (which do project Brent prices through 2037), Mr. Abdala "extends [said] seven forecasts through 2037 assuming a 2% annual inflation, **even though the forecasters do not make that assumption themselves**".¹²⁰⁷ It follows that, somewhat consistent with Mr. Brailovsky's and Flores' observation that long-term forecasts are scarce compared to short-term forecasts,¹²⁰⁸ Mr. Abdala's sample of true long-term forecasts must be deemed reduced by a 53.3% (i.e. from fifteen to eight). The Parties do not directly discuss whether the reliability of Mr. Abdala's Brent price calculations are affected by this fact. Nevertheless, the Tribunal finds it telling that the Claimants' quantum expert projected such a fundamental pricing benchmark without properly representing the assessed data.
810. Third, the evidence on record suggests that long-term forecasts are particularly speculative. The considerable variation in terms of Brent price estimation between Mr. Abdala's first and second expert reports attest to that. As correctly noted by Mr. Brailovsky and Mr. Flores:
- In his first report in this Arbitration (filed on July 2015), [Mr. Abdala] projected that Brent prices would reach US\$ 100 per barrel in 2024. In his second report, just 10 months later, he projected that Brent prices would reach US\$ 100 per barrel in 2034, 10 years later. That a long-term projection would change so dramatically in just 10 months shows the lack of reliability of any long-term price projection.¹²⁰⁹
811. The Tribunal agrees and further notes that even the Claimants' internal documents confirm the apprehension towards relying on long-term price forecasts. During its 2014 annual stockholder meeting, ConocoPhillips only forecasted oil prices through

¹²⁰⁵ Brailovsky & Flores ER II, **RER-7**, § 144; Abdala ER II, **CLEX-079**, pp. 19-20.

¹²⁰⁶ Abdala ER II, **CLEX-079**, pp. 1, 19-20.

¹²⁰⁷ Brailovsky & Flores ER II, **RER-7**, § 144 (emphasis added); Abdala ER II, **CLEX-079**, pp. 19-20.

¹²⁰⁸ *Supra*, fn. 1200

¹²⁰⁹ Brailovsky & Flores ER II, **RER-7**, § 140; R-PHB, § 802.

2017.¹²¹⁰ Moreover, it did so with a broad margin of error. For instance, for Brent, ConocoPhillips estimated prices ranging from approximately USD 80 to USD 120 per barrel;¹²¹¹ a projection that in any event certainly failed to “contemplate the possibility of oil prices dropping into the [USD 30 to USD 40 per barrel] range, as occurred in 2015 and 2016”.¹²¹²

812. Subsequent to this price drop, ConocoPhillips issued an update to its investors on 2 June 2016. There, it did not make any projections beyond 2017.¹²¹³ In addition, ConocoPhillips: (i) acknowledged some of the macroeconomic contingencies driving down oil prices advanced by the Respondents in this arbitration, such as “excess [crude] inventories and ongoing demand uncertainty”;¹²¹⁴ (ii) noted that “rating agencies” have “materially lowered long-term price outlook[s]”;¹²¹⁵ and (iii) more importantly, recognized that the “[p]ath to price recovery remains unclear”.¹²¹⁶
813. In light of the aforementioned circumstances, the Tribunal considers that the Respondents’ calculations up to 2020 are appropriate (i.e. reaching Brent price of USD 67.50 per barrel in 2020). Indeed, insofar as they represent short-term projections, the Tribunal deems them more reliable than the Claimants’. That being said, the Tribunal finds that assuming a nominally flat Brent price of USD 67.50 per barrel from 2021 until the expiration of both Projects,¹²¹⁷ is unfathomable. This is particularly so given that, as pointed out by the Claimants, the Respondents precisely apply a post-2020 yearly 2% inflation rate to the Projects’ costs.¹²¹⁸
814. The Respondents provide an explanation for such an assumption, by stating that, “in the current environment, long-term crude oil price forecasts assuming simplistic rules such as increases with inflation are simply not reliable”.¹²¹⁹ The implication of that, however, is that world oil prices will be immune to inflation; an assumption that is untenable and in any event has not been adequately substantiated by either the Respondents or their quantum experts.

¹²¹⁰ Brailovsky & Flores ER I, **App. BF-095**, p. 10.

¹²¹¹ Brailovsky & Flores ER I, **App. BF-095**, p. 10.

¹²¹² R-PHB, § 804.

¹²¹³ Brailovsky & Flores ER II, **App. BF-267**, p. 3.

¹²¹⁴ Brailovsky & Flores ER II, **App. BF-267**, p. 3; *supra*, fn. 1165.

¹²¹⁵ Brailovsky & Flores ER II, **App. BF-267**, p. 3.

¹²¹⁶ Brailovsky & Flores ER II, **App. BF-267**, p. 3 (emphasis added).

¹²¹⁷ *Supra*, § 796.i.

¹²¹⁸ C-PHB, § 795; Abdala ER I, **CER-8**, § 89.

¹²¹⁹ R-PHB, § 801; Brailovsky & Flores ER II, **RER-7**, 140.

815. In turn, the Tribunal finds that the Claimants' assumption of a 2% yearly inflation rate applicable to Brent is reasonable. Therefore, the Tribunal shall apply a 2% inflation rate to the Respondents' post-2020 Brent forecast.¹²²⁰ This results in the price of Brent reaching USD 94.52 per barrel in 2037.

b. The Brent-Maya differential

816. The Claimants argue in favor of a Maya differential of a 13.78% discount to Brent (i.e. Maya is projected to trade at 86.22% of the determined Brent forecast),¹²²¹ while the Respondents submit that a 14.11% differential is more appropriate (i.e. Maya is projected to trade at 85.89% of the determined Brent forecast).¹²²² The variation between the Parties' differentials boils down to the Respondents' consideration of additional independent analyses forecasting both Brent and Maya prices throughout the relevant forecast period.¹²²³

817. The Claimants' quantum expert does not *per se* contest the use of additional sources in calculating the Brent-Maya differential. Rather, Mr. Abdala submits that the Respondents' quantum experts "end up with an overestimated differential" by: (i) basing their calculation on both "short-term forecasts (Barclays, Platts and JP Morgan)" and "long-term forecasts";¹²²⁴ and (ii) assigning "the same weight to the short-term differential forecasts as the long-term differential forecasts, despite the fact that long-term differentials are generally lower than short-term differentials (and short-term forecasts were trending downwards)".¹²²⁵

818. The Tribunal finds Mr. Abdala's arguments to be unpersuasive. First, as pointed out by Mr. Brailovsky and Mr. Flores,¹²²⁶ the Tribunal notes that Mr. Abdala also relied on both short-term and long-term differentials in his first expert report. In particular, Mr. Abdala then based his calculations on, *inter alia*, one of the criticized short-term

¹²²⁰ Abdala ER II, **CER-8**, § 91.

¹²²¹ Abdala ER I, **CER-3**, §§ 85-86; Abdala ER II, **CER-8**, §§ 92-93.

¹²²² R-PHB, § 806; Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, § 283; Brailovsky & Flores ER I, **RER-3**, § 133; Brailovsky & Flores ER II, **RER-7**, § 150.

¹²²³ Barclays, *Energy: US Crude Export Ban Lift: EPS Changes*, December 21, 2015, Brailovsky & Flores ER I, **RER-3 App. BF-86**; BMO Capital Markets, *Oil & Gas: Lower for Long Enough*, December 22, 2015, Brailovsky & Flores ER I, **RER-3 App. BF-87**; Phil Gresh, John M. Royall and Anthony Yu, J.P. Morgan, *Refining 2016 Outlook*, December 15, 2015, Brailovsky & Flores ER I, **RER-3 App. BF-88**; *Steps, though Deleveraging Still a Long Journey*, August 15, 2016, Figure 12 - Global Macro Assumptions, August 15, 2016, Brailovsky & Flores ER I, **RER-3 App. BF-256**, Barclays, *Petrobras: Positive*, p. 16; Brailovsky & Flores ER I, **RER-3**, § 135; Brailovsky & Flores ER I, **RER-3**, § 133; Brailovsky & Flores ER II, **RER-7**, § 150.

¹²²⁴ Abdala ER II, **CER-8**, § 93;

¹²²⁵ Abdala ER II, **CER-8**, § 93;

¹²²⁶ Brailovsky & Flores ER II, **RER-7**, fn. 265.

forecasts used by the Respondents' quantum experts, namely, Platts.¹²²⁷ In view of the foregoing, the Tribunal observes that Mr. Abdala "first calculate[d] the average implied price differential forecasted for each individual analyst for the forecast period, and then compute[d] the median of the average price differentials".¹²²⁸ Therefore, in line with Mr. Brailovsky and Mr. Flores, Mr. Abdala likewise assigned the same weight to short and long-term forecasts in his initial determination of the Brent-Maya differential.¹²²⁹

819. Second, it does not seem to the Tribunal that the consideration of additional short-term forecasts together with long-term forecasts would be unwarranted. To the contrary, the Tribunal agrees with the Respondents' quantum experts in that, "given [the] few forecasters [...] for Maya, using short-term forecasts (when available) alongside long-term forecasts can help increase the sample size and the reliability of the median differential".¹²³⁰ To some extent, Mr. Abdala appears to share the same understanding. Indeed, when justifying his methodology for calculating the Brent-Maya differential (i.e. using forecasts employing both Maya and Brent as opposed to those exclusively using Maya-based forecasts and with which the Respondents agree), Mr. Abdala stressed the importance of "allow[ing] the "incorporat[ion]" of "as much information as possible regarding crude oil price expectations".¹²³¹ The exclusion of additional short-term forecasts (and arguably less speculative), such as those employed by the Respondents, seems to run contrary to that logic.
820. In light of the above, the Tribunal deems that the Respondents' expansion of the pool of assessed forecasts is apposite for the purposes of achieving a more solid statistical sample. This will in turn lead to greater confidence in the projected forecast. Accordingly, the Tribunal determines that the Maya differential must be set as

¹²²⁷ Abdala ER I, **CER-3**, § 189. The Tribunal notes that the Platts forecast was initially considered by Mr. Abdala to be a long-term forecast (Abdala ER I, **CLEX-039**, pp. 1, 3). Such a classification, however, does not withstand scrutiny. Unlike the other forecasts used by Mr. Abdala (i.e. AJM Deloitte, Sproule, Turner, Mason & Company, IHS, GLJ Petroleum Consultants, and Wood Mackenzie), which project prices through the expiration of the AAs, Platts only accounts for a 5-year forecast.

¹²²⁸ Abdala ER I, **CER-3**, § 189.

¹²²⁹ The Tribunal notes that, in his second expert report, Mr. Abdala disposed of the use of short-term forecasts. Indeed, the Platts short-term forecast appears to have been replaced by a long-term forecast issued by BMO (Abdala ER II, **CLEX-079**, p. 2). This perhaps explains why the 14.81% differential established in Mr. Abdala's first expert report was subsequently reduced to a 13.78% differential in his second expert report (Abdala ER I, **CER-3**, §§ 190, 86; Abdala ER II, **CER-8**, § 92). Nevertheless, the foregoing substitution simply maintains the same number of forecasts in the Claimants' pool of assessed samples. The fact that the Respondents' quantum experts consider additional forecasts, albeit both short and long-termed, seems preferable in terms of attaining a more reliable differential (*infra*, § 603).

¹²³⁰ Brailovsky & Flores ER II, **RER-7**, fn. 265.

¹²³¹ *Supra*, fn. 1146.

calculated by the Respondents' quantum experts, namely, at a 14.11% discount to Brent.

c. *The Maya-Petrozuata CCO differential*

821. On this point, the Parties are in virtual agreement. The Claimants suggest a Maya-Petrozuata CCO differential of 0%, that is, an estimation that the Petrozuata CCO will trade at 100% of the calculated Maya forecast.¹²³² The Respondents' position varies slightly: they calculate a Maya-Petrozuata CCO differential of 0.08%, suggesting that the Petrozuata CCO will trade at 100.08% to Maya.¹²³³
822. The Tribunal is of the view that the Respondents' calculations are preferable. First, the Tribunal notes that Mr. Abdala's 0% differential is premised on the observation that, historically, the Petrozuata CCO has traded "at" or "close" to the price of Maya.¹²³⁴ Such a standard, being undetermined, tolerates variations such as the 0.08% premium calculated by the Respondents.
823. Second, when confronted with the Respondents' slight differential adjustment, Mr. Abdala did not consider the calculations by Mr. Brailovsky and Mr. Flores to be erroneous. To the contrary, Mr. Abdala concedes to be "essentially [in] agree[ment]" with the Respondents' quantum experts,¹²³⁵ and that the latter's calculation "is very close to [his] zero differential".¹²³⁶
824. Third, Mr. Abdala accepts that Mr. Brailovsky's and Mr. Flores' Maya-Petrozuata CCO differential is "based on updated information on Petrozuata syncrude prices".¹²³⁷
825. Fourth, Mr. Abdala states that his calculation of the Maya-Petrozuata CCO differential has been updated by "apply[ing] the actual information introduced by Respondents for the historical period".¹²³⁸ However, Mr. Abdala nonetheless "retain[s]" his "forecasted Petrozuata syncrude price at par with [his] Maya forecast".¹²³⁹ The

¹²³² Abdala ER I, **CER-3**, § 87(b); Abdala ER II, **CER-8**, fn. 108.

¹²³³ Brailovsky & Flores ER I, **RER-3**, § 135; R-PHB, § 807; Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, § 286.

¹²³⁴ SoC, § 306.

¹²³⁵ Abdala ER I, **CER-3**, § 95.

¹²³⁶ Abdala ER I, **CER-3**, fn. 108.

¹²³⁷ Abdala ER I, **CER-3**, fn. 108.

¹²³⁸ Abdala ER I, **CER-3**, fn. 108.

¹²³⁹ Abdala ER I, **CER-3**, fn. 108.

Tribunal thus finds Mr. Abdala's insistence on a 0% differential to be somewhat contradictory.

826. In light of the above, the Tribunal determines that the proper Maya-Petrozuata CCO differential must be set at a 0.08% premium over Maya. As such, the foregone production volumes of the Petrozuata CCO must be indemnified under the DA provisions of the Petrozuata AA assuming that the Petrozuata CCO has and will trade at 100.08% to Maya.

d. The Maya-Hamaca CCO differential

827. The issue here relates to the post-Expropriation sale of a lower quality CCO trading at a discount to Maya, as opposed to premium to Maya as occurred pre-Expropriation. The Respondents contend that the need to produce said lower quality CCO responds to the reduced performance of the Hamaca upgrader and the lower quality of the EHCO feed in need of processing.¹²⁴⁰ In turn, the Claimants argue that the alleged change in quality is the result of post-Expropriation managerial decisions for which the Claimants "cannot be penalized".¹²⁴¹

828. Having considered the Claimants' arguments,¹²⁴² the Tribunal has come to the conclusion that, post-Expropriation, the Hamaca Project has effectively sold lower quality CCO at a discount to Maya.¹²⁴³ This seems to be undisputed by Mr. Abdala.¹²⁴⁴

829. In this regard, the Tribunal has established elsewhere that the changes in CCO quality are not attributable to actions by the Respondents.¹²⁴⁵ In view of this, the Tribunal finds no reason to depart from the *ex post* historical price data provided by

¹²⁴⁰ *Supra*, § 796.iv; R-PHB, fn. 1722.

¹²⁴¹ Reply, § 430; C-PHB, § 797.

¹²⁴² C-PHB, § 797 ("Respondents have not proven that such a change has actually occurred [...]").

¹²⁴³ Brailovsky & Flores ER I, **RER-3**, fn. 246.

¹²⁴⁴ Abdala ER II, **CER-8**, §§ 86, 95 ("For the period up to 2016, the major difference between the experts' assumptions is Brailovsky and Flores's use of a lower price for the **syncrude** sold by the Hamaca Project [...]. While Brailovsky and Flores and I essentially agree on the price relationship between Petrozuata **syncrude** and Maya crude, we disagree with respect to Hamaca **syncrude**. Brailovsky and Flores rely upon pricing data from crude oil sold by Hamaca post-expropriation, which was influenced **by the sale of a lower quality, and thus lower priced, syncrude**") (emphasis added). In this regard, the Tribunal notes that the Claimants refer to "syncrude" or "SCO", terms that stand for Synthetic Crude Oil, as upgraded ECHO (SoD, § 48). In turn, the Tribunal recalls that the term "CCO", which stands for "Commercial Crude Oil", also refers to upgraded EHCO (*supra*, fn. 1028). It follows that the terms Commercial Crude Oil, CCO, Synthetic Crude Oil, syncrude, and SCO, can be used interchangeably (*supra*, fn. 900). Indeed, the Claimants themselves have expressly adhered to this view (Tr. (Day 11) 2823:18 - 2824:2 (Flores)).

¹²⁴⁵ *Supra*, § 791.

the Respondents (denoting that Hamaca CCO has traded at a discount to Maya). For the valuation's future period, the Tribunal shall therefore apply a negative Maya-Hamaca CCO differential of 1.64%. Accordingly, the foregone production volumes of Hamaca CCO must be compensated under the assumption that Hamaca CCO has and will continue to trade at 98.36% of Maya.

e. By-products

830. The Parties' submissions do not openly discuss the Projects' by-products or their pricing. Rather, it is the Parties' respective quantum experts that deal with the matter. In this regard, the Tribunal notes that there is only one main contention raised by Mr. Brailovsky and Mr. Flores, namely, that the Hamaca AA excludes the consideration of by-products when calculating the compensation owed to the Claimants under its DA provisions.¹²⁴⁶ As such, the Respondents' quantum experts submit that Mr. Abdala errs by "including the by-product revenues in his calculations" for Hamaca, as he did in his first expert report.¹²⁴⁷
831. All the other specificities as to how to determine the sale price of coke, sulfur, and LPG are not really in dispute. Mr. Brailovsky and Mr. Flores do differ from Mr. Abdala in terms of the methodology and sources used to determine the historical and future price for each item.¹²⁴⁸ Yet, neither expert openly characterizes the other's approach as flawed or necessarily incorrect. Accordingly, the Tribunal understands that it is called upon to decide which employed methodology and sources are more appropriate in light of all relevant circumstances.
832. With the foregoing in mind, the Tribunal notes that the exclusion of by-product sales from the compensation owed to the Claimants under the DA provisions of the Hamaca AA is ultimately uncontroversial. As to whether or not Article 14.2(f) of the Hamaca AA excludes by-products,¹²⁴⁹ in his second expert report Mr. Abdala stated having "corrected the treatment of Hamaca's by-product revenues under the Discriminatory Provisions Scenario".¹²⁵⁰ Correspondingly, Mr. Brailovsky's and Mr. Flores' second expert report highlights as an "Are[a]r of Agreement between Claimants and Respondents" that the "[c]ompensation calculations for the Hamaca

¹²⁴⁶ *Supra*, fn. 1183.

¹²⁴⁷ Brailovsky & Flores ER I, **RER-3**, § 162.

¹²⁴⁸ *Supra*, §§ 794-797.

¹²⁴⁹ *Supra*, fn. 1183.

¹²⁵⁰ Abdala ER I, **CER-3**, fn. 16.

Projec[t] assume no royalty on [...] coke and sulfur”.¹²⁵¹ Moreover, in his updated valuation model Mr. Abdala only appears to assign value to revenues obtained from CCO sales.¹²⁵² Therefore, the Tribunal is of the view that Mr. Abdala has addressed the issue and deems the matter closed. In other words, the Tribunal does not need to make a particular determination on this issue, as a decision in favor of either Party should have no impact on the quantum of this case.

833. With respect to coke and sulfur, the Respondents’ quantum experts rely on the historical figures provided by Mr. Figuera to establish the coke and sulfur prices from 2007 through 2015. Mr. Brailovsky and Mr. Flores then calculate the average differentials to Brent, which they then use to project their coke and sulfur prices from 2016 onwards.¹²⁵³ While adopting the same underlying methodology, the Claimants’ quantum expert obtains the corresponding Brent differential from historical data running from 2005 to 2007 (i.e. pre-Expropriation data).¹²⁵⁴

834. In the context of an *ex post* date-of-award valuation, the Respondents’ reliance on post-Expropriation data is *ab initio* preferable. However, as established elsewhere, *ex ante* data may be preferred where the Tribunal determines that a particular set of *ex post* data is unsubstantiated.¹²⁵⁵ This appears to be the case at hand. Indeed, the data provided by Mr. Figuera to Mr. Brailovsky and Mr. Flores seems to be unsourced; it lacks supporting documentation.¹²⁵⁶ As such, it cannot be corroborated. Given that neither the Respondents nor their quantum experts refer to additional or otherwise objective evidence aside from Mr. Figuera’s testimony, the Tribunal deems the Respondents’ coke and sulfur calculations and projections to lack documental support. Accordingly, the Tribunal shall apply the calculations offered by Mr. Abdala despite being grounded on *ex ante* data.

835. As to LPG, the issue turns on the calculation of the most suitable LPG-Brent differential, as both Parties’ experts define their LPG projection based on some

¹²⁵¹ Brailovsky & Flores ER II, **RER-7**, Table 6.

¹²⁵² AUVI, C-PHB **Appendix E**, DA Revenues (HC), Cell B30. The Tribunal notes that the referred tab makes no mention to LPG. However, contrasted with the tab dealing with Petrozuata revenues (“Revenues (PZ)”), which does, the Tribunal understands that, *a contrario*, the “DA Revenues (HC)” tab assigns no value to LPG sales.

¹²⁵³ Brailovsky & Flores ER I, **RER-3**, fn. 256-257; Brailovsky & Flores ER II, **RER-7**, fn. 296; Brailovsky & Flores ER I, App. BF-008, §§ 26-27.

¹²⁵⁴ Abdala ER I, **CER-3**, § 192.

¹²⁵⁵ *Supra*, §§ 578-580.

¹²⁵⁶ Figuera WS I, **RWS-2**, fn. 78, 141, 143; Figuera WS I, **RWS-2, Annex A**, §§ 13, 39; Figuera WS I, **RWS-2, Annex D**, § 102.

differential to Brent.¹²⁵⁷ Mr. Brailovsky and Mr. Flores calculate theirs from differentials included in the ConocoPhillips Composite Economic Model.¹²⁵⁸ Mr. Abdala, however, is unclear as to the sources utilized for the calculation of his 74.49% LPG-Brent differential.¹²⁵⁹ In fact, the Tribunal notes that the Respondents' quantum experts characterize Mr. Abdala's differential as "unsourced";¹²⁶⁰ an assertion that neither the Claimants nor Mr. Abdala appear to have rebutted. In view of this, the Tribunal finds the Respondents' LPG calculations to be more reliable than the Claimants'. The LPG price projection must therefore be calculated in accordance with an LPG-Brent differential of 57.86%, as calculated by the Respondents' quantum experts.¹²⁶¹

D. PROJECT COSTS

836. The next step in the assessment of damages is to determine the Projects' costs, namely the expected capital expenses ("CAPEX") and the expected operating expenses ("OPEX"). This input of the quantum analysis actually comprises two sub-inputs: first, whether actual costs incurred post-Expropriation should be accounted for in the costs projections and to what extent; and second, how should the overall costs be adjusted to account for macroeconomic factors such as inflation and prevailing exchange rate between the Venezuelan Bolivar and the USD (the latter being the currency in which revenues were earned). The Tribunal will first set out the Parties' positions before setting out its determination of the above two issues in turn.

1. The Claimants' position

837. In respect of the Projects' expected costs, Mr. Abdala argues that "production and costs are closely related, as costs represent the inputs needed to obtain a certain level of production".¹²⁶² Consequently, in order to ensure consistency between his cost and production estimates, Mr. Abdala relies on the same pre-Expropriation business planning documents that he used to forecast the production volumes for each Project: specifically, the Composite Economic Model for the Petrozuata Project and the Ameriven Model for the Hamaca Project.

¹²⁵⁷ *Supra*, fn. 1157, 1182.

¹²⁵⁸ Brailovsky & Flores ER I, **RER-3**, § 143; Brailovsky & Flores ER I, **App. BF-008**, §§ 22-24; Brailovsky & Flores ER II, **RER-7**, p. 7 (Table 2), § 164.

¹²⁵⁹ Abdala ER I, **CLEX-002**, Price Forecast, Cell D-29; AUVI, C-PHB **Appendix E**, DA Price, Cell D-29.

¹²⁶⁰ Brailovsky & Flores ER II, **RER-7**, p. 7 (Table 2).

¹²⁶¹ Brailovsky & Flores ER I, **App. BF-008**, § 23.

¹²⁶² Abdala ER II, **CER-8**, § 72.

838. The Composite Economic Model estimates total CAPEX (expressed in real terms) for the Petrozuata Project as USD 1,955 million from June 2007 until 2036.¹²⁶³ Similarly, the Ameriven Model estimates total CAPEX (in real terms) for the Hamaca Project as USD 3,369 million from June 2007 until 2037.¹²⁶⁴ The aggregate OPEX predicted by these Models for both Projects is USD 27.5 billion. Mr. Abdala then adjusts these projections upwards to obtain the nominal values.¹²⁶⁵
839. As was the case with production volumes, Mr. Abdala states that he cannot rely on the actual post-Expropriation data as it does not accurately reflect the costs that would have been incurred applying a but-for analysis. Hence, he uses the projections in the abovementioned models instead.¹²⁶⁶
840. Having so determined the costs estimates and projections, Mr. Abdala adjusts the same to bring them to nominal terms by applying the US Producer Price Index for inflation.
841. Turning to the Respondents' case on Project costs, the Claimants submit that the "additional costs" sought to be included by Mr. Brailovsky and Mr. Flores are "(i) unreasonable and/or unnecessary; (ii) unsupported by the evidence; and (iii) ever-changing, and therefore unreliable".¹²⁶⁷ On this basis, the Claimants assert that the additional costs sought to be included by the Respondents should be disallowed.
842. In addition, Mr. Abdala also states that Mr. Brailovsky and Mr. Flores overstate costs by using an exchange rate for Bolivar-denominated costs that does not reflect how the Projects would have operated with a private entity like the Claimants. In doing so, the Respondents further reduce the extent of damages payable.¹²⁶⁸
843. In sum, the Claimants assert that the Tribunal should disregard the additional costs proposed by the Respondents and instead adopt the costs projections in the 2006 Models alone. Moreover, with respect to applicable inflation and exchange rates, the

¹²⁶³ Abdala ER I, **CER-3**, § 78; **CLEX-007**.

¹²⁶⁴ Abdala ER I, **CER-3**, § 72; **CLEX-031**.

¹²⁶⁵ Nominal values are those that are adjusted for inflation. The Parties' arguments regarding inflation will be discussed subsequently. Mr. Abdala converts the constant-dollar operating expenses projections to U.S. nominal-dollar terms using an escalation index composed of: (a) a specific U.S. PPI index measuring inflation in the E&P industry between year 2006 and the date of valuation; and (b) anticipated E&P inflation, which he estimates by using an index composed of expected U.S. general inflation (weighted 85%) and expected crude oil price variation (weighted 15%) from the date of valuation.

¹²⁶⁶ Abdala ER II, **CER-8**, § 70.

¹²⁶⁷ C-PHB, § 810.

¹²⁶⁸ Abdala ER II, **CER-8**, § 66(b), Table 9.

Claimants emphasize that a more favourable exchange rate should apply in order to nullify the effect of inflation, and provide a true reflection of Project costs.

2. The Respondents' position

844. Although the Respondents also start their cost estimates with the Composite Economic Model and the Ameriven Model, they disagree with the approach followed by the Claimants which in their view “fails to take into account actual operating experience from 2007” and assumes that costs unforeseen in the 2006 models would not have been incurred in the but-for scenario.¹²⁶⁹
845. The Respondents' experts state that it is an “elementary fact that, because of the inherent uncertainties in oil development projects, budgets are frequently revised and updated. These updates include managerial changes, such as the decision to drill additional wells, or adjustments to account for macroeconomic factors, such as changes in oil prices or host-country inflation.”¹²⁷⁰ Accordingly, they assert that the 2006 business documents cannot form the exclusive basis for assessing costs in a but-for analysis. Consequently, in order to account for the environment that the Projects would have experienced, the Respondents' experts include actual *ex post* cost data based on the testimony of Mr. Figuera and Mr. Patino.¹²⁷¹ The additional costs included by the Respondents are costs incurred for well drilling and repairs, solids handling, turnaround and maintenance of the Projects' upgraders and other operational costs not contemplated in the 2006 business planning documents, which resulted in higher OPEX and CAPEX for the Projects.
846. In response to the Claimants' criticism of their cost projections, the Respondents submit that the costs sought to be included by them are sufficiently substantiated and reliable and should therefore be included.
847. Having thus provided their cost estimates, which include actual *ex post* costs, the Respondents adjust these costs for inflation. In this respect, the Respondents critique the Claimants' approach, asserting that by “convert[ing] the bolivar-based costs from the 2006 models to their [USD] equivalents in 2006 [USD] [and] then inflat[ing] those costs using a U.S. inflation index [the Claimants] completely immunize the Projects

¹²⁶⁹ Brailovsky/Flores ICSID Consolidated Report, § 192.

¹²⁷⁰ Brailovsky/Flores ICSID Consolidated Report, § 192.

¹²⁷¹ Brailovsky/Flores ICSID Consolidated Report, §§ 206-207; Figuera WS I, **RWS-2**, §§ 40, 42, 51, fn. 114. See also, Figuera WS I, **RWS-2, Annex D**.

from Venezuelan inflation and exchange rate policies, as if the Projects were located in Texas, [and] subject only to U.S. inflation.”¹²⁷²

848. The Respondents recall that the Projects were in Venezuela and thus take into consideration Venezuelan inflation rates and the absence of timely devaluation of the Bolivar, which together resulted in increased costs. Accordingly, while accounting for inflation and exchange rates, the Respondents’ experts duly account for the Projects’ costs actually incurred in Bolivars and are therefore subject to the effects of the Venezuelan macroeconomic factors.¹²⁷³

3. Analysis

849. The Tribunal notes that the starting point for both Parties’ experts to estimate Projects costs in the but-for analysis are the 2006 business planning documents previously used by Mr. Abdala to forecast oil production, i.e., the Composite Economic Model for the Petrozuata Project and the Ameriven Model for the Hamaca Project.

850. From this common starting point however, the Parties’ experts go their separate ways. The dispute in connection with the Project’s CAPEX and OPEX projections revolves around the following issues: first, whether the Projects costs should be purely those indicated in the 2006 models (as argued by the Claimants) or whether they should take into account additional costs incurred/to be incurred by the Projects after the Expropriation (as argued by the Respondents) (**IV.D.3.a**). Second, having determined the Projects costs, how should inflation and exchange rates be accounted for (**IV.D.3.b**).

851. The Tribunal addresses each of the above issues below.

a. *Whether the Projects’ cost projections should include post-Expropriation “additional costs”?*

852. The Tribunal notes that the dispute between the Parties revolves around whether or not the following categories of costs should be included as part of Project costs in an *ex post* valuation:¹²⁷⁴

¹²⁷² R-PHB, § 772.

¹²⁷³ Brailovsky & Flores ER I, **RER-3**, n 65; Brailovsky & Flores ER 2, **RER-7**, §§ 46-47, 57-61, 157.

¹²⁷⁴ The Tribunal notes that the dispute is not whether a particular category of cost should be accounted towards OPEX or CAPEX, but rather whether this category should be included in the costs projections at all. In the circumstances, the Tribunal shall examine each category individually to the extent that the Parties’ submissions allow it to do so. The Tribunal finds that this is also reflective of the methodology in the AUVM. However, for the

- i. Well repair costs;
- ii. Costs incurred towards solids handling at the Petrozuata Project;
- iii. Costs incurred towards PRAC and PREMs in connection with the Hamaca upgrader;¹²⁷⁵
- iv. Drilling and related costs;
- v. Costs associated with upgrader turnaround at both Projects; and
- vi. Costs associated with electricity generation, installation of firefighting equipment and other upgrader related improvements at the Projects.

853. Given that the Respondents assert the inclusion of the above cost categories, the Tribunal considers it apposite to first set out the Respondents' position and then the Claimants', before setting out its determination with respect to each category.

i. The Respondents' position

854. The Respondents overall position on the "additional costs" can be summed up as follows:

[T]he "additional costs" included by Respondents and their experts in the historical period are appropriately supported and would have been incurred in a "but for" world. The costs that have not yet been incurred but that will be required in the future are fully supported by the record. That some cost items have been dropped (e.g. expansion and modernization at the solids handling facility) or deferred (e.g. firefighting systems at Petrozuata) does not change the fact that costs that were incurred would have been incurred in the "but for" world. Finally, the fact that the pre-nationalization models do not include the additional costs is completely irrelevant to an *ex-post* analysis. Indeed, the fact that the Claimants' *ex post* costs match their *ex ante* costs (except for U.S. inflation) shows that their entire *ex post* analysis is not credible, as the one thing certain in any long-term oil project is that cost projections cannot be accurate for 30 years. The essence of any *ex post* analysis is to take account of the changes that invariably occur over the course of those 30 years, not to blindly follow projections that bear no relationship to reality, as the Claimants want this Tribunal to do.¹²⁷⁶

855. In light of the above general position, the Respondents address each of the cost categories and the Claimants' objections to their inclusion as follows:

sake of clarity, the Tribunal notes that the disputed additional OPEX comprises of (i)-(iii) above and disputed additional CAPEX comprises of (iv)-(vi).

¹²⁷⁵ PRAC stands for "Restoration Plan for Critical Assets" and PREM stands for "Restoration Plan for Major Equipment". See *infra*, fn. 1314.

¹²⁷⁶ R-PHB, § 799.

(1) Well repair costs

856. As regards well repair cost estimates, the Respondents' experts propose a figure of USD 360,000 (in Yr. 2007 USD) per well, on the basis that this was the same figure proposed in the *Mobil* ICC and ICSID cases. In response to the Claimants' criticism that use of this estimate is not reliable, the Respondents explain that the wells at issue in the *Mobil* cases and those at the Petrozuata and Hamaca Projects are very similar. Accordingly, it can be expected that the average cost of a relatively straightforward well repair (such as a pump replacement) will be the same.¹²⁷⁷

(2) Solids Handling facilities

857. The Tribunal understands that a significant amount of coke and sulphur are produced as by-products when EHCO is upgraded to CCO. These by-products have to be loaded onto vessels for transportation to markets elsewhere. The Petrozuata Project operates a Solids Handling Facility where the solids (coke and sulfur) from the Projects are collected, prepared for shipment and loaded onto vessels for export.¹²⁷⁸

858. It appears that there were two post-Expropriation incidents in 2009 (i.e. after the Claimants relinquished control of the Projects), which damaged the Solids Handling Facility and resulted in several hundred million dollars being expended to repair the same. That aside, while the Solids Handling Facility was out of commission, the coke and sulphur had to be stored in temporary storage piles in the vicinity.¹²⁷⁹ For the purposes of transporting the solids to the temporary storage, trucks had to be hired and costs incurred in this respect. The Respondents claim additional trucking costs of USD 250 million.¹²⁸⁰

859. In response to the Claimants, the Respondents' rather brief submission on the costs incurred with respect to the Solids Handling Facility and those incurred for trucking is that (i) despite repairs being implemented, the Solids Handling Facility was not operating properly; and that therefore (ii) trucking costs had to be incurred and (iii) if such costs were not incurred, it would mean that upgrading operations would have to

¹²⁷⁷ Patiño ER I, **RER-4**, fn. 20; Patiño ICSID Consolidated Report, fn 179.

¹²⁷⁸ Earnest ER, **CER-7**, § 102.

¹²⁷⁹ Tr. (Day 5), 1284:3-14 (Mr. Figuera); Figuera WS I, **RWS-2, Annex D**, §§ 99-101.

¹²⁸⁰ These OPEX were incurred as follows: USD 7,151,325 in 2009, USD 3,001,293 in 2010, USD 35,322,929 in 2011, USD 96,351,309 in 2012, USD 64,466,776 in 2013 and USD 66,784,442 in 2014. Figuera WS I, **RWS-2, Annex E**, nn. 171, Figuera WS I, **RWS-2**, nn. 153-154. Mr. Figuera notes that "the costs relate not only to transporting the coke and sulfur, but, as the contracts show, also to the management of the large piles of coke, labor, fire prevention and other costs".

be curtailed in order to reduce the production of solid by-products.¹²⁸¹ Thus in a nutshell, the Respondents' defense is that such costs were necessary and were in fact incurred and therefore should be accounted for.

(3) PREM and PRAC costs

860. As noted above, the PREM and PRAC were authorized and implemented in 2012 by the Project partners at the time (i.e. PDVSA Sub and Chevron) in order to improve the OSF of the Hamaca upgrader. It is not disputed that despite the PREM and PRAC, such improvements have been negligible.
861. According to the Respondents however, merely because certain costs are not contemplated in the 2006 business planning documents is not reason enough to disqualify them from being included in the *ex post* assessment.¹²⁸² They add that in this instance, the PREM and PRAC costs were approved by all Project participants including Chevron, and were pursuant to a detailed assessment of the problems at the Hamaca upgrader.¹²⁸³ As such, they contend that the fact that these costs had to be incurred is not unjustified.
862. Regarding the Claimants' contention that the PREM and PRAC costs are unsubstantiated, the Respondents contend that the Claimants have "ignored the stacks of documents that have been appended to Mr. Figuera's witness statements and produced in the document production phase of this case".¹²⁸⁴ They further object to the Claimants' attempt to account for every single dollar spent and argue that the evidence produced is sufficient proof that the amounts claimed have been incurred and should be counted in an *ex post* valuation.¹²⁸⁵ As regards the alleged lack of substantiation of the cost of future PRAC and PREMs, the Respondents submit that these have not been incurred and therefore by definition, there cannot be invoices or other documents in support of the same. Instead, they note that their witness Mr. Figuera has made a good faith estimation that the average cost of future PREMs will replicate the average cost of the previous PREMs and on this basis arrived at cost estimates.¹²⁸⁶ Accordingly, the Respondents submit that the cost projections for

¹²⁸¹ R-PHB, § 792; Figuera WS 2, **RWS-4**, fns. 50, 52.

¹²⁸² R-PHB, § 787.

¹²⁸³ Figuera, WS I, **RWS-2**, § 40. C-PHB, fn 1266, 1503; Figuera, WS I, **RWS-2**, **App. 43**.

¹²⁸⁴ C-PHB, fn 1677.

¹²⁸⁵ C-PHB, § 788.

¹²⁸⁶ Figuera, WS I, **RWS-2**, §§ 40, 51(i), n.146.

PREM in 2016-2022 are reasonable and should be accounted for in the *ex post* calculations.

(4) Drilling and well pads costs

863. The Respondents allocate the following drilling costs: USD 2,900,000 per well for single lateral wells used in cold production, USD 3,800,000 for EOR wells plus USD 1,800,000 per well for surface facilities for the Hamaca Project and USD 3,500,000 for dual lateral wells along with associated costs for the Petrozuata Project.¹²⁸⁷ In support of their drilling costs estimates, the Respondents submit that the Claimants' own witnesses have acknowledged the reasonableness of the Respondents' projections. In particular, the Respondents point out that Mr. Brown testified that USD 3.5 million as overall drilling costs for the Petrozuata Project is a reasonable estimate and also comports with the Claimants' own estimates made in 2006.¹²⁸⁸ This was also confirmed by another of the Claimants' witnesses during the ICSID proceedings.¹²⁸⁹
864. As regards the Claimants' allegation that the Respondents are including costs for drilling wells fitted with EOR but not accounting for incremental production which would result due to the use of EOR, the Respondents' experts clarify that they have only included the CAPEX associated with drilling EOR compatible wells. Their costs estimates do not include additional CAPEX or OPEX that would have been incurred had EOR projects actually been implemented at the Projects. Accordingly, they submit that there is no contradiction between their costs estimates and production profiles and thus, the former in relation to drilling costs ought to be allowed.¹²⁹⁰

(5) Turnaround costs

865. According to the Respondents, the discrepancy between the "turnaround costs implicit in the 2006 models and the costs actually incurred by the Projects shows the absurdity of relying on outdated economic models", as Mr. Abdala does, for projecting

¹²⁸⁷ Reply, § 455.

¹²⁸⁸ Tr. (Day 4); 959:24-960:16 (Mr. Brown) (**Q.** Okay. And then right next to where I was looking, it says: "Incremental CAPEX assumes 3.5"--MM is million; right? **A.** I believe so, yes. **Q.** "3.5 million average per well"? **A.** That's what I would read that as: 3.5 million average per well. That would be normal nomenclature. **Q.** Okay. And was what the cost of the wells were that were being inspected at the time? **A.** I presume that is the cost of the wells, the completion, the wellhead, the pad and all the incremental costs associated with the wells. The wells themselves, my remembrance is the actual drilling if the well is significantly less than that; but, when you load it up with all the incremental costs which are associated with the well, that's probably what that represents. I didn't prepare that, but certainly that's what I would expect it to represent). The Tribunal notes that Mr. Brown was discussing the ConocoPhillips October 2006 Presentation that was made soon after the 2006 Business Plan. See Figuera, WS I, **RWS-2, App. 151**, p.6 (ConocoPhillips October 2006 Presentation).

¹²⁸⁹ February 2017 ICSID Hearing Transcript, **R-280**, p.1959-1961.

¹²⁹⁰ Brailovsky/Flores ICSID Consolidated Report, §§ 216-217.

turnaround costs.¹²⁹¹ The Respondents' point out that Mr. Earnest himself confirmed that he found the Claimants' projections of future turnaround costs to be low.¹²⁹²

866. As to the Claimants' attempt to compare the costs of pre-nationalization turnarounds with post-nationalization turnarounds and those projected for future turnarounds, the Respondents submit that the comparison is inapposite for various reasons. First, they submit that Mr. Earnest's figures ignore the effect of Venezuela's macroeconomic factors, namely the high inflation experienced in the post-Expropriation period, which would have the effect of increasing costs.¹²⁹³
867. Second, they submit that the scope of the pre-Expropriation turnarounds was much more limited, inasmuch as they were only partial turnarounds or "Pit Stop" turnarounds and thus rather obviously cost less than the full-scale turnarounds that took place in 2009 and 2012. According to the Respondents, it stands to reason that "more extensive turnarounds would be more expensive".¹²⁹⁴ They buttress their argument by emphasizing that it was Chevron – a private commercial and international oil company like the Claimants – that was in charge of managing the turnarounds.¹²⁹⁵
868. Third, the Respondents rely on a study which reported that turnaround costs averaged a 15% increase each year from 2000-2008¹²⁹⁶ and the Project partners' expectation in 2006 that a full turnaround would cost 5-10 times more, in support of their higher post-Expropriation turnaround costs.

(6) Electricity generation and firefighting equipment costs

869. As regards costs incurred for the installation of firefighting equipment, the Respondents submit that additional firefighting equipment has been installed at the Petrozuata Project and that through 2014, approx. USD 10 million has been spent on

¹²⁹¹ R-PHB, § 777.

¹²⁹² Tr. (Day 8), 2271:1-6 (Mr. Earnest).

¹²⁹³ R-PHB, §§ 778-779.

¹²⁹⁴ R-PHB, §§ 780-781; Figuera, WS 1, **RWS-2, Annex D**, §§ 59, 97, fn 135, 210; Figuera, WS 1, **RWS-2, App. 82**; Figuera, WS 1, **RWS-2, App. 46**; Figuera, WS 1, **RWS-2, App. 100**; Figuera, WS 1, **RWS-2, App. 114**.

¹²⁹⁵ Figuera, WS 1, **RWS-2, Annex D**, fn 135. It appears that the technical and operations manager who is in charge of managing turnarounds was a Chevron appointee.

¹²⁹⁶ Figuera, WS 1, **RWS-2, App. 124** (Solomon Associates Presentation).

the same. The Respondents also submit that these costs have been sufficiently substantiated.¹²⁹⁷

870. As regards the costs incurred for increasing electricity generation capacity at both Projects, the Respondents submit that pursuant to a 2009 decree, PDVSA and its affiliates received directions to reduce reliance on hydroelectric power due to a nation-wide power shortage.¹²⁹⁸ Pursuant to the aforesaid Decree, the Hamaca Project allegedly installed 40 megawatts of power generating capacity at a cost of USD 95 million. The Respondents submit that this cost has been duly substantiated and should be included in the *ex post* cost estimates.¹²⁹⁹

871. In response to the Claimants' allegation that this cost is inflated, the Respondents submit that the allegation is baseless as the "costs for the electricity generating equipment were fully documented and approved by the PetroPiar Financing Department, which was headed by a Chevron appointee".¹³⁰⁰

ii. The Claimants' position

872. The Claimants reiterate their reliance on only the 2006 pre-Expropriation business planning documents as their basis to determine the expected Project costs for the full duration of the Projects' terms.¹³⁰¹ In support, the Claimants reiterate the same arguments they had made in connection with production volumes.¹³⁰²

873. Turning to Brailovsky and Flores' costs projections, the Claimants note that the additional post-Expropriation costs sought to be included in the Respondents' valuation add a "staggering US\$9.1 billion of additional costs items over the remaining 30 years of the Petrozuata and Hamaca Projects' terms" which "amount[s] to a doubling of the expected per-barrel operating expenses, and a quadrupling of the capital expenses", vastly exceeding the projections made by Mr. Abdala.¹³⁰³

¹²⁹⁷ Figuera, WS 1, **RWS-2, App. 148** (Contract for Improvements to the Fire-Fighting System at the PetroAnzoategui Upgrader (Phase I) and Invoices); Figuera, WS 1, **RWS-2, Annex E**, § 66.

¹²⁹⁸ Figuera, WS 1, **RWS-2, App. 69**.

¹²⁹⁹ R-PHB, § 798; February 2017 ICSID Hearing Transcript, **R-280**, pp. 2399-2400; Figuera, WS 1, **RWS-2, App. 140** (Invoices for the purchase of Petropiar's Turbo Generators).

¹³⁰⁰ R-PHB, § 798; February 2017 ICSID Hearing Transcript, **R-280**, pp. 2399-2400

¹³⁰¹ Abdala ER I, **CER-3**, §§ 72, 78.

¹³⁰² *Supra*, §§ 588-595, 607-612; C-PHB, §§ 802-804.

¹³⁰³ C-PHB, §§ 805-806. Compare **CLEX-078** with App. BF 215.

874. First, the Claimants' expert, Mr. Abdala, asserts that the Respondents' cost projection is a contradiction in terms. He points out that if the "additional costs" asserted by the Respondents were to be accepted along with their reduced production volumes, then the post-tax cash flows of both Projects would become negative post-2015 and permanently negative in 2024 (for Petrozuata)¹³⁰⁴ and 2027 (for Hamaca).¹³⁰⁵ According to Mr. Abdala, if the financial performance of the Projects was so poor as to make them commercially unviable, then they should have been shut down. However, the reality is that the Projects continue to operate. In fact, they appear to have generated dividends of around USD 8.8 billion in value to their shareholders between June 2007 and 2014.¹³⁰⁶ In the circumstances, Mr. Abdala concludes that the Respondents' cost projections are facially incredible and ought to be rejected.
875. In the alternative, the Claimants call into question the "additional costs" alleged by the Respondents on three grounds: either that they are (i) unreasonable and/or unnecessary; or (ii) unsupported by evidence; or (iii) ever-changing and therefore unreliable. On this basis, the Claimants ask the Tribunal to conclude that the aforementioned categories of "additional costs" would not have been incurred in the but-for scenario and should therefore be rejected. Accordingly, the Tribunal shall now examine the Claimants' arguments on each cost category indicated above.¹³⁰⁷

(1) Well repair costs

876. With respect to the costs incurred for well repairs, the Claimants submit that these are entirely unsubstantiated. The Claimants point out that the cost of USD 360,000 per well (in Yr. 2007 USD) for repairs allocated by the Respondents' expert, Mr. Patino, is "based on the testimony by a different claimant in a different arbitration"¹³⁰⁸ and that these costs are unverifiable.¹³⁰⁹

(2) Solids handling costs

877. According to Mr. Earnest, the approx. USD 250 million costs that the Respondents assert were spent on trucking costs (to collect and transport the solids to such

¹³⁰⁴ Abdala ER II, **CER-8**, Figure 4.

¹³⁰⁵ Abdala ER II, **CER-8**, Figure 5.

¹³⁰⁶ Abdala ER II, **CER-8**, §§ 23-28; Petroanzoategui, 31 December 2014 Financial Statements, Abdala ER II **CLEX-081**, Note 16, pp. 34-37.

¹³⁰⁷ *Supra*, §§ 852.i-852.vi.

¹³⁰⁸ Abdala/Spiller, ICSID Consolidated Report, fn 157.

¹³⁰⁹ Abdala/Spiller, ICSID Consolidated Report, § 152(a).

alternate storage piles between 2009 and 2014) are entirely absurd.¹³¹⁰ First, the Claimants contend that these costs far exceed the amount required to repair the Solids Handling Terminal and therefore it did not make commercial sense for the Respondents to have incurred such high trucking costs.¹³¹¹ Second, Mr. Earnest draws attention to a Government Inspection Report, which found that the contracts with the trucking company used for transporting the solids were illegal.¹³¹² This inspection report also found that the job of refurbishment of the solids management area at the upgraders (which would have included the Solids Handling Terminal) was awarded to a company with no experience and in fact the work was never completed which contributed to the excess trucking costs incurred over a longer period of time.¹³¹³

(3) PREM and PRAC costs

878. The Claimants call into question the additional costs of USD 1 billion allocated for the PREM and PRAC maintenance of the Hamaca upgrader on the ground that (i) they were never contemplated in the Ameriven Model; and (ii) the expenditures are entirely unsubstantiated.¹³¹⁴ In this respect, the Claimants assert that of the 2012-2015 costs actually incurred for the PREM, less than 15% is documented.¹³¹⁵

¹³¹⁰ C-PHB, § 818; Earnest ER, **CER-7**, §§ 102-104.

¹³¹¹ The Claimants point to the fact that Mr. Figuera himself states that the cost of repairing the Solids Handling Terminal would have been in the range of USD 37.5 million. However, according to Mr. Figuera, the Project was apparently considering a solution that would use revenues from the possible sales of coke and sulphur to offset the cost of the eliminating the coke pile. Figuera, WS 1, **RWS-2**, § 51, fn. 155.

¹³¹² **C-358**, pp. 26, 29-30. According to the Respondents, the alleged illegality of this contract pertained to whether the situation justified awarding of the contract without a tender process. The actual value of the contract was not impugned. See Figuera, WS 2, **RWS-4**, fn. 50.

¹³¹³ *Id.*

¹³¹⁴ It appears that after the 2009 turnaround of the Hamaca Project did not improve the OSF, the Board of Directors of the then Hamaca JVC commissioned a comprehensive review of the upgrader by a joint team of experts from PDVSA, Chevron and independent consultants. The team concluded that the upgrader was running at very inefficient OSF. Accordingly, it appears that the then Hamaca JVC prepared two plans: the Restoration Plan for Critical Assets or PRAC and the Restoration Plan for Major Equipment or PREM for improving the performance of the Hamaca upgrader. The PREM was expected to be carried out annually from 2012-2022. The PRAC was carried out in 2012 along with the Hamaca Project's third turnaround and allegedly cost around USD 313.2 million. The first PREM was also carried out in 2012 and cost around USD 44.4 million. Overall, the Respondents' witness Mr. Figuera states that USD 350 million was spent in 2012 on activities to improve the performance of the Hamaca upgrader. Figuera, WS 1, **RWS-2**, § 40.

¹³¹⁵ C-PHB, § 835; Reply, § 455. The Claimants submit that of the USD 356,850,000 alleged to have been spent on these PREMs, Mr. Figuera has provided invoices for only USD 8.6 million of USD 44.4 million claimed for 2012 (Figuera, WS 1, **RWS-2**, **App 115**), provided invoices for only USD 11.1 million of USD 67.5 million claimed for 2013 (Figuera, WS 1, **RWS-2**, **App 117**), provided invoices for only USD 23.2 million of USD 113.0 million claimed for 2014 (Figuera, WS 1, **RWS-2**, **App 118**, **App 166**); and provided invoices for only USD 1.1 million of USD 131.9 million claimed for 2015 (Figuera, WS 1, **RWS-2**, **App 167**). The Claimants' 15% calculation is based upon PDVSA's proposed exchange rates; application of alternative exchange rates would mean that an even smaller fraction of this claim is documented.

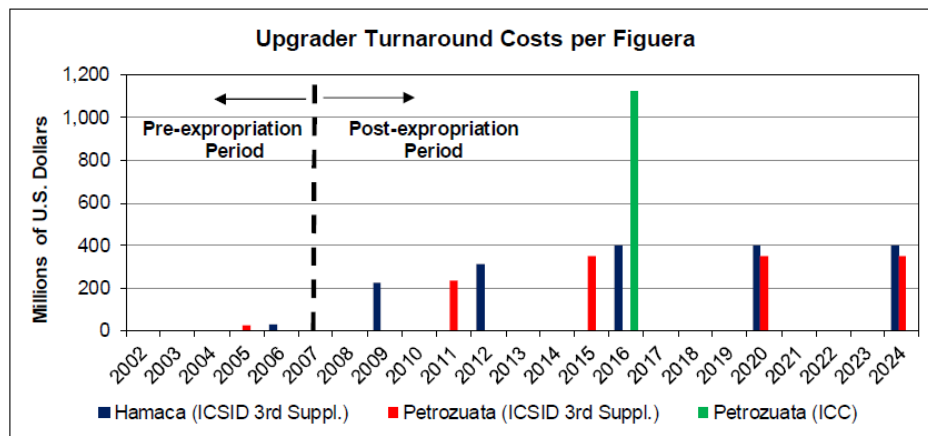
Furthermore, for the 2016-2022 PREM costs, no documentation has been supplied by Mr. Figuera.

(4) Drilling and well pad costs

879. According to the Claimants, the costs for wells and wellpads are entirely unsubstantiated and this should be dispositive of the case in their favour.¹³¹⁶ With respect to the cost estimated for EOR wells at the Hamaca Project, the Claimants point to the alleged obvious contradiction in the Respondents’ case, where on the one hand, the production volumes are estimated on the basis of cold production techniques only. Yet, the costs take into account the more expensive wells that were capable of supporting EOR.

(5) Turnaround costs

880. The Claimants note that the Respondents’ experts include “huge alleged past and future costs for “turnarounds” i.e. upgrader maintenance shutdowns occurring approximately every four years”, which are not only multiples greater than those envisaged by the Project partners in the pre-Expropriation period,¹³¹⁷ but also greater than the costs that were actually incurred in the pre-Expropriation period. The Claimants’ expert on turnaround costs, Mr. Earnest, illustrates his submission as follows:¹³¹⁸



881. The aforesaid figure “shows the turnaround costs at the Petrozuata and Hamaca Upgraders in 2005 and 2006 prior to expropriation, as well as the turnaround costs reported by Mr. Figuera for 2009 and 2012 [and...] the range of costs that Mr. Figuera

¹³¹⁶ Reply, § 455; C-PHB, fn. 1499.

¹³¹⁷ Earnest ER, CER-7, §§ 79-80.

¹³¹⁸ Earnest ER, CER-7, § 16, Figure 2.

provides in his various statements for a Petrozuata turnaround originally scheduled for 2015, which was then postponed into 2016, as well as Mr. Figuera's estimates for future turnaround costs at both upgraders".¹³¹⁹ According to Mr. Earnest, when compared with the pre-Expropriation costs, Mr. Figuera's post-Expropriation costs are "commercial nonsense". Moreover, the Claimants assert that the Respondents have produced no reliable evidence to support their proposal of such high turnaround costs.¹³²⁰

882. Finally, in order to expose the incredible nature of the Respondents' projections, Mr. Earnest reflects the turnaround cost as proposed by the Respondents as a percentage of the construction cost of the upgrader. He opines that Mr. Figuera's projections add up to about 20% of the construction cost of the entire facility. In other words, he explains that "if you have a five-room house, what Mr. Figuera would have [the Parties do] is [knock] down one room every four years and [rebuild] it new."¹³²¹

883. In conclusion, the Claimants draw attention to the fact that despite the massive expenditures on turnaround and maintenance costs, the OSF of the upgraders remained extremely low. Thus, not only were the Projects "money-pits" but also uneconomical. To the Claimants, it makes no sense for the Respondents to expropriate Projects that were in such a state and any arguments to this effect are evidently self-serving.¹³²²

(6) Electricity generation and firefighting equipment costs

884. According to the Claimants, the costs for installation of electricity generation and firefighting equipment were not contemplated by the 2006 business planning documents and are not sufficiently substantiated. Accordingly, these costs should not be included in the *ex post* cost estimates.¹³²³

iii. The Tribunal's determination

¹³¹⁹ Earnest ER, **CER-7**, § 16

¹³²⁰ C-PHB, §§ 813-814.

¹³²¹ Tr. (Day 8), 2228:19 – 2229:3 (Mr. Earnest); Earnest ER, **CER-7**, §§ 76-79 (He states that "[i]n effect, when the turnaround and annual maintenance cost is combined, Mr. Figuera is claiming that every 4 years about 19 percent of the upgrader must be replaced. Based upon my industry experience, this level of maintenance expenditure greatly exceeds that required by a competent operator executing a well-planned turnaround effort").

¹³²² C-PHB, § 815.

¹³²³ Reply, § 455.

885. Having examined the Parties' submissions on the six categories of disputed additional costs, the Tribunal sets out its determination on each category below.
886. First, with respect to well repair costs for the Petrozuata Project, the Respondents' expert Mr. Patino relies on the well repair costs used in the Mobil ICC and ICSID cases in connection with the Cerro Negro Project. The Tribunal is not persuaded by the Respondents' case and finds that they have failed to sufficiently justify why they are excused from independently demonstrating well repair costs on the basis of the existing wells at the Petrozuata and Hamaca Projects. Given that it is the Respondents' own case to rely on actually incurred costs, they should thus prove such costs. In other words, there is insufficient basis for the Respondents to instead rely (as the Claimants put it) on "the testimony of a different claimant from a different arbitration", which is not in any way connected to the present arbitration. Thus, as far as the well repair costs are concerned, the Tribunal finds that the Respondents have not sufficiently demonstrated the reliability of their costs estimates.
887. Second, as regards the costs incurred for solids handling and for trucking, the crux of the Claimants' objection to these costs is that they are far in excess of the costs required to repair the damage caused to the Solids Handling Facility, and thus no prudent operator would have incurred such high costs for trucking as an alternative. The Respondents' only response to this contention is that the trucking costs were allegedly necessary, have been incurred for five years between 2009 and 2014, and must therefore be accounted for. They submit that despite repairs being carried out, the Solids Handling Facility was not operating at optimal levels. Therefore, it was necessary to continue storing solid by-products at the alternate location and incurring the respective trucking costs.
888. The Tribunal is not convinced by the Respondents' arguments. According to the Respondents themselves, the cost that would be incurred in repairing the Solids Handling Facility is approximately USD 37.5 million. In comparison, the amount that was incurred by the Respondents in trucking costs between 2009 and 2014 is approx. USD 250 million.¹³²⁴ The sheer disparity between these two figures calls into question the reliability of these costs. If, as the Respondents admit, repairs did not solve the damage caused to the Solids Handling Facility, given the arguably lower cost of such repairs, it would have been less expensive to undertake further repairs than to incur exorbitant trucking costs. In light of the disparity, for the trucking costs to be justified

¹³²⁴ The Tribunal notes that these costs have in fact been supplied by the Respondents themselves. See Figuera, WS 1, **RWS-2, Annex E**, § 60.

as necessary, the Respondents ought to have demonstrated that incurring additional costs to repair the Solids Handling Facility would have been more expensive and therefore commercially non-viable *vis-à-vis* incurring additional trucking costs. Instead, the Respondents merely state that despite repairs, the Solids Handling Facility continued to have problems and therefore the trucking costs had to be incurred. As the Claimants correctly point out, that in itself is no justification for incurring trucking costs which are almost five times greater than the cost of repairs, and that too, for a period of five years between 2009 and 2014.¹³²⁵ In light of the above, the Tribunal need not examine the Claimants' other argument that the trucking contract was allegedly illegal and/or that the consideration payable under the contract was allegedly inflated.

889. In the circumstances, regardless of the fact that such costs may have been actually incurred, the Tribunal finds that they were attributable to the Respondents' business decisions. As the Claimants correctly point out, no prudent operator would have allowed such costs to be incurred for an extended duration. Accordingly, the Tribunal cannot accept these costs.
890. The third category of costs that is disputed is the costs incurred towards PREM and PRAC for improvement and maintenance of the Hamaca upgrader. The Claimants call into question these costs on the ground that less than 15% have been properly substantiated. In particular, the Claimants' expert found that of the USD 356,850,000 alleged to have been spent on these PREMs, Mr. Figuera has provided invoices for only the following amounts:
- i. USD 8.6 million of USD 44.4 million claimed for 2012;
 - ii. USD 11.1 million of USD 67.5 million claimed for 2013;
 - iii. USD 23.2 million of USD 113.0 million claimed for 2014;
 - iv. USD 1.1 million of USD 131.9 million claimed for 2015.
891. The Respondents do not deny that they have only provided partial invoices, however these invoices are numerous. The Respondents' counterargument is that, in demonstrating costs, every penny needs not be accounted for. While the principle relied on by the Respondents is practical, in the facts of the present case, the Tribunal finds that the disparity between the amounts claimed to have been expended

¹³²⁵ C-PHB, §§ 818-820

by the Respondents, and the portion of costs in respect of which they have provided actual substantiation, is too great. The Tribunal is of the view that this disparity is sufficient to call into question the reliability of the Respondents' costs figures.

892. The above is buttressed by Mr. Figuera's admissions during the Hearing. When questioned about turnaround costs and the documents he had provided to substantiate the same, Mr. Figuera stated as follows:

Q. Now, your position is that, since the Expropriation, Project costs have increased dramatically; is that right?

A. Yes, of course.

Q. And you asserted that there have been a number of new or increased cost items that the Project participants didn't anticipate prior to the Expropriation; right?

A. That's right.

Q. Now, with your various Witness Statements, you provided a few large files of cost documents, including copies of contracts and some invoices. Do you remember that?

A. Amazing numbers, yes. Significant numbers.

Q. Did you compile those documents yourself?

A. No.

Q. The documents are not indexed in any way. Do you recall that?

A. No, I don't.

Q. PdVSA did not have them reviewed or audited for the purposes of this case by any accountant or other expert, to your knowledge, did it?

A. Not to my knowledge.¹³²⁶

893. It transpires from the above testimony that Mr. Figuera merely provided an "amazing number" of documents to purportedly support the Respondents' costs claim for PREM and PRAC, but that these documents have not been verified in any manner. In the circumstances, the Tribunal is unable to accept the Respondents proposed upgrader maintenance costs.

894. For the sake of completeness, the Tribunal notes that the aforesaid costs are comprised of the additional OPEX claimed by the Respondents and disputed by the

¹³²⁶ Tr. (Day 5), 1256:16-1257:12 (Mr. Figuera)

Claimants. For the purposes of reflecting the above decision in the AUVM, the toggles in the Costs Panel of the AUVM for OPEX shall be set to “Abdala”.¹³²⁷

895. The next three categories of costs are the additional CAPEX costs that are disputed by the Claimants.
896. The first of such CAPEX is costs incurred towards drilling additional wells at the Petrozuata and Hamaca Projects. With respect to the additional cost of USD 3.5 million per well in light of the testimony given by the Claimants’ witness, Mr. Brown,¹³²⁸ the Tribunal finds that the Parties are in agreement as to the cost of drilling dual lateral wells. Therefore, with respect to such wells, the Tribunal finds that additional costs of USD 3.5 million per new well can be included in the post-Expropriation costs estimates.
897. What remains in dispute is the cost of drilling single lateral wells for cold production as well as whether to account for the cost of wells fitted for EOR. With respect to the costs of drilling single lateral wells for cold production, the Tribunal finds that the figure of USD 2.9 million per single lateral well has been proposed by the Respondents on the basis of Mr. Figuera’s testimony,¹³²⁹ who in turn makes a good faith estimate of the same. As the Claimants correctly point out, the Respondents have not produced any documents to explain how Mr. Figuera arrives at such good faith estimate. Accordingly, the Tribunal is unconvinced that the Respondents have sufficiently established the cost of drilling single lateral wells.
898. Turning to the wells that were fitted for EOR, the Tribunal acknowledges that the Respondents have only included the cost of drilling wells that are EOR compatible and not the cost of actually implementing EOR techniques at these wells. However, in application of the but-for test, the Tribunal must examine what costs would have been incurred had the Claimants remained with the Projects. The Tribunal has previously concluded that the Claimants were never contemplating implementing EOR techniques at the Projects.¹³³⁰ Therefore, in the but-for scenario it is unlikely that the Claimants would have signed off on the additional costs necessary to drill EOR compatible wells (as opposed to cold production compatible wells), especially when they would have gained no benefit from the same. Any reasonable and commercially

¹³²⁷ C-PHB, Annex F, § 29(a)(i) – 29(a)(ii).

¹³²⁸ *Supra*, fn 1288.

¹³²⁹ Brailovsky & Flores ER I, **RER-3**, §§ 185, 197; Figuera, WS 1, **RWS-2, Annex B**, §§ 34-35.

¹³³⁰ *Supra*, § 717.

prudent entity would have ensured that such costs would have been borne by the entity who would end up benefitting from the eventual EOR implementation. Accordingly, the Tribunal finds that the cost incurred for drilling EOR compatible wells cannot be included in an *ex post* valuation.

899. The second CAPEX relates to turnaround costs for the Petrozuata and Hamaca upgraders. In this respect, the Respondents rely on actual costs expended on the turnarounds whereas the Claimants rely on the turnaround costs projected in the 2006 business planning documents. Having examined the Parties' positions and the evidence on record, the Tribunal is unable to accept the Respondents' position.
900. First, in support of their turnaround cost estimates, the Respondents rely on a study conducted by Solomon Associates (a firm that purportedly conducts benchmarking studies in the refinery industry including studies concerning turnaround costs) which predicted that the cost of turnarounds averaged a 15% increase each year from 2000-2008.¹³³¹ Having examined the document on record, the Tribunal finds that it does not support the Respondents' case in any manner. First, this document appears to be a pamphlet or brochure and is merely two pages long. Second, the document is taken out of context. There is nothing in the document to indicate how the above conclusions regarding the increase in turnaround costs has been arrived at, much less whether the same consideration will apply to EHCO projects in Venezuela. In the circumstances, this does not in any way support the Respondents' case.
901. Second, apart from the above study, the Respondents also appear to be arguing that their turnaround cost estimates are reliable and justified in light of the fact that these turnarounds were managed by the foreign partners in the Project, i.e. in the case of the Hamaca Project, the turnarounds were managed by Chevron.¹³³² However, the Tribunal is of the view that the participation of an international oil company in and of itself does not justify or support the extent of the costs incurred on turnarounds and those estimated for additional turnarounds. The Respondents cannot fall back on the presence and/or participation of Chevron to substantiate their costs. In the circumstances, the Tribunal finds that the Respondents' turnaround cost estimates are untenable. Accordingly, the Tribunal shall adopt the turnaround costs estimated by the Claimants.

¹³³¹ Figuera, WS 1, **RWS-2**, App. 124.

¹³³² R-PHB, § 780.

902. The Tribunal notes that while the Claimants' turnaround cost estimates do raise certain questions,¹³³³ on the whole they are more reliable than those proposed by the Respondents. Additionally, it is also worth noting that the turnaround costs are a significant portion of the Project's CAPEX and, as the Claimants' have pointed out, accepting the high costs proposed by the Respondents results in a situation where the Projects would become economically unviable.¹³³⁴
903. The third and final CAPEX comprises costs incurred for installation of electricity generating capacity at both Projects and for installation of fire-fighting equipment.
904. With respect to the costs incurred for the installation of electricity generating capacity, the Tribunal finds that the inclusion of such costs is justified. As the Respondents point out, the installation of such electricity generation capacity was mandated by law. In that regard, the relevant provisions of the Decree state as follows:

**BOLIVARIAN REPUBLIC OF VENEZUELA. MINISTRY OF THE POPULAR
POWER FOR ELECTRICAL ENERGY NO. 002. CARACAS, NOVEMBER 2,
2009**

[...]

CONSIDERING

That demand for energy is rapidly increasing, which makes it necessary to adopt policies that promote the efficient use of energy and guarantee energy sustainability for future generations of Venezuelans and protect the environment;

RESOLVES:

Article 1. The Corporación Eléctrica Nacional, S.A. (CORPOELEC), its affiliates, **Petróleos de Venezuela, S.A. (PDVSA), its affiliates, and any other State Company with thermoelectric generation capacity should immediately proceed to carry out all necessary actions to maximize the use of all of such generation, including the installation of new rapid-response generation equipment units**, recovery of unavailable units and all those that are feasible to be put into operation within a period of no more than six (6) months [...]¹³³⁵

905. The reason for passing the above Decree was the rapidly increasing demand for energy in Venezuela and not conditions which were attributable solely to the Respondents. Accordingly, the effects of such a Decree would have applied even in the but-for world to PDVSA and thus the Projects in which it was a participant.

¹³³³ In this respect, the Tribunal notes that the Claimants' expert Mr. Earnest did consider these estimates to be "somewhat low". Tr. (Day 8), 2270:20-2271:10 (Mr. Earnest)

¹³³⁴ *Infra*, § IV.H.5.

¹³³⁵ Figuera, WS 1, **RWS 2, App. 69**, p. 372.731

906. In addition to the above, the Tribunal finds that the Respondents have produced the invoices necessary to substantiate the costs that are being claimed for such installation.¹³³⁶ Thus, the Respondents have established that such costs were incurred and were necessary. By contrast, the Tribunal finds that the Claimants' only defense appears to be that the costs are unsubstantiated, which is clearly not the case. In the circumstances, the Tribunal finds that the costs incurred for the installation of electricity generation must be included.
907. With respect to costs incurred for the installation of firefighting equipment, the Tribunal finds that the Respondents have sufficiently substantiated the incurrence of such costs through the testimony of their witness as well as the invoices provided. The Respondents have demonstrated that the initial proposal to implement fire-fighting equipment estimated the costs to be approx. USD 100 million.¹³³⁷ Of this estimated expenditure, the Respondents have substantiated the incurrence of USD 10 million through invoices.¹³³⁸ As regards the remaining sum, the Tribunal is satisfied with Mr. Figuera's explanation that these amounts are being deferred to future years. In this regard, the Claimants have sought to call into question these costs on two grounds: first, that they were not included in the original costs projections. However, this is no basis to disregard a cost that had to be incurred. Second, they argue that if a reasonable and favourable exchange rate were applied, the overall costs of the firefighting equipment would reduce to USD 10 million. However, the Claimants' second ground of challenge is defeated by the numbers. In that, the proposed USD costs component of the firefighting equipment was projected at USD 25 million. This component was not subject to any exchange rate and would not have reduced to USD 10 million as the Claimants contend. In the circumstances, the Tribunal finds that the costs incurred towards firefighting equipment should be granted in the Respondents' favour.
908. Thus, for the purposes of reflecting the above decision on CAPEX in the AUVM, the toggles for "Drilling and Wellpads" and "Turnaround costs" should be set to Abdala, and the toggle for "Others" should be set to Brailovsky and Flores.

¹³³⁶ Figuera, WS 1, **RWS 2, App. 140**.

¹³³⁷ Figuera, WS I, **RWS-2, App. 83** (PDVSA, Investment Proposals Summary Sheet, Improvements in the Firefighting System of the Petroanzoátegui Upgrader, July 2014). The costs for the firefighting project were estimated in mid-2014 to consist of USD 25 million (in actual U.S. dollars) and 472.5 million Bolivars which, at the official exchange rate of Bs. 6.3 per USD, was equal to USD 75 million.

¹³³⁸ Figuera, WS I, **RWS-2, App. 148** (Contract No. 1B-112-037-D-12-S-0023 between PDVSA Petróleo, S.A. and ICM Proyectos 2001, C.A., Improvements to the Fire-Fighting System at the PetroAnzoátegui Upgrader (Phase I), dated June 19, 2012, and Invoices).

909. Apart from the fact that the Claimants have successfully called into question the Respondents' cost projections, the Tribunal is also persuaded by the Claimants' argument that if the Respondents' costs projections were to be accepted, the Projects would become permanently loss making. It stands to reason that neither of the Project Participants would be agreeable to such an eventuality in the but-for world. In the circumstances, the Tribunal finds that its decision to adopt the Claimants' cost estimates is also reinforced by these considerations.

b. *What is the appropriate inflation and exchange rate?*

910. The Tribunal understands that the costs projections in the 2006 business models are reflected in real terms, i.e. they are not adjusted for inflation and the applicable exchange rates between the Venezuelan Bolivar and the USD. Therefore, both Parties' experts adjust these values to account for inflation and exchange rates. They differ however on the methodology followed to account for the effect of the macroeconomic factors, as well as regarding which inflation and exchange rate should be applied.

i. The Claimants' position

(1) The Claimants' position on inflation and exchange rates

911. Mr. Abdala converts the real USD costs projections to nominal USD terms using an escalation index composed of: (a) a specific U.S. Producer Price Index ("US PPI") measuring inflation in the Energy & Petroleum ("E&P") industry between year 2006 and the date of valuation; and (b) anticipated E&P inflation, which he estimates by using an index composed of expected US general inflation (weighted 85%) and expected crude oil price variation (weighted 15%) from the date of valuation.¹³³⁹

912. Turning to the Respondents' criticism of his methodology – namely, that Mr. Abdala has ignored the significant increase in domestic inflation as experienced in Venezuela since 2007 – Mr. Abdala states that this criticism is wrong as his methodology reflects inflation as experienced in the industry from 2007-2015, as measured by the US PPI for oil industry commodities.¹³⁴⁰ Importantly, as elaborated upon below, he does acknowledge that the inflation index used by the Respondents' experts to inflate the USD-denominated costs is equally reputable.

¹³³⁹ Abdala ER I, **CER-3**, Annex E §§ 223-224

¹³⁴⁰ Abdala ER II, **CER-8**, § 68.

(2) The Claimants' position on the Respondents' inflation and exchange rates

913. As regards the Respondents' calculation of inflation and exchange rates, Mr. Abdala states that "Brailovsky and Flores overstate [...] costs by using an [inappropriate] exchange rate (to convert Bolivar-denominated costs into US dollars) that does not reflect how a private manager would have operated the Projects [and that] [t]his has the effect of reducing damages by US\$ 1.4 billion under the Discriminatory Provisions Scenario".¹³⁴¹
914. With respect to the historical period, the Claimants submit that the Respondents' experts' critical mistake is that they convert Bolivar denominated costs to USD by using the *lowest official exchange rate*, i.e. the CADIVI/CENCOEX, thereby "greatly exaggerating" their cost estimates (when converted to USD).
915. According to the Claimants and Mr. Abdala, there were multiple foreign exchange rates prevailing in Venezuela at the relevant time and a rational commercially-driven entity managing the Projects, such as the Claimants, would take steps to avoid the inflated costs assumed by the Respondents' experts in their calculation either by accessing the more favourable exchange rate or by minimizing exposure to Venezuela's high domestic inflation.¹³⁴²
916. In particular, Mr. Abdala suggests that a "reasonable private manager" of the Projects would have taken the following steps to get past the effects of high inflation:
- i. Financed the operations through intercompany loans, which would allow access to more favorable, legal exchange rates.¹³⁴³ In particular, the Projects could have accessed the higher SICAD I and SICAD II rates through intercompany loans which would not involve the exchange of funds received from the sale of hydrocarbons.¹³⁴⁴

¹³⁴¹ Abdala ER II, **CER-8**, § 66.b, Table 9. To this Mr. Abdala adds that if he were to accept the Respondents' methodology and segregate costs in Bolivars and USD, but instead apply the best available exchange rate, the resulting costs would be lower than what he has currently forecast.

¹³⁴² Tr. (Day 10), 2596:23-2598:22 (Dr. Abdala); Abdala ER II, **CER-8**, § 79.

¹³⁴³ ICSID Consolidated Abdala Report, § 157(a);

¹³⁴⁴ For intercompany loans, the Claimants cite Article 1 of Exchange Agreement No. 24 of 30 December 2013 (Abdala ER II, **CER-8 CLEX-096**) and Article 5 of Exchange Agreement No. 28 of 3 April 2014, Article 5 (Abdala ER II, **CER-8 CLEX-097**).

- ii. Obtained Bolivar-denominated loans to service the Bolivar-denominated costs, and paid back the principal with USD once the exchange rate normalised.¹³⁴⁵
- iii. Hired or outsourced certain functions to international suppliers and contractors (including professional services firms, such as engineers, managers, and other specialized labour), and paid them in USD (perhaps outside Venezuela), thereby avoiding the exchange rate issue altogether. According to the Claimants, there is no legal prohibition against paying one's own employees in USD and the relevant Exchange Agreement No.9 only prevents PDVSA from paying its employees in the hydrocarbons industry in USD. No such limitation applies to the Associations or even to mixed companies.¹³⁴⁶

917. The Claimants further submit that the Respondents suggestion that only PDVSA and *empresas mixtas* could avail of the favourable exchange rate is misplaced because the Exchange Agreements treated *empresas mixtas* and Associations as the same for the purposes of applicable exchange rate regime both before and after the Expropriation.¹³⁴⁷

918. With respect to the projection period, the Claimants submit that the Respondents' experts provide no basis for applying the DICOM and DIPRO rate on a 50-50 split basis. According to the Claimants, the only reason for the Respondents' suggestion is to bring about a further reduction in the Claimants' damages.¹³⁴⁸ Summing up the argument, Mr. Abdala submits that "the difference in total costs put forward by the parties' respective experts is driven primarily by the selection of the appropriate exchange rate [...] [and] when more favorable, legal exchange rates are applied to Brailovsky & Flores's [sic] own cost projections, their costs model substantially coalesces as with Dr. Abdala's".¹³⁴⁹

ii. The Respondents' position

(1) The Respondents position on inflation and exchange rates

¹³⁴⁵ C-PHB, § 824(b).

¹³⁴⁶ Exchange Agreement No. 9, 15 September 2005, Abdala ER II, **CLEX-098**, Articles 1-5; C-PHB, fn 1468; C-PHB, § 824(d).

¹³⁴⁷ C-PHB, § 827; Brailovsky/Flores ICSID Consolidated Report, §§ 169, 173; Exchange Agreement No. 9 of 21 November 2005 (Abdala ER I, **CER-3 CLEX-098**) and Exchange Agreement No.9 of 11 August 2009, Brailovsky/Flores ICSID Consolidated Report, **App. BF-233**.

¹³⁴⁸ C-PHB, § 828.

¹³⁴⁹ C-PHB, §§ 830-832.

919. Mr. Brailovsky and Mr. Flores emphasize that a significant share of the Projects costs were incurred in Bolivars.¹³⁵⁰ Accordingly, they contend that different inflation indices should be applied to the costs incurred in Bolivars and to those incurred in USD. For costs incurred in Bolivars they use actual and projected inflation in Venezuela to convert real costs to nominal costs and thereafter apply actual and projected exchange rates between the Bolivar and USD to convert these nominal costs from Bolivars into USD.¹³⁵¹ As regards costs incurred in USD, they use a combination of oil industry and CAPEX and OPEX specific international inflation indices to determine the nominal value of costs incurred in USD.¹³⁵²
920. They apply the following inflation and exchange rates to adjust the costs incurred in Bolivars:
- i. From 2006 to 2015, they apply actual inflation in Venezuela as published by the Central Bank of Venezuela, i.e the Consumer Price Index of the Metropolitan Area of Caracas (“CPIC”);¹³⁵³ The Respondents’ experts then convert these costs in Bolivars to USD by applying actual exchange rates between the Bolivar and the USD through 2015, as published by the Central Bank of Venezuela.¹³⁵⁴
 - ii. For 2016, they use the IMF’s October 2016 forecast of Venezuelan inflation;¹³⁵⁵ As regards the exchange rate, from January 1, 2016 to March 9, 2016, they apply the CADIVI/CENCOEX exchange rate of Bs. 6.3 per USD to convert Bolivars to USD. From March 10, 2016 and through the end of 2016, they assume that the Projects would have access to the DICOM exchange

¹³⁵⁰ According to Mr. Figuera, approx. 70% of OPEX and CAPEX were incurred in Bolivars and 30% in USD. Figuera, WS I, **RWS-2, Annex D**, §§ 58-59.

¹³⁵¹ Brailovsky & Flores ER I, **RER-3**, §§ 161.

¹³⁵² Brailovsky/Flores ICSID Consolidated Report, §§ 301-302, fn 626.

¹³⁵³ Banco Central de Venezuela, *Consumer Price Index, Caracas Metropolitan Area, Series since 1950, Base December 2007=100 (Updated as of March 7, 2016)*, Brailovsky/Flores ICSID Consolidated Report, **App. BF-345**. Dr. Abdala objects to the use of this inflation index on the ground that it is a “consumer-level index and the Respondents’ experts have not taken into account whether this is reflective of the cost-structure of the Projects. According to the Respondents’ experts, this inflation index is the only one that covers the entire period from 2006 to 2015 without any discontinuities and is therefore reliable. Brailovsky/Flores ICSID Consolidated Report, fn. 627. The calculations are at *Ex Post Inflation Factors and Other Calculations* as of December 31, 2016, Brailovsky/Flores ICSID Consolidated Report, **App. BF-407**, Tables 1, 6.

¹³⁵⁴ Banco Central de Venezuela, *Reference Exchange Rates, Transactions in Foreign Currencies*, February 2015 – September 2016, Brailovsky/Flores ICSID Consolidated Report, **App. BF-413**.

¹³⁵⁵ International Monetary Fund, World Economic Outlook Database, Report for Venezuela: *Gross Domestic Product, Current Prices (National Currency), Gross Domestic Product, Current Prices (U.S. Dollars) and Inflation, Average Consumer Prices (Percent Change)*, October 2016, Brailovsky/Flores ICSID Consolidated Report, **App. BF-416**.

rate for 50% of their exchanges and access to the DIPRO exchange rate for the remaining 50% of their exchanges.¹³⁵⁶

- iii. From 2007 to 2021, the IMF's October 2016 forecast of inflation in Venezuela as well as of exchange rates to convert costs from Bolivars into USD.

921. As regards the costs incurred in USD:

- i. From 2006 to 2016, Mr. Brailovsky and Mr. Flores adjust OPEX and CAPEX incurred in USD based on the IHS CERA Upstream Operating Cost Index ("UOCI").¹³⁵⁷
- ii. From 2007 to 2021, they use a "composite inflation index calculated as the weighted average of: (i) expected annual changes in Brent prices, with a 15% weight, and (ii) long-term inflation expectations of 2% per year, with an 85% weight."¹³⁵⁸

922. With respect to costs incurred from 2022 onwards:

[I]n order to simplify the calculations and account for the currency fluctuations and differences in inflation rates, [they] assume that purchasing power parity – the economic principle that higher inflation rates in one country will be offset by corrections in the exchange rate – will hold. Therefore, from 2022 forward [they] convert all OPEX and CAPEX incurred in bolivars into U.S. dollars, based on the IMF's projected exchange rate in 2021; [they] then apply the composite inflation index [to all costs] to inflate values to future years.¹³⁵⁹

(2) The Respondents' position on the Claimants' inflation and exchange rates

923. Turning to Mr. Abdala's valuation of inflation and exchange rates, the Respondents' experts disagree with Mr. Abdala on two counts:

924. First, they submit that Mr. Abdala incorrectly disregards the fact that a significant share of costs were incurred in Bolivars and not in USD and that as a consequence, he also ignores the effect of actual inflation in Venezuela and exchange rates for the historical period. According to the Respondents, this is fundamental error (2.1).

¹³⁵⁶ Banco Central de Venezuela, *Updated Reference Exchange Rates*, 1996 – September 2016, Brailovsky/Flores, ICSID Consolidated Report, **App. BF-414**.

¹³⁵⁷ IHS CERA, *Upstream Operating Costs Index (UOCI)*, 2000=100, Q2 2016, Brailovsky/Flores ICSID Consolidated Report **App. BF-449**; IHS CERA, *Upstream Capital Costs Index (UCCI)*, 2000=100, Q1 2016, Brailovsky/Flores ICSID Consolidated Report **App. BF-450**; *Ex Post Inflation Factors and Other Calculations* as of December 31, 2016, Brailovsky/Flores ICSID Consolidated Report **App. BF-407**, Table 3.

¹³⁵⁸ Brailovsky/Flores ICSID Consolidated Report, § 304(c).

¹³⁵⁹ Brailovsky/Flores ICSID Consolidated Report, § 305; *Ex Post Inflation Factors and Other Calculations* as of December 31, 2016, Brailovsky/Flores ICSID Consolidated Report **App. BF-407**, Table 1.

925. Second, they disagree with Mr. Abdala's use of the US PPI as the inflation index (2.2).

2.1. Mr. Abdala disregards actual inflation in Venezuela in the historical period

926. The Respondents' experts explain that Mr. Abdala disregards the currency specific projections in the 2006 Models and instead adopts the following incorrect two-step calculation: first, he converts the costs projected in Bolivars into USD using the official exchange rate in 2006 which was Bs. 2.15 per 1 USD;¹³⁶⁰ and second, he then inflates these costs – now stated in Yr. 2006 USD terms – using a US inflation index. According to the Respondents' experts, the flaw in this approach is that “Mr. Abdala implicitly assumes that from 2006 forward, costs incurred in [B]olivars would have increased at the same inflation rate as costs incurred in [USD]”, when the reality is that between 2007 and 2015, Venezuela has experienced high inflation and such inflation has not been offset by timely devaluations of the Bolivar vis-à-vis the USD.¹³⁶¹

927. In terms of a concrete example, the Respondents' above criticism can be illustrated as follows:

Consider a Bs. 100 cost incurred in 2014 in Venezuela expressed in 2006 bolivars. [Mr. Abdala] would first convert this cost into U.S. dollars at the official exchange rate as of 2006, Bs. 2.15 per US\$, obtaining US\$47. [He] would then inflate this amount through 2014 using U.S. inflation, obtaining US\$60. In contrast, using actual inflation in Venezuela and exchange rates [...] the Bs. 100 cost is first inflated using actual inflation in Venezuela through 2015, obtaining Bs. 2,251; this amount is then converted into U.S. dollars at the official exchange rate as of 2015, Bs. 6.3 per US\$, obtaining US\$357. By properly accounting for actual inflation in Venezuela and official exchange rates, the Bs. 100 cost inflated to 2015 is six times higher than the cost estimated using [Mr. Abdala's] incorrect [methodology].¹³⁶²

928. The Respondents submit that as a result of Mr. Abdala's “egregious error” the costs are grossly understated, when the reality is that costs incurred in Bolivars have ended up being much higher, in USD terms, than originally expected in 2006. More to the

¹³⁶⁰ Brailovsky & Flores ER I, **RER-3**, §§ 46-47; Petrozuata Breach Scenario Model, tab “OPEX” under “Inputs based on: COP Composite Economic Model”, Abdala ER I, **CER-3 CLEX-002**.

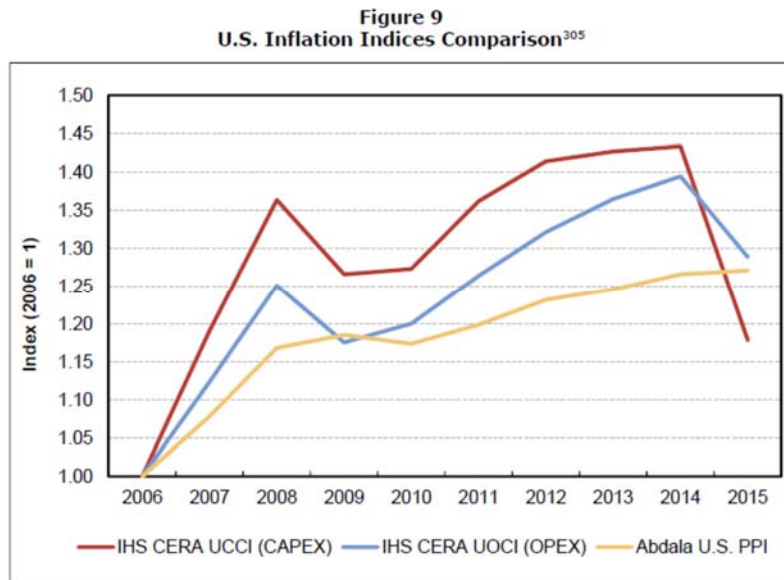
¹³⁶¹ Brailovsky & Flores ER I, **RER-3**, §§ 46-47; The Respondents experts also provide the following example: assume that costs incurred in bolivars in year 1 are Bs. 215. With the exchange rate equal to Bs. 2.15 per US\$, those costs translate to US\$ 100. Between year 1 and year 2, inflation in Venezuela is 100%, so the costs incurred in bolivars become Bs. 430 in year 2. If there is no devaluation of the bolivar with respect to the U.S. dollar in year 2, then those costs in year 2 translate to US\$ 200. That is, costs incurred in bolivars also double from a U.S. dollar perspective. Inflation in the bolivar would only be irrelevant from a U.S. dollar perspective if the bolivar had been regularly devalued in a way that would offset the high inflation in Venezuela. That was not the case from June 26, 2007 through the Valuation Date.

¹³⁶² Brailovsky & Flores ER I, **RER-3**, § 50.

point, they point out that “these cost increases have nothing to do with any perceived inefficiencies by PDVSA, but are simply the result of inflationary forces and exchange rate policies”.¹³⁶³

2.2. Mr. Abdala’s reliance on the US PPI to measure inflation is incorrect.

929. The second ground of disagreement is Mr. Abdala’s use of the US PPI for “Oilfield and gas field machinery” as the appropriate inflation index. According to the Respondents’ experts, this index measures the change in prices of machinery in USA and while it may be used as a proxy for inflation in CAPEX when a better index does not exist, this is not the case at present. That apart, the US PPI index is in any event far from ideal to measure inflation in OPEX. The “obvious anomaly” resulting from using the US PPI is illustrated by the Respondents as follows:¹³⁶⁴



930. Next, the Respondents address the Claimants’ argument that the high inflation in Venezuela and the lack of devaluations of the Bolivar would not have affected the Projects because any “reasonable Project manager” would have sought to circumvent the effects of these macroeconomic factors by (i) taking advantage of more favourable exchange rates; (ii) reducing the exposure to high domestic inflation; or (iii) minimizing the use of local inputs thereby minimizing costs incurred in local

¹³⁶³ Brailovsky/Flores ICSID Consolidated Report, § 162.

¹³⁶⁴ Brailovsky & Flores ER I, **RER-3**, Figure 9.

currency.¹³⁶⁵ The Respondents experts reject Mr. Abdala's arguments on the following grounds:

931. First, that the favourable exchange rates to which Mr. Abdala refers were not applicable to USD generated from the sale of hydrocarbons until the issuance of Exchange Agreement No. 35 on 9 March 2016¹³⁶⁶ which introduced the DIPRO/DICOM system.¹³⁶⁷ For that matter, according to the Respondents' experts none of the exchange agreements providing for more favourable exchange rates was applicable to the associations and permitted USD obtained from the sale of hydrocarbons to be exchanged at such rates.
932. Second, to the extent such favourable rates were applicable to USD generated from other activities, only PDVSA and its subsidiaries and *empresas mixtas* operating under the 2001 Hydrocarbons Law could avail of the benefit.¹³⁶⁸ Given that in the but-for world, the Projects would have continued as associations under the 1975 Nationalization Law, the benefits of a favourable exchange rate cannot be assumed by the Claimants.¹³⁶⁹ The Respondents point out that Mr. Abdala does not address these points.
933. Third, as a matter of fact, even PDVSA, its subsidiaries or *empresas mixtas* have not been granted unlimited access to benefit from favourable exchange rates. They can only do so subject to "Government evaluation of need for and availability of U.S. dollars for the DIPRO mechanism". Their ability to exchange more bolivars for selling USD is subject to considerations of national economic policy, which would have been no different in the but-for scenario. Hence, according to the Respondents, "[i]t is unreasonable and unrealistic for Dr. Abdala to assume that the Projects [...] would be given special favorable treatment in the form of unlimited access to whatever number of bolivars they wanted at the more favorable rates."¹³⁷⁰
934. Last, Mr. Abdala's argument that a "reasonable manager would access the various alternative official exchange rates, finance the Project's operations through

¹³⁶⁵ Brailovsky & Flores ER II, **RER-7**, § 40.

¹³⁶⁶ Exchange Agreement No. 35 of the Ministry of the Popular Power for Banking and Finance and the Central Bank of Venezuela, Official Gazette No. 40.865, published 9 March 2016, Brailovsky & Flores ER II, **RER-7 App. BF-222**, Articles 8, 11.

¹³⁶⁷ This explains the Respondents valuation which applies different exchange rates for Yr. 2016 as explained at *supra*, § 920.ii.

¹³⁶⁸ Brailovsky & Flores ER II, **RER-7**, §§ 41-42, 48.

¹³⁶⁹ Brailovsky & Flores ER II, **RER-7**, §§ 48-49

¹³⁷⁰ Brailovsky & Flores ER II, **RER-7**, §§ 43-45.

intercompany or third party loans or other source, pay the Projects' suppliers in US dollars and hire international suppliers and pay them in US dollars outside of Venezuela"¹³⁷¹ is entirely unsubstantiated. The Respondents explain that their calculations already account for the payment of a certain percentage of the CAPEX and OPEX in US dollars based on the percentage of costs that would be incurred outside of Venezuela. There is no basis to assume that further costs would have been incurred outside Venezuela, much less that this would have been feasible. Furthermore, most of the labour for the Projects had to be employed locally (and therefore paid in local currency) and was protected by strong labour unions. These could therefore not be easily ousted for outsourced labour. Finally, under the Organic Law of Labour and Workers, there was a cap on the number of foreign employees that could be hired and the remuneration that they could be paid.¹³⁷²

935. In light of all of the above, the Respondents contend that the inflation and exchange rates adopted by their experts is the most appropriate.

iii. The Tribunal's determination

936. Having examined the Parties' submissions, the Tribunal finds that the Parties' experts differ as to (i) the methodology by which they have calculated the nominal value of the Project costs, as well as (ii) the inflation and exchange rate that they have applied.
937. That said, the Claimants' expert does not oppose the Respondents' methodology or chosen inflation rate outright.¹³⁷³ Rather, according to Mr. Abdala the key issue driving the difference in the costs calculations put forward by the Parties' experts is the applicable exchange rate. He states that, "[o]nce alternative legal exchange rates are applied inflation and the relevant exchange rate move more closely together".¹³⁷⁴ Thus Mr. Abdala implies that once a more favourable and higher exchange rate is applied, any discussion regarding methodology and inflation rate is rendered moot.

¹³⁷¹ Abdala ER II, **CER-8**, § 80.

¹³⁷² Figuera, WS I, **RWS-2 Annex E**, § 14; Decree with Rank, Value and Force of Organic Law of Labor and Workers, Official Gazette No. 6.076 (Extraordinary), published May 7, 2012, Brailovsky/Flores ICSID Consolidated Report, **App. BF-234**, Article 27.

¹³⁷³ Abdala ER II, **CER-8**, fn. 74 (Mr. Abdala states, "There are two other differences in input prices estimates. First, Brailovsky and Flores use a different index to inflate US dollar costs for the period between the expropriation and the date of valuation. While I apply the observed inflation in the E&P industry, as reflected by the US Producer Price Index for crude oil industrial commodities, Brailovsky and Flores use US cost inflation indices prepared by the oil industry consultancy IHS. Both sources are reputable, and I therefore retain my assumption based on the US PPI. Using the IHS indexes for cost inflation during the historical period would decrease my overall damages estimate by 1.4%. [...]")

¹³⁷⁴ Abdala ER II, **CER-8**, fn. 90.

As a consequence of this approach, most of the Claimants' submissions center around the selection of the appropriate exchange rate.

938. In this regard, the Claimants' key argument is that "any reasonable project manager" would have taken steps to avail of the most favourable exchange rates that existed in Venezuela by financing the Projects operations through intercompany or third party loans or other sources, paying the Projects' suppliers in USD and hiring international suppliers so as to pay them in USD outside Venezuela. However, having examined the Claimants' proposals, the Tribunal finds the Respondents' position more convincing.
939. First, as the Respondents correctly point out, until Exchange Agreement No. 35 issued in March 2016, none of the Exchange Agreements cited by the Claimants applied to USD revenues earned from the sale of hydrocarbons abroad. Thus, a favourable exchange rate would not have been applicable to USD revenues until March 2016 at least.¹³⁷⁵
940. Second, to the extent that favourable exchange rates were applicable to USD generated from other activities, they were only applicable to PDVSA, its subsidiaries and *empresas mixtas*. For instance, the Claimants suggest that the Projects could have financed their operations through intercompany loans, which they claim were eligible for more favourable exchange rates. In support of this proposal, Mr. Abdala cites Exchange Agreement No. 24 of 2013 and Exchange Agreement No. 28 of 2014. However, these state in relevant part as follows:

Article 1. The purchase currency exchange rate applicable [PDVSA] and its subsidiaries, as well as to mixed companies [...] for the sale of currency stemming from activities or operations different to those of export and/or sales of hydrocarbons, shall be the same as the exchange resulting from the last assignation of currencies carried out through the Complementary System of

¹³⁷⁵ Exchange Agreement No. 35, Ministry of the Popular Power for Banking and Finance and the Central Bank of Venezuela, Official Gazette No. 40.865, 9 March 2016, **App. BF-222**, Article 11 ("The sale transactions of foreign currency by Petroleos de Venezuela, S.A. (PDVSA), its subsidiaries, and mixed companies mentioned in the Organic Law of Hydrocarbons, the Organic Law of Gaseous Hydrocarbons and Organic Law for the Development of Petrochemical Activities, resultant from financing, financial instruments, capital contributions in cash, asset sales, exports and/or sale of hydrocarbons, dividends received, debt collection, provision of services, and from any other source, will be made at any of the exchange rates provided in this Exchange Agreement, with a reduction of zero point twenty five percent (0.25%), in response to the programming, coordination and evaluation between the Sectorial Vicepresidency of Economy, the Ministry of Popular Power for Banking and Finance and the Central Bank of Venezuela, according to the established policies and the availability of foreign currency to meet the needs of the economy governed by the exchange rate referred in Chapter I of this Exchange Agreement.")

Currency Administration [...] which shall be published in the website of said institute, reduced by a zero point twenty-five percent (0.25%).¹³⁷⁶

Article 5. Sale of currency operations by [PDVSA] and its subsidiaries, as well as by mixed companies [...], stemming from financing, financial instruments, cash capital contributions, sales of assets, received dividends, debt collection, provision of services, and from any other source as long as they result from activities or operations different from the export and/or sales of hydrocarbons, shall be subject to [...] the currency exchange [...] applicable at the date of the respective operation, reduced by a reduced by a zero point twenty-five percent (0.25%). To that effect, [PDVSA]'s subsidiaries as well as mixed companies [...] shall provide the currencies to [PDVSA] which in turn will undertake the corresponding sale on their behalf.

Sole Paragraph: The sale of currency operations generated due to the operations and activities of export and/or sales of hydrocarbons by [PDVSA] and its subsidiaries, as well as by mixed companies [...] will continue to be subject by what is established in the Exchange Agreement No. 9 of 14 July 2009.¹³⁷⁷

941. Finally, the Claimants have relied on Article 5 of Exchange Agreement No. 9 to argue that even Associations were eligible for favorable exchange rates, both before and after the Expropriation.¹³⁷⁸ Consequently, they would have been in a position to obtain the most favourable exchange rate. However, the Tribunal finds that the Claimants' reliance on Article 5 of Exchange Agreement No. 9 is misplaced. Article 5 provides as follows:

Companies created by virtue of the association agreements subscribed by Petróleos de Venezuela, S.A. under the framework of the derogated Organic Law that Reserves to the State the Industry and Trade of Hydrocarbons, mixed companies referred to in the Organic Law of Hydrocarbons and Organic Law of Gas Hydrocarbons, as well as the mixed companies constituted pursuant to the provisions of the Organic Law for the Development of Petroleum Activities, may maintain currency accounts abroad in banking institutions or institutions of a similar nature, by virtue of the revenues received, for the purpose of executing corresponding payments and reimbursements outside the Bolivarian Republic of Venezuela, which shall be monitored by the Central Bank of Venezuela, who shall issue the corresponding regulation. **The remaining foreign currency, must be sold to the Central Bank of Venezuela, at the currency exchange rate fixed pursuant to Article 6 of the Exchange Agreement No. 1 dated February 5, 2003.**¹³⁷⁹

942. Thus, quite apart from the Claimants' interpretation, Article 5 only permits the Associations to maintain a currency account in a foreign banking institution for the

¹³⁷⁶ Exchange Agreement No. 24, Ministry of the Popular Power for Banking and Finance and the Central Bank of Venezuela, Official Gazette No. 40324, 30 December 2013, **CLEX-096**, Article 1 (translation by the Tribunal).

¹³⁷⁷ Exchange Agreement No. 28, of the Ministry of the Popular Power for Banking and Finance and the Central Bank of Venezuela, Official Gazette No. 40387, 3 April 2014, **CLEX-097**, Article 5 (translation by the Tribunal).

¹³⁷⁸ C-PHB, §§ 827-828.

¹³⁷⁹ Exchange Agreement No. 9 of the Ministry of the Popular Power for Economics and Finance and the Central Bank of Venezuela, Official Gazette No. 39.239, published on 11 August 2009, Brailovsky/Flores ICSID Consolidated Report, **App. BF-240**, Article 5.

purposes of holding a portion of foreign revenues that will be required for executing corresponding payments outside Venezuela. All the remaining foreign currency has to be sold to the Central Bank of Venezuela at the exchange rate fixed in Exchange Agreement No. 1.

943. Exchange Agreement No. 9 in and of itself does not entitle the Claimants to a better exchange rate. Rather, it points to another agreement, i.e., Exchange Agreement No.1, which presumably sets out the exchange rate at which the Central Bank of Venezuela will purchase USD. The Claimants' argument that they were also entitled to a better exchange rate thus remains unsubstantiated.
944. To the extent Article 5 of Exchange Agreement No. 9 allows associations to maintain foreign currency accounts and make payments in foreign currency, the Tribunal notes that Mr. Brailovsky and Mr. Flores' calculations already account for a certain percentage of the costs being incurred in USD. In particular, they assume that the "30% portion of OPEX and the 70% portion of CAPEX that is incurred in U.S. dollars would have been paid in U.S. dollars, presumably with proceeds from the sale of hydrocarbons that were kept in U.S. dollar accounts outside of Venezuela".¹³⁸⁰
945. The Claimants have not produced any evidence to suggest that these percentages could and should have been increased in light of Venezuelan macroeconomic factors. To the extent they have made the proposals highlighted above,¹³⁸¹ the Tribunal finds that these are merely suggestive and the Claimants have not provided any basis to support their assumption that had they remained with the Projects, they would have adopted such methods to reduce costs.
946. Thus, the Tribunal finds that the Claimants and their expert Mr. Abdala have not established that, but-for the Expropriation, the Associations would have been in a position to avail of better and/or more favorable exchange rates, would have actually done so, and that in the process the effect of Venezuelan inflation would have become less pronounced. On balance, the Tribunal finds the Respondents' case on exchange rates more plausible.
947. Moreover, the Tribunal is of the view that the Respondents' methodology better reflects the real costs incurred by the Projects. In particular, the Tribunal is satisfied with the Respondents' use of actual inflation rates until 2015 and thereafter the IMF

¹³⁸⁰ Brailovsky/Flores ICSID Consolidated Report, § 176.

¹³⁸¹ *Supra*, §§ 916.i-916.iii.

projected inflation rates to determine the nominal value of costs as it considers such data reliable.

948. In sum, the Tribunal is of the view that the Claimants have been unable to demonstrate their case that the Projects could have availed of more favorable exchange rates in the but-for world and that by doing so they would have overcome the effects of high Venezuelan inflation. As such, the Tribunal finds the Respondents' case on inflation and exchange rates more reliable and will adopt the same in its calculations.

E. POST-EXPROPRIATION FISCAL REGIME

1. The Claimants' position

949. The Claimants' overall contention is that "[i]t would be manifestly improper to reduce the indemnification owed for one Discriminatory Action by hypothesizing the application of another Discriminatory Action in the but-for world".¹³⁸² In view of this, they submit that the Income Tax Increase,¹³⁸³ the Royalty Measure, and the Extraction Tax, are all DAs under both AAs (the latter two as part of the Overall Expropriation).¹³⁸⁴ Thus, these measures "should be ignored in determining the indemnification owed [by the Respondents] for [the issuance of DAs]".¹³⁸⁵ In view of this, the Claimants have instructed their quantum expert to assume that, for the purposes of determining the *ex post* scenario under the DA provisions, the Projects: "(i) pay the general corporate income tax rate of 34% (not 50%); (ii) benefit[...] from the Royalty Reduction Agreement; and (iii) are not subject to the Extraction Tax".¹³⁸⁶

950. Similarly, the Claimants argue that several taxation measures not applicable to the Projects pre-Expropriation would constitute DAs if applied to both Projects in the but-for world.¹³⁸⁷ This is the case of:

- i. The "the so-called 'Windfall Profits Tax' [...], also known as the 'Special Contribution Tax,' introduced by the Government in 2008";¹³⁸⁸

¹³⁸² Reply, § 474.

¹³⁸³ *Supra*, § 94.i

¹³⁸⁴ *Supra*, § 94.ii

¹³⁸⁵ C-PHB, § 863.

¹³⁸⁶ C-PHB, § 862.

¹³⁸⁷ C-PHB, § 865.

¹³⁸⁸ Reply, § 462; C-PHB, § 865.

- ii. The “‘Social Contribution’ tax [of 2007], a marginal tax applicable to *empresas mixtas*”,¹³⁸⁹ requiring the payment of “1% of [the] prior years income before tax”;¹³⁹⁰
- iii. The “‘Shadow Tax’ [of 2007] (also known as the ‘Special Advantage Tax’), which guarantees the Government a minimum of 50% take of the production value of *empresas mixtas*”;¹³⁹¹ and
- iv. The Anti-Drug Contribution of 2005, consisting of a 1% tax applied to the net income of “public or private legal entities [employing] 50 or more workers”.¹³⁹²

951. Therefore, the Claimants have also instructed their quantum expert to exclude the Windfall Profits Tax, the Social Contribution and the Shadow Tax from his post-Expropriation DA calculations.¹³⁹³ Mr. Abdala further understands that the Anti-Drug Contribution was only applicable to the Petrozuata Project and, as such, has not included the said measure in the Hamaca Project’s but-for scenario.¹³⁹⁴ The Claimants endorse Mr. Abdala’s understanding.¹³⁹⁵

952. With respect to the Windfall Profits Tax in particular, the Claimants argue that, in any event, the Projects would not have been subject to said measure. This is so given that: (i) the “Projects would have taken advantage of one or more of the WPT’s carve-outs and exemptions [...]”;¹³⁹⁶ and (ii) “the future content or even existence of the [Windfall Profits Tax] cannot be assumed given that it has been repealed, re-enacted, and repeatedly amended since its arrival in 2008 [...]”.¹³⁹⁷

953. In this context, the Claimants refer to:

- i. Article 12.2 of the Windfall Profits Tax Law, carving-out from the law’s scope any exports to certain exempt states with which Venezuela has an international cooperation and financing agreement. In the but-for scenario, the Projects “could and would have modified their operations, if necessary, to

¹³⁸⁹ Reply, § 474.

¹³⁹⁰ Abdala ER II, **CER-8**, Table 6.

¹³⁹¹ Reply, § 474.

¹³⁹² Abdala ER I, **CER-3**, § 235, fn. 183; C-PHB, Appendix F, § 32(b).

¹³⁹³ Abdala ER II, **CER-8**, fn. 30.

¹³⁹⁴ Abdala ER I, **CER-3**, fn. 183.

¹³⁹⁵ C-PHB, Appendix F, § 32(b).

¹³⁹⁶ C-PHB, § 852.

¹³⁹⁷ C-PHB, § 852.

export to Exempt States to avoid the imposition of the [Windfall Profits Tax]”.¹³⁹⁸

- ii. Article 12.1 of the 2011 Windfall Profits Tax Law, exempting from its scope any exports from projects engaged in EOR techniques. In the but-for world, such “technology could and would have been implemented at both Projects”.¹³⁹⁹
- iii. The option of significantly reducing the Projects’ exposure to the Windfall Profits Tax by “selling production locally in Venezuela”, considering that the said measure “was imposed only on production sold abroad”.¹⁴⁰⁰
- iv. The possibility of reducing the Projects’ taxable base by making “royalty-in-kind” payments, thereby reducing the Windfall Profits Tax owed by the Projects.¹⁴⁰¹
- v. The fact that the Windfall Profits Tax law has been repeatedly “repealed, replaced or amended” since its enactment, thus “rendering any assumption about its future applicability or content [...] highly speculative”.¹⁴⁰²
- vi. The Respondents’ document production in this arbitration, which confirmed that “the Petropiar Project (formerly Hamaca) has not paid the WPT since October 2013 and similarly appears to have been exempt from the WPT between April and December 2011”.¹⁴⁰³ In this regard, the Claimants further note that, despite the “Tribunal’s Procedural Order No. 2, and follow-up correspondence from Claimants to Respondents on 25 May 2016, Respondents have refused to produce the equivalent documents for PDVSA’s other subsidiaries, including the Petroanzoátegui Project (formerly Petrozuata)”.¹⁴⁰⁴ Hence, the Tribunal should draw the appropriate inferences, “namely that the Projects are not subject to the [Windfall Profits Tax] post-

¹³⁹⁸ C-PHB, § 853.

¹³⁹⁹ C-PHB, § 855.

¹⁴⁰⁰ C-PHB, § 857.

¹⁴⁰¹ C-PHB, § 858.

¹⁴⁰² C-PHB, § 859.

¹⁴⁰³ C-PHB, § 860.

¹⁴⁰⁴ C-PHB, § 860.

expropriation and, accordingly, that neither would be subject to the [Windfall Profits Tax] in the but-for scenario”.¹⁴⁰⁵

2. The Respondents’ position

954. The Respondents argue that the Claimants are wrong in assuming that they would have “benefited from the fiscal stability they were denied in the 1990s, even though the entire documentary record in this case shows that it was a fundamental condition of the Congressional Authorizations that the State retained unfettered its right to take governmental measures to capture profits generated by high oil prices”.¹⁴⁰⁶ In this context, the Respondents highlight that the Claimants themselves have conceded that the lack of fiscal stability of the Projects is “uncontroversial”.¹⁴⁰⁷
955. As such, the Projects remained “subject to governmental action [affecting] project economics”, and there are no grounds to hypothesize that the state of affairs would have been any different post-Expropriation.¹⁴⁰⁸ To the contrary, the principle of full reparation suggests that the correct assumption is to project a but-for scenario that accounts for all the taxation measures applicable today in the Venezuelan oil industry. Otherwise, the Claimants would artificially place themselves “in a better position that they would have been in had they remained in the Projects”.¹⁴⁰⁹ The compensation owed to the Claimants under the DA provisions “requires consideration of all factors affecting value in applying *restitutio in integrum*”, including the taxation measures not initially applicable to the Projects prior to the Expropriation.¹⁴¹⁰
956. With respect to the applicability of the Special Contribution or Windfall Profits Tax in particular, the Respondents argue that the Claimants’ view that the Projects would have qualified for exemptions is misguided. The Respondents explain their argument as follows:¹⁴¹¹

In the first instance, although the applicable law provides for certain exemptions, all such exemptions must be specifically approved in each instance, subject to the discretion of the Ministry. [...] Claimants’ assertion that the Projects would be granted exemptions is purely speculative, not only because there is no indication that the associations would have engaged in any

¹⁴⁰⁵ C-PHB, § 860.

¹⁴⁰⁶ Rejoinder, § 377.

¹⁴⁰⁷ Rejoinder, § 379; Reply, § 291.

¹⁴⁰⁸ Rejoinder, fn. 737.

¹⁴⁰⁹ R-PHB, § 574.

¹⁴¹⁰ R-PHB, § 577.

¹⁴¹¹ Rejoinder, fn. 743; R-PHB, fn. 1196.

activities for which exemptions may have been available [...], but more significantly, because they have no explanation for presuming that discretionary exemptions would be granted to associations or their participants when associations were clearly a disfavored vehicle in which PDVSA subsidiaries held minority stakes in the economic benefits of the Projects. Further, Claimants had their own unique contractual framework created in the 1990s, including the congressionally-approved Compensation Provisions protecting them from governmental tax measures up to the threshold cash flow levels specified in the Association Agreements, while permitting the Government to reap the benefits of excess profits. Having refused to migrate to the mixed company framework under which all companies operating in Venezuela's petroleum sector have conducted their activities since 2007, it defies credulity to assume that they would have nevertheless been granted exemptions from windfall profits taxes accorded to post-migration mixed companies, while at the same time maintaining the structure and contractual protections they had under the Association Agreements, particularly when that structure and those protections had expressly been negotiated in light of the possibility of windfall profits.

3. Analysis

a. Preliminary matters

957. According to Article 14.2(f) Hamaca AA, the RNCF requires the subtraction of taxes (i.e. the "OT", "ITR", and "SC" variables defined in the RNCF formula) from the Project's cash-flow.¹⁴¹² Article 14.2(g) of the Hamaca AA in turn states that, for the purposes of calculating the TCF, the foregoing variables must only account for taxes "that did not themselves constitute [DAs]".¹⁴¹³ Consequently, insofar as the Hamaca AA is concerned, the determination of the TCF, and thus, of the but-for scenario, requires the exclusion of taxation measures that constitute DAs in their own right.
958. The Tribunal is of the view that the same conclusion must be reached with respect to the Petrozuata AA. Unlike the Hamaca AA, the Petrozuata AA lacks a clear contractually defined formula specifying the variables relevant to calculate the compensation owed by the Respondents under the DA provisions.¹⁴¹⁴ Nonetheless, it is common ground between the Parties' quantum experts that, precisely for that purpose, the fiscal regime applicable to the Petrozuata Project must be computed along with its cash flow.¹⁴¹⁵ It would therefore be nonsensical to consider taxation measures in the but-for scenario that, in and of themselves, constitute DAs in the but-for scenario. Otherwise, the DA provisions of the Petrozuata AA would be devoid of *effet utile*.

¹⁴¹² *Supra*, § 553.

¹⁴¹³ Hamaca AA, C-3, Article 14.2(g); *supra*, fn. 833.

¹⁴¹⁴ *Supra*, § 552.

¹⁴¹⁵ *Supra*, §§ 550-551.

959. *A contrario*, taxation measures that cannot be characterized as DAs must remain as relevant inputs in the determination of the *ex post* quantum scenario. In this context, the Tribunal recalls its determinations that the Income Tax Increase indeed constitutes a DA, while the Royalty Measure and the Extraction Tax do not.¹⁴¹⁶
960. Subject to its findings on liability,¹⁴¹⁷ the Tribunal therefore determines that the calculation of the DA but-for scenario must assume that the Projects were not subject to the Income Tax Increase. However, the Royalty Measure and the Extraction Tax, not being DAs, must be discounted from the Projects' cash flow.
961. Further to the Parties' submissions, the taxation measures at issue that have not yet been subject to a determination by the Tribunal are thus the following:
- i. The *Ley de Contribución Especial sobre Precios Extraordinarios del Mercado Internacional de Hidrocarburos* of 2008, referred to by the Respondents as the Special Contribution and by the Claimants as the Windfall Profits Tax or WPT (henceforth, "Special Contribution" or "SPEC").¹⁴¹⁸ The SPEC establishes a contribution payable when crude oil prices exceed certain thresholds established by law. For instance, when initially adopted, the SPEC essentially required the payment of USD 0.50 for every dollar that the average price of the Venezuela basket of crude oils found itself between USD 70 and USD 100 per barrel, and of USD 0.60 for every dollar that the price of the Venezuelan basket exceeded USD 100 per barrel.¹⁴¹⁹ While foregoing thresholds and tax rates (along with various other provisions of the SPEC) were amended in 2011 and 2013,¹⁴²⁰ the implications of said amendments are not in dispute between the Parties.
 - ii. The Social Contribution of 2007 ("Social Contribution" or "SOCO"). It is common ground between the Parties' quantum experts that the SOCO requires the payment of 1% of the previous year's net income before taxes for social development programs.¹⁴²¹ The Parties do not seem to have introduced the text of the SOCO into the record.

¹⁴¹⁶ *Supra*, §§ 294.i-294.vii

¹⁴¹⁷ *Supra*, § 294.xi-294.xii.

¹⁴¹⁸ Special Contribution 2008, **App. BF-105; C-298**.

¹⁴¹⁹ Special Contribution 2008, **App. BF-105**, Article 1; Brailovsky & Flores ER I, **RER-3**, § 218.a.

¹⁴²⁰ Special Contribution 2011, **App. BF-108**; Special Contribution 2013, **App. BF-112**.

¹⁴²¹ Abdala ER II, **CER-8**, Table 6; Brailovsky & Flores ER I, **RER-3**, § 218.d.

- iii. The Special Advantage Tax of 2007, also referred to by the Claimants as the Shadow Tax (“Special Advantage” or “SPAT”). It is common ground between the Parties’ quantum experts that the SPAT requires the payment of “the excess, if any, of 50%” of the value of hydrocarbons extracted “over the sum of all royalties, taxes and contributions paid” by the Projects.¹⁴²² The Parties do not seem to have introduced the text of the SPAT into the record.
- iv. Article 96 of the *Ley Orgánica Contra el Tráfico Ilícito y el Consumo de Sustancias Estupefacientes y Psicotrópicas* of 2005 (“Anti-Drug Contribution” or “ADCO”). The ADCO requires all companies employing 50 or more workers to contribute 1% of their annual net income to the prevention of trafficking and consumption of illegal drugs.¹⁴²³

962. The Tribunal will now assess whether, pursuant to the Parties’ submissions, the SPEC, the SOCO, the SPAT, and/or the ADCO can be characterized as constituting DAs under either of the AAs.¹⁴²⁴ Before doing so, however, the Tribunal must first establish whether these existing taxation measures could have applied to the Projects in the but-for world.

963. In this regard, the Tribunal notes that the Respondents’ quantum experts consider that the Adjusted Price determining the TCF finds itself below the minimum price threshold required by the SPEC.¹⁴²⁵ As such, they assume the SPEC would not have applied to the Hamaca Project post-Expropriation.¹⁴²⁶ Similarly, Mr. Brailovsky and Mr. Flores “do not calculate the [SPAT] in [their] compensation calculations for the Hamaca Project, assuming that it may not have applied in a scenario where Brent oil prices were [USD 27 in y. 1994 USD]”.¹⁴²⁷

964. Given that the Claimants outright exclude the application of both the SPEC and the SPAT from their DA calculations, the Tribunal finds no reason to disagree with the Respondents’ quantum experts: it must therefore be assumed that the Hamaca Project would not have been subject to either the SPEC or the SPAT. The Tribunal

¹⁴²² Abdala ER I, **CER-3**, 236.b; Brailovsky & Flores ER I, **RER-3**, § 218.g.

¹⁴²³ Anti-Drug Contribution 2005, **App. BF-117**, Article 96; Anti-Drug Contribution 2010, **App. BF-118**, Article 32; Brailovsky & Flores ER I, **RER-3**, § 218.e; Abdala ER I, **CER-3**, 235.b.

¹⁴²⁴ For the sake of clarity, any determination as to the characterization of the SPEC, the SOCO, the SPAT, and/or the ADCO as DAs or not should not be misconstrued as a decision on liability. Such a determination is only relevant for quantum purposes in line with the DA formulae (*supra*, §§ 957-958).

¹⁴²⁵ Brailovsky & Flores ER I, **RER-3**, § 218.a; *supra*, §§ 559-560.

¹⁴²⁶ Brailovsky & Flores ER I, **RER-3**, § 218.a.

¹⁴²⁷ Brailovsky & Flores ER I, **RER-3**, fn. 450.

understands that the quantum experts of both Parties already implement this assumption in their respective valuation models.

b. Would the Special Contribution apply to the Projects?

965. The Claimants have advanced various arguments in support of their contention that, post-Expropriation, the SPEC would not have been imposed on the Projects, or at least not to its full extent.¹⁴²⁸ The Tribunal is not persuaded by the Claimants' position for the reasons expanded on below.
966. While it is true that Article 12.2 of the SPEC law carves out from its scope crude exports to certain exempted states,¹⁴²⁹ the Tribunal finds it undemonstrated that the Claimants would have modified their operations to qualify for the said exemption. As pointed out by the Respondents, the SPEC law does not exempt from its application crude exports to states with which Venezuela has concluded international agreements on cooperation or financing; it does not provide for a list of exempted states either.¹⁴³⁰ Rather, it exempts crude exported in the "implementation of International Agreements on cooperation or financing".¹⁴³¹
967. It very well may be that, as the Claimants note, the post-Expropriation Projects have benefited from this SPEC exemption by exporting oil to, *inter alia*, China and certain members states of the Petrocaribe Oil Alliance.¹⁴³² Nevertheless, the Claimants' own exhibits indicate that the said exports were, to an important extent: (i) made to repay Venezuela's sovereign debt or in exchange for payments in-kind (i.e. food) or other services;¹⁴³³ or (ii) subject to long-term repayment periods exceeding 20 years.¹⁴³⁴ As phrased by the Respondents, it "hardly seems likely" and even "somewhat silly" that the Claimants would have exported crude under these conditions.¹⁴³⁵

¹⁴²⁸ *Supra*, § 953.

¹⁴²⁹ Special Contribution 2011, **App. BF-108**, Article 12.2 ("Exempt from the contributions of this law are: 2) The export volumes in implementation of International Agreements on cooperation or financing"); Special Contribution 2013, **App. BF-112**, Article 7.

¹⁴³⁰ R-PHB, § 584.

¹⁴³¹ R-PHB, § 584 (emphasis by the Respondents); *supra*, fn. 1429.

¹⁴³² C-PHB, § 583.

¹⁴³³ BLOOMBERG, *Venezuela Siphoning U.S. Oil Exports to China Sinks Bonds*, 4 February 2014, **C-334**, p. 1; REPORTERO 24, *Pdvsa Raised Financing to Petrocaribe's Countries to 60%*, 28 April 2011, **C-316**, p. 1; EL NACIONAL, *\$11.2 Billion that Will Not Be Collected through Special Contribution*, 22 February 2013, **C-323**, p. 1.

¹⁴³⁴ REPORTERO 24, *Pdvsa Raised Financing to Petrocaribe's Countries to 60%*, 28 April 2011, **C-316**, p. 1.

¹⁴³⁵ R-PHB, §§ 586-585.

968. The Claimants' argument that they could have benefited from the exemption in Article 12.1 of the SPEC law by implementing EOR techniques is similarly flawed.¹⁴³⁶ It is not contentious that the implementation of EOR techniques qualifies for SPEC exemptions under Article 12.1 of the SPEC law.¹⁴³⁷ Indeed, the Claimants have demonstrated that, pursuant to Article 12.1, the Ministry of Energy has granted SPEC exemptions to post-Expropriation projects implementing "improved recovery".¹⁴³⁸ This fact, however, simply corroborates that the SPEC exemption under Article 12.1 is subject to governmental authorization; an approval that the Claimants concede is required,¹⁴³⁹ and which, in the Tribunal's view, most probably would not have been obtained. As established elsewhere, it has not been demonstrated that the Claimants were or would have been either in the disposition or in the capacity of implementing EOR techniques.¹⁴⁴⁰
969. For the Tribunal, the issue of Article 12 of the SPEC law thus boils down to the following: whether it would be acceptable for the Venezuelan Government to deny SPEC exemptions to the Claimants on the basis that the Claimants refused to migrate to the *empresas mixtas*.
970. The Respondents answer in the affirmative,¹⁴⁴¹ while the Claimants submit entirely the opposite. In particular, the Claimants argue that denying SPEC exemptions (to which they were arguably "entitled [...] under Venezuelan law") on such a principled consideration would be both "unlawful" and "discriminatory".¹⁴⁴²
971. The Tribunal finds it difficult to agree with the Claimants' position. The need for Governmental authorization for the SPEC exemptions clearly denotes a certain degree of administrative discretion.¹⁴⁴³ Accordingly, it cannot be accepted that the Claimants would have been outright "entitled" to obtain the said exemptions under Venezuelan law. Without further arguments by the Claimants in this respect, the

¹⁴³⁶ *Supra*, § 953.ii.

¹⁴³⁷ Special Contribution 2011, **App. BF-108**, Article 12; Special Contribution 2013, **App. BF-112**, Article 7.

¹⁴³⁸ Ministry of Energy, *Technical Report on Determination of Volumes Subject to Exemption from Special Contribution for Extraordinary Prices and Exorbitant Prices on International Market of Hydrocarbons*, 2012 and 2013, **C-337**, pp. 2-5.

¹⁴³⁹ C-PHB, § 856.

¹⁴⁴⁰ *Supra*, § 717.

¹⁴⁴¹ *Supra*, § 956.

¹⁴⁴² C-PHB, § 856.

¹⁴⁴³ Special Contribution 2011, **App. BF-108**, Article 13 ("The special contributions set forth in this Law may be subject to partial or total exoneration **on the part of the National Executive, in favor of certain exports within the framework of political economy and international cooperation**") (emphasis added).

Tribunal finds no justification to determine that the denial of SPEC exemptions on the grounds discussed above would be “unlawful”, as broadly argued by the Claimants.

972. The Claimants’ submission regarding alleged discrimination fares no differently. Beyond this general statement, the Claimants have not elaborated on why the denial of SPEC exemptions for the reasons set out above would be discriminatory under general Venezuelan law. If by resorting to discrimination-based arguments the Claimants intended to refer to the DA provisions, then the Claimants conflate two different issues. Whether the SPEC or a refusal to grant SPEC exemptions must be deemed DAs has no bearing in the present analysis. Indeed, the Tribunal must first determine whether the SPEC would have been applicable in the post-Expropriation’s but-for scenario (as it is today). Only then is it apposite to ascertain whether the SPEC or the denial of SPEC exemptions can be characterized as DAs;¹⁴⁴⁴ an inquiry that is developed further below.¹⁴⁴⁵ Overall, the Tribunal considers that the Claimants have failed to sufficiently demonstrate the SPEC’s inapplicability to the Projects on the basis of the exemptions envisaged in the SPEC law.
973. In any event, the Tribunal cannot help but note that Article 12 of the SPEC law was only introduced in 2011. When initially adopted in 2008, the SPEC law made no mention to specific exemptions. Rather, it generally stated that the SPEC could “be subject, by the National Executive Power, to total or partial exemption in benefit of certain exports, within the framework of economic policies and international cooperation”.¹⁴⁴⁶ In this context, the Claimants have not provided any explanation as to how they would have avoided the imposition of the SPEC from 2008-2011 by way of a statutorily defined exemption.
974. More significantly, perhaps, the Claimants are entirely silent in terms of how they would have actually adapted their operations to qualify for the SPEC exemptions. The studies, details, analyses, projections or even internal estimates of the steps that the Claimants would have concretely undertaken to benefit from the SPEC exemptions are conspicuous for their absence. In these circumstances, a mere statement that the Claimants would have done everything possible is, by and large, insufficient.

¹⁴⁴⁴ *Supra*, § 962.

¹⁴⁴⁵ *Infra*, § 994.

¹⁴⁴⁶ Special Contribution 2008, **App. BF-105**, Article 2.

975. The foregoing is a recurrent problem in the Claimants' position regarding the alleged operational changes that would have been carried out in order to avoid their exposure to the SPEC. The Claimants submit that they would have:

- i. Sold production "locally in Venezuela" and therefore avoided the SPEC, as the latter only applies to the export of crude.¹⁴⁴⁷ According to the Claimants, "PDVSA's own records confirm that *empresas mixtas*—including those producing EHCO—were designed to sell the vast majority of their production in Venezuela, thus avoiding the imposition of [the SPEC] on these sales".¹⁴⁴⁸
- ii. Reduced their SPEC taxable base by making "royalty-in-kind" payments,¹⁴⁴⁹ that is, by "putting 'the volume of hydrocarbons extracted from any field' towards royalties owed" ("RIK Payments").¹⁴⁵⁰ According to the Claimants, the "Respondents' document production in this arbitration confirms that the Petropiar Project (formerly Hamaca) has benefited from such RIK Payments".¹⁴⁵¹

976. The Tribunal cannot take the Claimants' arguments at face value. This is so precisely because the Claimants have not elaborated or even hypothesized on how and to what approximate extent these operational changes could have been implemented.¹⁴⁵²

¹⁴⁴⁷ *Supra*, § 953.iii - 953.iv.

¹⁴⁴⁸ C-PHB, § 857.

¹⁴⁴⁹ *Supra*, § 953.iv.

¹⁴⁵⁰ C-PHB, § 858.

¹⁴⁵¹ C-PHB, § 858.

¹⁴⁵² R-PHB, fn. 1240 ("Finally, Claimants argue that they could have used EHCO that could not be upgraded to pay royalties, thereby mitigating the financial effects of reduced CCO production. [...] That argument ignores a number of points. First, the associations were "upgrading" projects, and the prohibition against blending could not be circumvented by simply foisting non-upgraded EHCO on the Government in payment of the royalty. The fact that a mixed company authorized to sell blended product was also directed in some circumstances to pay royalties "in-kind" has no bearing on the issue of whether the associations could do so. Second, even if an association had been permitted to make royalty payments "in-kind" at its option, it is unclear how such in-kind payments would be implemented. EHCO cannot be delivered unless it is diluted with a lighter hydrocarbon that makes it mobile in the pipeline, and therefore the Projects would need to purchase new diluent (usually naphtha) in order for additional EHCO production at the field to be achieved. Claimants do not take into account the costs of the naphtha or the logistics of dealing with royalty in-kind payments. Finally, Claimants and their expert are wrong when they argue that the associations could simply have paid the royalty in-kind at their option. Under the Hamaca Association Agreement, the parties were "required to pay to the appropriate Venezuelan authorities in Bolívares the amount of the royalty due in respect of the Extra-Heavy Oil title to which vests in such Party pursuant to Section 9.2." It was only if the Ministry decided at its option to take the royalty in-kind that the royalty could be paid in that manner").

977. In any event, with respect to the possibility of selling crude within Venezuela in particular, the Tribunal notes that the Claimants' assumptions are inaccurate.¹⁴⁵³ Indeed, PDVSA's "own records" do not "confirm" that the *empresas mixtas* "were designed to sell the vast majority of their production in Venezuela" (thereby avoiding the imposition of the SPEC on those domestic sales).¹⁴⁵⁴ The evidence relied upon by the Claimants to make that assertion only states that an important characteristic of the *empresas mixtas* model is its product placement: the extracted crude can only be commercialized by the Venezuelan State, through PDVSA or another state entity.¹⁴⁵⁵ Accordingly, the report continues, the *empresas mixtas* shall deliver the totality of their hydrocarbon production of Venezuela, who will in turn sell the said production to the customers it deems convenient.¹⁴⁵⁶ Only thereafter, the *empresas mixtas* shall receive payment for the production transferred in accordance with the appropriate market price.¹⁴⁵⁷ Therefore, nothing in the Claimants' relied-upon evidence points to the conclusion that the aforementioned "deliver[y]" of production volumes to PDVSA amounts to a domestic sale of crude.¹⁴⁵⁸ This is more so given that it appears to be within PDVSA's full discretion to commercialize the received production volumes either internally or abroad.
978. In light of the above, the Tribunal determines that the SPEC must be deemed applicable to the Projects in the but-for scenario. The Tribunal's view remains the same even in consideration of the Claimants' arguments that:
- i. The SPEC law has been repeatedly "repealed, replaced or amended";¹⁴⁵⁹ and

¹⁴⁵³ *Supra*, § 975.i.

¹⁴⁵⁴ C-PHB, § 858.

¹⁴⁵⁵ Ministry of Energy and Petroleum and PDVSA, *Empresas Mixtas*, March 2006, **C-273**, p. 18 ("*Una característica importante del modelo de Empresas Mixtas está relacionada con el tema del proceso de colocación en los mercados del petróleo extraído: éste no podrá ser comercializado por terceras compañías. Aunque el recurso explotado será propiedad de las operadoras de las Empresas Mixtas, el mismo solamente será comercializado por el Estado venezolano, a través de PDVSA u otro ente estatal*"); C-PHB, fn. 1555; Reply, fn. 917.

¹⁴⁵⁶ Ministry of Energy and Petroleum and PDVSA, *Empresas Mixtas*, March 2006, **C-273**, p. 19 ("*Las Empresas mixtas entregarán la totalidad de su producción de hidrocarburos a PDVSA y ésta venderá la producción a los clientes que considere convenientes*").

¹⁴⁵⁷ Ministry of Energy and Petroleum and PDVSA, *Empresas Mixtas*, March 2006, **C-273**, p. 19 ("*Y, al final de ese proceso, las Empresas Mixtas recibirán el pago del valor de los hidrocarburos, conforme a los precios de mercado*").

¹⁴⁵⁸ C-PHB, fn. 1555; Reply, fn. 917.

¹⁴⁵⁹ *Supra*, § 953.v.

- ii. Adverse inferences should be drawn given the Respondents' failure to produce the full set of documents showing the entitlements, by PDVSA and its subsidiaries, to tax exemptions, exceptions, or deductions.¹⁴⁶⁰

979. The Tribunal fails to see how the changes in the SPEC may affect its (in)applicability. First, it is well within Venezuela's prerogative as a sovereign state to repeal, replace, or amend its legislation. Second, while the original 2008 SPEC law was repealed in 2011, this only occurred to introduce more comprehensive legislation on the matter.¹⁴⁶¹ Since then, the SPEC law has been subjected to certain amendments (with respect to its thresholds and rates), yet its basic structure and applicability has never been put into question.¹⁴⁶² The Claimants contend that the SPEC law may be further amended in the future.¹⁴⁶³ Nevertheless, such a generalized eventuality is insufficient to exclude the SPEC from the but-for scenario. This is notably so, again, in the absence of forecasts by the Claimants on how the SPEC could have been imposed post-Expropriation (for instance, in accordance with their own oil price projections).
980. Similarly, while it is unfortunate that the Respondents have not produced all documents pertaining to the possible tax benefits enjoyed by PDVSA (and its subsidiaries), it is not in itself dispositive of the issue at hand. Since the very outset the SPEC law has envisaged the possibility of granting "total or partial exemption[s] in benefit of certain exports, within the framework of economic policies [...]".¹⁴⁶⁴ In this context, the Tribunal finds it unsurprising that, as alleged by the Claimants, the PetroPiar Project appears to have been exempted from the payment of the SPEC since 2013.¹⁴⁶⁵ In fact, it would not strike it as odd if the same could be said of the Petroanzoategui Project (formerly Petrozuata).
981. The issue, however, is not whether the post-Expropriation projects were granted SPEC exemptions. Rather, it is whether it can be safely assumed that the same exemptions would have been granted to the Claimants. Nothing in the record leads to that conclusion. To the contrary, the Respondents have been clear in their position of

¹⁴⁶⁰ *Supra*, § 953.vi.

¹⁴⁶¹ Special Contribution 2011, **App. BF-108**, Articles. 15-16; Special Contribution 2013, **App. BF-112**.

¹⁴⁶² Special Contribution 2013, **App. BF-112**; *supra*, fn. 1420.

¹⁴⁶³ C-PHB, fn. 1558.

¹⁴⁶⁴ Special Contribution 2008, **App. BF-105**, Article 2; Special Contribution 2011, **App. BF-108**, Article 13; *supra*, fn. 1446.

¹⁴⁶⁵ *Supra*, § 953.vi.

favoring *empresas mixtas* over those hypothetically remaining entities, such as the Claimants, that refused to adhere to the 2007 Nationalization Decree.¹⁴⁶⁶ It follows, once more, that the appropriate inquiry is then to assess whether such a stand by the Respondents is tantamount to discriminatory and unjust treatment (as defined in the DA provisions of each AA); an analysis that is subsequent to the one regarding the SPEC's applicability,¹⁴⁶⁷ and that is made *infra*.¹⁴⁶⁸

982. For the reasons set out above, the Tribunal confirms its determination that, at least insofar as the Petrozuata Project is concerned,¹⁴⁶⁹ the post-Expropriation's but-for scenario must assume that the SPEC would have applied to the Projects.

c. *Would the Social Contribution, the Special Advantage Tax and the Anti-Drug Contribution apply to the Projects?*

983. The Tribunal notes that the Respondents do not seem to have adopted a position with respect to the (in)applicability of either the SOCO and/or the SPAT. That being said, in essence, neither have the Claimants.

984. Aside from instructing Mr. Abdala to exclude the SOCO and the SPAT from his DA calculations,¹⁴⁷⁰ the Claimants have not offered a clear explanation in support of such instruction. The Claimants appear to submit that only *empresas mixtas* would have been subject to either the SOCO or the SPAT, hence implying that the Claimants would have not, had they remained in control of the Projects.¹⁴⁷¹ Such a position, however, does not withstand scrutiny.

985. The Tribunal recalls that the Parties do not seem to have introduced the texts of the SOCO or the SPAT into the record.¹⁴⁷² The Tribunal cannot therefore ascertain the accuracy of the Claimants' implied assertion. Being the interested Party in this respect, however, the Claimants carried the burden of demonstrating why and to what extent the SOCO or the SPAT should be deemed inapplicable in the but-for scenario; a burden that, in these circumstances, the Claimants have failed to meet.

¹⁴⁶⁶ *Supra*, fn. 1441.

¹⁴⁶⁷ *Supra*, §§ 969-972.

¹⁴⁶⁸ *Infra*, § 994.

¹⁴⁶⁹ *Supra*, §§ 963-964.

¹⁴⁷⁰ *Supra*, fn. 1393.

¹⁴⁷¹ Reply, § 474; *supra*, §§ 950.ii-iii.

¹⁴⁷² *Supra*, §§ 961.ii-iii.

986. Accordingly, the Tribunal determines that the post-Expropriation but-for scenario must assume that: (i) the SOCO would have been imposed to both Projects; and (ii) in line with its previous finding in relation to the Hamaca Project,¹⁴⁷³ the SPAT would have been imposed to the Petrozuata Project.
987. Regarding the ADCO, the issue also hinges on supporting evidence or, more precisely, the lack thereof. It is common ground between the Parties' quantum experts that the ADCO is applicable to public and private companies employing 50 or more workers.¹⁴⁷⁴ However, Mr. Abdala suggests that the Hamaca Project did not, and would not have, met such a requirement.¹⁴⁷⁵ While the Claimants themselves endorse Mr. Abdala's understanding,¹⁴⁷⁶ no specific submission is made to that effect, and no evidence is referred to what would lead to such conclusion.
988. The same can be said of the Respondents and their quantum experts. Besides disagreeing with Mr. Abdala's assumption, Mr. Brailovsky and Mr. Flores stop there: they do not elaborate on why the ADCO did apply and would have continued to apply to the Hamaca Project. The Respondents are equally silent on the matter.
989. Unlike the SOCO and the SPAT, the ADCO was originally adopted in 2005, that is, pre-Expropriation.¹⁴⁷⁷ Because of this, the Tribunal is of the view that the Respondents were in a better position to demonstrate that the ADCO was indeed imposed on the Hamaca Project up to the Expropriation. Given that the Respondents have failed to discharge their burden of proof, however, the Tribunal cannot but accept the Claimants' assumption that the Hamaca Project was not subject to the ADCO between 2005 and 2007. By consequence, the same must be projected post-Expropriation. The Tribunal therefore determines that, in the but-for scenario, the ADCO must be deemed inapplicable to the Hamaca Project.

d. Are any of the applicable taxation measures DAs?

990. The Tribunal has already found that the SPEC is not applicable to the Hamaca Project and therefore it does not need to determine whether it amounts to a DA under

¹⁴⁷³ *Supra*, § 963-964

¹⁴⁷⁴ Brailovsky & Flores ER I, **RER-3**, § 218.e; Abdala ER I, **CER-3**, 235.b.

¹⁴⁷⁵ Abdala ER I, **CER-3**, fn. 183.

¹⁴⁷⁶ C-PHB, Appendix F, § 32(b).

¹⁴⁷⁷ Anti-Drug Contribution 2005, **App. BF-117**, Article 96; Anti-Drug Contribution 2010, **App. BF-118**, Article 32; Brailovsky & Flores ER I, **RER-3**, § 218.e; Abdala ER I, **CER-3**, 235.b.

the Hamaca AA.¹⁴⁷⁸ That being said, as developed further below, it is clear to the Tribunal that the SPEC is not “discriminatory” in accordance with the DA provisions of the Petrozuata AA. This is so given that the Claimants have not applied the correct comparator.

991. The Claimants argue that the imposition of the SPEC must be excluded from the but-for scenario given that it constitutes “a [DA] in its own right”.¹⁴⁷⁹ According to the Claimants, this is so because “it applies only to certain hydrocarbon-producing entities rather than to corporations generally”.¹⁴⁸⁰ This is the only argument put forward by the Claimants. The Tribunal notes that the Respondents do not raise a specific argument with respect to the SPEC. However, the Tribunal recalls the Respondents’ position in relation to the Income Tax Increase, which is equally applicable here. According to the Respondents, the issue turns on the meaning of what constitutes a generally applicable taxation measure: “[i]f the [measures are] generally applicable because they appl[y] to any tax payer engaging in the oil business, then they cannot be a [DA]”.¹⁴⁸¹ Albeit in the context of the Claimants’ Willful Breach Claim, the Respondents further argue that “there is nothing wrong with having different fiscal regimes for companies that are not similarly situated”.¹⁴⁸² The Tribunal generally agrees.
992. Section 1.01 of the Petrozuata AA establishes a default comparator for the purposes of determining whether a particular qualified measure is discriminatory, namely, a measure whose “treatment” is not “applicable to all enterprises in Venezuela”.¹⁴⁸³ However, as analyzed elsewhere in this award,¹⁴⁸⁴ Section 1.01 subsequently contemplates a first carve-out to the foregoing default comparator. This first carve-out states that “treatment shall not be considered discriminatory if it equally applies to the enterprises (*empresas*) within the oil industry in Venezuela”.¹⁴⁸⁵

¹⁴⁷⁸ *Supra*, § 963.

¹⁴⁷⁹ C-PHB, § 865.

¹⁴⁸⁰ C-PHB, § 865.

¹⁴⁸¹ R-PHB, § 521; *supra*, § 185.

¹⁴⁸² R-PHB, § 587.

¹⁴⁸³ Petrozuata AA, **C-1**, Section 1.01.

¹⁴⁸⁴ *Supra*, § 188.

¹⁴⁸⁵ Petrozuata AA, **C-1**, Section 1.01(a).

993. Being a taxation measure applicable to all private, mixed and public entities, and imposed on the export of crude oil and by-products,¹⁴⁸⁶ the SPEC must be deemed to “equally appl[y] to the enterprises [...] within the oil industry in Venezuela” deciding to undertake export activities. Because of this, the SPEC cannot be characterized as a discriminatory qualified measure under the Petrozuata AA and, therefore, as a DA.
994. The same goes for the Claimants’ arguments that the denial of SPEC exemptions would amount to discriminatory treatment.¹⁴⁸⁷ First, the Claimants do not develop their contention that an intentional denial of SPEC exemptions would have constituted a DA under the AAs. For instance, the Claimants fail to categorize administrative decisions denying tax exemptions as qualified measures falling under the purview of the relevant DA provisions of either AA.¹⁴⁸⁸ Assuming they do, however, the Claimants in any event merely make general statements as to how a denial of SPEC exemptions to the Projects would be “discriminatory”.¹⁴⁸⁹ The Claimants do not refer to the DA provisions of the AAs and, as such, offer no contractual basis for their statements.
995. Second, the Respondents’ position is clear: the granting of SPEC exemptions to *empresas mixtas*, as opposed to the Claimants, would have ultimately been determined by a policy to accord more favorable treatment to the former.¹⁴⁹⁰ In this context, the Tribunal cannot help but note that the Petrozuata AA specifically provides that “if special favorable treatment applicable only to the government owned companies is adopted, such treatment shall not be considered per se discriminatory”.¹⁴⁹¹
996. For the reasons set out above, the Tribunal determines that it would run contrary to the explicit text of the Petrozuata AA to characterize, either the SPEC itself, or the eventual refusal to grant SPEC exemptions to the Claimants, as DAs. Therefore, the SPEC cannot be excluded from the but-for scenario and must be discounted from the cash flows that the Petrozuata Project would have generated had the Expropriation not taken place.

¹⁴⁸⁶ Special Contribution 2008, **App. BF-105**, Article 1; Special Contribution 2011, **App. BF-108**, Articles. 6, 8.

¹⁴⁸⁷ *Supra*, §§ 972,981.

¹⁴⁸⁸ *Supra*, § 111.

¹⁴⁸⁹ *Supra*, § 970.

¹⁴⁹⁰ *Supra*, § 956.

¹⁴⁹¹ Petrozuata AA, **C-1**, Section 1.01(a)(3).

997. With respect to the SOCO and the SPAT, the issue is straightforward: the Claimants limit their argument to stating that “[t]hese taxes would also be [DAs], as defined in the AAs, and should be excluded for that reason”.¹⁴⁹² The relevant comparator under either AA is not identified nor the scope of each qualified measure is considered.

998. In short, the Claimants provide no elements for the Tribunal to assess whether, in fact, the SOCO and the SPAT are discriminatory in accordance with the contractual provisions of the Petrozuata and Hamaca AAs. In view of this, the Tribunal determines that neither of these measures can be deemed DAs and must therefore be duly accounted for in the but-for scenario.

F. INTEREST

999. It is common ground between the Parties that, with respect to the Claimants’ DA Claim, each AA sets out the applicable interest rate in order to bring the lost historical cash flows forward to present value (i.e. the date of valuation, namely, 27 May 2016).¹⁴⁹³ The Petrozuata AA establishes a “Base Rate” interest of 12-month LIBOR.¹⁴⁹⁴ The Hamaca AA in turn establishes a 3-month LIBOR interest rate to the same effect.¹⁴⁹⁵

1000. The issue in contention is whether the aforementioned rates must be granted on a compounded interest basis, as argued by the Claimants,¹⁴⁹⁶ or on a simple interest basis, as argued by the Respondents.¹⁴⁹⁷

1001. According to the Claimants, Venezuelan law “permits the award of compound interest”,¹⁴⁹⁸ which “reflects [the] economic reality [of] modern times”.¹⁴⁹⁹ To support their argument the Claimants rely, chiefly, on investment arbitration awards,¹⁵⁰⁰ on the

¹⁴⁹² R-PHB, § 865.

¹⁴⁹³ SoC, §§ 352,361; Reply, fn. 1063; C-PHB, fn. 1729; SoD, § 553; Rejoinder, fn. 1278; R-PHB, § 859; *supra*, § 585.

¹⁴⁹⁴ Petrozuata AA, **C-1**, Sections 9.07(d), 1.01 (definition of Base Rate).

¹⁴⁹⁵ Hamaca AA, **C-3**, Articles 14.3(d), 1 (definition of LIBOR).

¹⁴⁹⁶ C-PHB, §§ 968-970.

¹⁴⁹⁷ R-PHB, §§ 874-879.

¹⁴⁹⁸ C-PHB, § 968.

¹⁴⁹⁹ SoC, § 338.

¹⁵⁰⁰ *Continental Casualty v. Argentina*, ICSID Case No. ARB/03/9, Award, 5 September 2008, **CLA-14**, § 309; *Suez, Sociedad General de Aguas de Barcelona, S.A. and Vivendi Universal, S.A. v. Argentine Republic*, ICSID Case No. ARB/03/19, Award, 9 April 2015, **CLA-67**, ¶ 65; *El Paso Energy International Company v. The Argentine Republic*, ICSID Case No. ARB/03/15, Award, 31 October 2011, **CLA-15**, ¶ 746; *Occidental Petroleum Corporation and Occidental Exploration and Production Company v. Republic of Ecuador*, ICSID Case No. ARB/06/11, Award, 5 October 2012, **CLA-18**, § 834.

ConocoPhillips OPEC award,¹⁵⁰¹ on a decision rendered by the Venezuelan Superior Court for Civil, Banking and Commercial Matters,¹⁵⁰² and on their legal expert, Prof. Mata Borjas. In particular, Prof. Mata Borjas states the following:

Venezuelan law provides for pre- and post-award compound interest except in a small number of exceptional circumstances—such as credit card and home mortgage laws—that do not apply here. Compound interest is also payable by mutual agreement or by judicial decision. [...] Venezuelan jurisprudence [...] recognizes the award of compound interest pursuant to Article 530. Further, principles of full reparation under Venezuelan law require compound interest to be awarded to an injured party, to offset all of the losses caused by the wrongful conduct.¹⁵⁰³

1002. In this regard, the Claimants argue that the foregoing denotes the “appropriateness of compound interest”.¹⁵⁰⁴ They therefore submit: “all capitalization or interest awarded to Claimants should be subject to reasonable compounding”.¹⁵⁰⁵

1003. The Respondents, on the other hand, submit that, pursuant to Article 530 of the Venezuelan Commercial Code (“VCoC”),¹⁵⁰⁶ Venezuelan law allows compounding only in the two following situations: “(i) when the parties enter into an express agreement to capitalize interest after the interest has already been quantified, or (ii) when a judgment is rendered including interest, in which case interest will accrue on the entire amount of the judgment from the date of the judgment”.¹⁵⁰⁷ According to the Respondents, neither of these two situations applies to the case at hand, and therefore only simple interest can be awarded.¹⁵⁰⁸ The Respondents notably rely on the reports of their legal expert, Prof. García Montoya and the authorities cited therein.¹⁵⁰⁹

1004. The Tribunal agrees with the Respondents. First, the Tribunal finds that the investment arbitration awards relied upon by the Claimants are of no bearing to the present issue. As acknowledged by the Claimants themselves, the Iodestar is

¹⁵⁰¹ *Phillips Petroleum Company Venezuela Limited & ConocoPhillips Petrozuata B.V. v. Petróleos de Venezuela, S.A.*, ICC Case No. 16848/JRF/CA (C-16849/JRF), Final Award (henceforth “*ConocoPhillips OPEC Award*”), 17 September 2012, **CLA-17**, §§ 300, 307.

¹⁵⁰² *Banco Latino v. Eduardo Manuitt Carpio*, Eighth Superior Court for Civil, Banking and Commercial Matters, 28 July 2008, **CLA-4**.

¹⁵⁰³ Mata Borjas ER II, § 62.

¹⁵⁰⁴ Reply, § 552.

¹⁵⁰⁵ Reply, § 552.

¹⁵⁰⁶ VCoC, **RLA-123**, Article 530.

¹⁵⁰⁷ R-PHB, § 874.

¹⁵⁰⁸ R-PHB, § 874.

¹⁵⁰⁹ García Montoya ER I, **RER-1**, §§ 147-154; García Montoya ER II, **RER-5**, §§ 75-80.

whether “Venezuelan law [...] restrict[s] the Tribunal’s power to award compound interest”.¹⁵¹⁰ Whether or not investment arbitration tribunals, applying international law, grant compounded interests, is of little relevance.

1005. Second, the Tribunal finds little guidance in the ConocoPhillips OPEC award. In their decision, the tribunal reasoned as follows:

Claimants have requested the application of compound interests based on the main reasons that only compound interest would be in accordance with the principle of full compensation of damages, and that failure to grant compound interest would represent an unwarranted departure from current arbitral practice. In addition, neither Venezuelan law nor the ICC Rules would in any way fetter the Arbitral Tribunal's discretion in this regard.

Respondent has not challenged Claimants' request for compound interests, nor has it objected to Claimant's calculation of such compound interest.

[...]

After discussing the appropriateness of compound interest as calculated by Mr. Manuel Abdala, the majority of the Arbitral Tribunal found no justifiable reason to depart from the calculation method he adopted.¹⁵¹¹

1006. The Tribunal thus notes that, contrary to the present case, the OPEC tribunal did not deal with a challenge by the responding party to the recognition of compound interest. It is perhaps for that reason that the content of Article 530 of the VCoC does not seem to have been properly considered. In this context, the OPEC tribunal's conclusion that Venezuelan law did not fetter its discretion to grant compound interest is, at best, of limited assistance.

1007. It follows that, as far as supporting authorities on domestic law are concerned, the Claimants' compound interest argument hinges on the *Banco Latino* case decided by the Venezuelan Superior Court for Civil, Banking and Commercial Matters.¹⁵¹² This case, however, runs in favor of the Respondents' position.

1008. While in *Banco Latino* the Court recognized the applicability of compound interest under Venezuelan law, it did so within the framework of Article 530 of the VCoC, which states as follows:

Interest is not owed on interest as long as, after its calculation, it is not included in a new contract as a capital increase. It is also owed when by mutual

¹⁵¹⁰ Reply, § 552.

¹⁵¹¹ *ConocoPhillips OPEC Award*, **CLA-17**, §§ 297-298, 300.

¹⁵¹² *Supra*, fn. 1502.

agreement, or by judicial decision, the balance is calculated including therein the accrued interest.¹⁵¹³

1009. As rightly pointed out by Prof. García Montoya, in *Banco Latino* the Court sanctioned compounded interest given that the parties had “mutually agreed to capitalize interest, and these were included in a new loan agreement, in accordance with the requirements of [the *first tranche* of] Article 530 of the Commercial Code”.¹⁵¹⁴ The factual considerations determining *Banco Latino* therefore correspond with the first of two situations mentioned above which, according to the Respondents, are the only scenarios whereby Venezuelan law allows compounding.¹⁵¹⁵ In this regard, the Tribunal agrees with the Respondents that “*Banco Latino* does not support [the] Claimants’ argument that compound interest should be awarded in this case, where the parties have not mutually agreed to compound interest”.¹⁵¹⁶

1010. Prof. Mata Borjas’ expert opinion does little to advance the Claimants’ position on this point. In his first expert report Prof. Mata Borjas is silent on the matter of compound interest. It is only in his second expert report that Prof. Mata Borjas argues in favor of granting compound interest in light of: (i) Article 530 of the VCoC; and (ii) the principles of full compensation.¹⁵¹⁷ Nevertheless:

- i. When referring to how Venezuelan case law “recognizes the award of compound interest pursuant to Article 530” of the VCoC, the only authority given to that effect is precisely the *Banco Latino* case.¹⁵¹⁸ As seen, however, *Banco Latino* is not favorable to the Claimants.
- ii. No authority is provided accounting for the relevance of the principles of full compensation as grounds for granting compound interests, and rightly so: during the Hearing, Prof. Mata Borjas conceded that, as opposed to general principles of compensation, the “only legal basis that exists in Venezuela for

¹⁵¹³ VCoC, **RLA-123**, Article 530 (“*No se deben intereses sobre intereses mientras que, hecha la liquidación de éstos, no fueren incluidos en un nuevo contrato como aumento de capital. También se deben cuando de común acuerdo, o por condenación judicial, se fija el saldo de cuentas incluyendo en él los intereses devengados*”).

¹⁵¹⁴ García Montoya ER I, **RER-1**, § 154; García Montoya ER II, **RER-5**, § 78; *Banco Latino v. Eduardo Manuitt Carpio*, Eighth Superior Court for Civil, Banking and Commercial Matters, 28 July 2008, **CLA-4**, pp. 6-8, 10.

¹⁵¹⁵ *Supra*, § 1003.

¹⁵¹⁶ R-PHB, § 875 (emphasis by the Respondents).

¹⁵¹⁷ *Supra*, fn. 1503.

¹⁵¹⁸ Mata Borjas ER II, fn. 90.

compound interest” is Article 530 of the VCoC.¹⁵¹⁹ In any event, the Tribunal agrees with Prof. García Montoya that reliance on general principles with respect to interest seems incorrect. Indeed, the “criteria regarding compound interest” held by the Venezuelan Supreme Court appears to “take precedence over any argument regarding its applicability under the principle of integral reparation”.¹⁵²⁰ In this regard, the Tribunal notes that the Respondents refer to at least two decisions by the Supreme Court suggesting that compounding interest is only permitted in the context of Article 530 of the VCoC;¹⁵²¹ decisions whose relevance to the Respondents’ case against compounded interest has not been questioned by the Claimants.

1011. Prof. Mata Borjas further submits that compound interests can also be “payable by [...] judicial decision”.¹⁵²² The Tribunal understands this to be a reference to the second *tranche* of Article 530 of the VCoC.¹⁵²³ Yet, the Tribunal again fails to see the relevance of that provision in the case at hand.

1012. It is undisputed that Article 530 of the VCoC envisages two situations whereby compound interest is permitted under Venezuelan law, the second one of which is through a judicial decision ordering so.¹⁵²⁴ Presumably, the same can be said of an arbitral award. Still, as explained by Prof. García Montoya, that can only occur when “pre-judgment[/award] interest is included within the amount of the judgment[/award],

¹⁵¹⁹ Tr. (Day 7) 1916:18-25 – 1927:1 (Mata Borjas). While Article 530 of the VCoC in principle only applies to loans, the Tribunal is persuaded by Prof. García Montoya that its extends to, generally, commercial matters in general (Tr. (Day 7) 1966:14 – 1968:1 (García Montoya))

¹⁵²⁰ García Montoya ER II, **RER-5**, § 79.

¹⁵²¹ *Asociación Civil Deudores Hipotecarios de Vivienda Principal (ASODEVIPRILARA) v. Superintendencia de Bancos et al.*, Supreme Tribunal of Justice (Constitutional Chamber), Case No. 01-1274, Judgment, 24 January 2002, **App. GM-133**, p. 60 (“[T]he aforementioned Article 530 does not permit that the creditor and the debtor enter into agreements for the capitalization of interests prior to the quantification of the actual interests”); *Nohema Medina de Rojas v. Consejo de la Judicatura*, Supreme Tribunal of Justice (Political Administrative-Chamber), Case No. 13321, Judgment, 11 December 1 2001, **App. GM-135**, p. 9 (“[The judge] acted erroneously ab initio, when admitting a claim that was contrary to an express provision of the Law. [...] Such prohibition arises from determining that in the complaint submitted [...] one of the claims alleged by plaintiff consisted in charging interest on interest owed, that is, what the doctrina has characterized as *anatocismo*, which, according to Article 530 of the Venezuelan Commercial Code, applies only in the cases expressly provided therein, namely, when there has been a quantification of interests and these are included in a new agreement as an increase of capital, or when, by mutual agreement, or by judicial decision, the outstanding balance is determined including therein”); R-PHB, § 876.

¹⁵²² *Supra*, fn. 1503.

¹⁵²³ *Supra*, fn. 1513.

¹⁵²⁴ *Supra*, § 1003.

in which case post-judgment[/award] interest may accrue on the full amount resulting from the judgment[/award]”.¹⁵²⁵

1013. Prof. García Montoya’s foregoing explanation is not controversial. Indeed, during the Hearing, Prof. Mata Borjas acknowledged that a judgement/award can allow for compound interests only after the pre-judgement/award interests are deemed matured and incorporated as a principal amount in the said judgement or award.¹⁵²⁶ That, however, is not the Claimants’ position in this arbitration. The Claimants very clearly request that “all capitalization or interest awarded”, including those relating to historical cash flows, “should be subject to reasonable compounding [...] on an annual basis”.¹⁵²⁷

1014. For the reasons set out above, the Tribunal is of the view that, under Venezuelan law, compound interest cannot be awarded in the present case. The Tribunal therefore determines that, pursuant to the Parties’ agreement with respect to the interest rates applicable to the DA Claim,¹⁵²⁸ the Hamaca Project’s historical yearly indemnifications accrue simple interest quarterly at 3-month LIBOR rate, while the Petrozuata Project’s historical annual indemnifications accrue simple interest annually at 12-month LIBOR.¹⁵²⁹

G. DISCOUNT RATE

1. The Claimants’ position

1015. In order to bring future cash flows pertaining to the DA Claim back to present value (i.e., the date of valuation, namely, 27 May 2016),¹⁵³⁰ the Claimants argue in favor of adopting a discount rate of 15.2%. The Claimants arrive at this figure by using the following International Capital Asset Pricing Model (ICAPM) “building blocks” approach:¹⁵³¹

- i. Establishing a base line risk-free rate of **2.11%**;

¹⁵²⁵ García Montoya ER II, **RER-5**, § 79.

¹⁵²⁶ Tr. (Day 7) 1927:3-21 (Mata Borjas).

¹⁵²⁷ Reply, § 552; C-PHB, § 969; *supra*, § 1002.

¹⁵²⁸ *Supra*, § 999.

¹⁵²⁹ C-PHB, Appendix F, § 35(b).

¹⁵³⁰ *Supra*, § 585.

¹⁵³¹ C-PHB, § 875, 12, 17; Abdala ER I, **CER-3**, §§ 89-90, 106, 195, 207-208, 221; Abdala ER II, **CER-8**, §§ 17, 20, 213.

- ii. Computing a 6.22% risk-factor reflecting the risks associated with an equity investment in the upstream crude oil industry in a developed economy like the United States (*i.e.*, industry risk premium) which, multiplied by an unlevered beta of 1.13 and added to the risk-free rate, yields an unlevered cost of equity for a U.S.-based upstream oil and gas project of 7%; and
 - iii. Applying a country risk premium of 6.1% to reflect the country-specific (*i.e.*, Venezuela) risks to which the Projects would have been exposed in the but-for world.
1016. The Claimants justify the foregoing unlevered cost of equity approach (“unlevered CoE”) as opposed to a weighted average cost of capital approach (“WACC”). They argue that “the indemnification amounts owing under the DA provisions are properly characterized as cash flows to equity holders, meaning that the discount rates for the DA provisions scenarios are based on the Projects’ cost of equity, rather than the weighted average of the cost of equity and cost of debt, as reflected in the WACC”.¹⁵³²
1017. In view of this, the Claimants submit that their discount rate of 15.21% is reasonable, as it is consistent with: “(i) the rates used by the Project participants and their affiliates throughout their relationship; and (ii) the rates Respondents apply to their other hydrocarbon projects in Venezuela today”.¹⁵³³
1018. Regarding the former, the Claimants refer to a report prepared by the Petrozuata Project of January 2000,¹⁵³⁴ and a Financing Memorandum prepared by the Hamaca Project in August 2000,¹⁵³⁵ calculating a discount rate of 8.53% and 10% respectively. The Claimants also refer to a 2008 “document that Venezuela was compelled to produce in the ICSID Arbitration, [...] bear[ing] the logos of PDVSA, the Government and the Ministry, [and] propos[ing] a discount rate range of 8% to 12% to value th[e] Projects”.¹⁵³⁶ According to the Claimants, the said range was calculated during the negotiations regarding the Expropriation, *i.e.*, at a time when the “Respondents’

¹⁵³² C-PHB, fn. 1581; Abdala ER I, **CER-3**, fn. 36; Abdala ER II, **CER-8**, fn. 110, 162. The Tribunal notes that the Claimants and their quantum expert do adopt a WACC methodology for the calculation of the discount rate under the Willful Breach scenario, which results in a discount rate of 13.8% (C-PHB, § 875, fn. 1581).

¹⁵³³ C-PHB, § 878.

¹⁵³⁴ Project for Association PDVSA–Conoco, Petrozuata C.A., Revision of Descriptive Report (*Proyecto de Asociación, PDVSA-Conoco, Petrozuata C.A., Revisión de la Memoria Descriptiva*), January 2000, **C-80**, p.15.

¹⁵³⁵ Hamaca Confidential Preliminary Information Memorandum, Volume I, Morgan Stanley Dean Witter, August 2000, **C-83**, p. XII-1.

¹⁵³⁶ C-PHB, § 880.

incentive was to use as high a discount rate as possible to reduce the Projects' value".¹⁵³⁷

1019. With respect to the alleged rates the Respondents currently apply to their other hydrocarbon projects in Venezuela, the Claimants refer to: (i) the 10% discount rate set in the 2008-2014 annual Consolidated Financial Statements for PDVSA and its subsidiaries;¹⁵³⁸ (ii) a discount rate of 8% determined in 2014 in the context of a greenfield and thus riskier project between PDVSA and foreign investors Eni and Repsol;¹⁵³⁹ and (iii) the 10% discount rate associated with the underdeveloped greenfield Junín 4 Block project also in the Orinoco Belt. This last project, the Claimants submit, is the product of a treaty between Venezuela and China to be developed through a joint venture between PDVSA and the Chinese National Petroleum Corporation ("CNPC").¹⁵⁴⁰

1020. The Claimants further argue that their discount is also consistent with those adopted in other arbitration awards in comparable cases,¹⁵⁴¹ such as *Occidental Petroleum* (applying a 12% discount rate),¹⁵⁴² *Enron* (applying a 12.6% discount rate),¹⁵⁴³ and *Gold Reserve* (applying a discount rate of 10.09%).¹⁵⁴⁴

1021. In view of the Respondents' proposed 27.7% discount rate,¹⁵⁴⁵ the Claimants note that such an "absurdly high" rate results from the miscalculation of their country risk premium, which is premised on the following three main interrelated errors:¹⁵⁴⁶

- i. First, the Respondents' quantum experts incorrectly consider the current near-default status of Venezuela's sovereign debt as a factor in the determination

¹⁵³⁷ C-PHB, § 881.

¹⁵³⁸ PDVSA, Consolidated Financial Statements for years 2008-2010, **C-304**, p. 84; PDVSA, Consolidated Financial Statements for years 2011-2013, **C-338**, p. 102; PDVSA, Consolidated Financial Statements for years 2012-14, **C-354**, p. 126.

¹⁵³⁹ Einstein Millán Arcia, PDVSA: Secretos del Proyecto Cardon IV – Campo Perla, SOBERANÍA, 14 July 2014, **C-343**, p. 2 (of PDF); PDVSA Presentation: Avances – Proyecto de Gas Rafael Urdaneta, Bloque Cardón IV, June 2014, **C-341**, pp. 2-3; C-PHB, § 884.

¹⁵⁴⁰ C-PHB, §§ 885-889.

¹⁵⁴¹ C-PHB, § 891.

¹⁵⁴² *Occidental Petroleum Corporation and Occidental Exploration and Production Company v. Republic of Ecuador*, ICSID Case No. ARB/06/11, Award, 5 October 2012 (henceforth, *Occidental Petroleum*), **CLA-18**, § 764.

¹⁵⁴³ *Enron Corporation, Ponderosa Assets, L.P. v. Argentine Republic*, ICSID Case No. ARB/01/3, Award, 22 May 2007 (henceforth, *Enron*), **CLA-61**, §§ 411-413.

¹⁵⁴⁴ *Gold Reserve, Inc. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/09/1, Award, 22 September 2014 (henceforth, *Gold Reserve*), **CLA-21**, §§ 840-842.

¹⁵⁴⁵ *Infra*, § 1023.

¹⁵⁴⁶ C-PHB, §§ 892, 895.

of the applicable country risk. According to the Claimants, this is misguided for the following two reasons. On the one hand, by “anchor[ing] their country risk premium on the [...] present-day borrowing costs of the Venezuelan government”, the Respondents perform an “actual” analysis as opposed to a “but-for analysis”.¹⁵⁴⁷ On the other hand, there is little to no relation between the risk of Venezuela defaulting on its financial sovereign obligations and the country risk assignable to private, profitable, and financially stable commercial enterprises such as the Projects. While the Venezuela’s 23% bond yield suggests market expectations that it will soon default on its loans, the Claimants refer to their quantum expert and assert that “the Projects were not, and have not been, anywhere close to near-default status. [T]he measure of the distress experienced by Venezuela, and reflected in the [sovereign debt spread], is not useful as a proxy to derive a country risk premium for the Projects”.¹⁵⁴⁸

- ii. Second, the Respondents improperly “inflate” their country risk premium by accounting for Venezuela’s “propensity to engage in types of unlawful conduct that are the subject of this arbitration”.¹⁵⁴⁹ According to the Claimants, Venezuela attempted the same “gambit” in *Gold Reserve*,¹⁵⁵⁰ where the tribunal rightfully found that it was “inappropriate to increase the country risk premium to reflect the market’s perception that a State might have a propensity to expropriate investments in breach of BIT obligations”.¹⁵⁵¹ The Claimants submit that holding otherwise would “reward violations of international law, and create an incentive for a State (or state companies acting in collusion with it) to take property in violation of its international obligations”;¹⁵⁵² a result that would be “irreconcilable with the basic principle that a party may not benefit from its wrongful conduct”.¹⁵⁵³

The Claimants distinguish *Gold Reserve* from other decisions relied upon by the Respondents, such as *Tidewater* and *Saint-Gobain*.¹⁵⁵⁴ In particular, the

¹⁵⁴⁷ C-PHB, § 896.

¹⁵⁴⁸ Abdala ER II, **CER-8**, §§ 102, 111.

¹⁵⁴⁹ C-PHB, § 904.

¹⁵⁵⁰ C-PHB, § 904.

¹⁵⁵¹ *Gold Reserve*, **CLA-21**, § 840-842.

¹⁵⁵² C-PHB, § 907.

¹⁵⁵³ C-PHB, § 910.

¹⁵⁵⁴ R-PHB, §§ 831- 832

Claimants submit that, *Gold Reserve*, unlike *Tidewater* and *Saint-Gobain*, concerned a confirmed unlawful expropriation of assets that had been invested in Venezuela during non-suspect times (i.e. in the mid-1990s, before the political and legal uncertainties associated with the ascendancy of the Chávez government).¹⁵⁵⁵ Accordingly, it is *Gold Reserve*, and not *Tidewater* or *Saint-Gobain*, which serves as proper guidance to the Tribunal.

- iii. Third, the Respondents' discount rate fails to account for the limited exposure of the Projects to the Venezuelan country risk. For instance, it ignores that the Projects: "(i) produced a commodity for which there is international demand; (ii) sold their products, and received their income, abroad in U.S. dollars; (iii) acquired critical inputs from international markets; (iv) used little local capital; (v) relied on infrastructure that was self-contained and largely insulated from local unrest or disruptions; and (vi) had legal protections designed to reduce their exposure to adverse governmental actions".¹⁵⁵⁶

1022. Furthermore, the Claimants submit that the Respondents' discount rate calculations are premised on the following out-of-context statements. In particular:

- i. The Respondents point to documents allegedly indicating that the Claimants have envisaged high discount with respect to the Projects themselves or other unspecified projects, such as the 20% rate identified by Mr. Robert McKee (former Conoco's Executive Vice President for Exploration and Production) at the time Conoco decided to participate in the Petrozuata Project in the mid-1990s,¹⁵⁵⁷ and by Mr. Matthew Fox (who held the same position that had been held by Mr. McKee) in 2013 with respect to projects in Canada.¹⁵⁵⁸ However, those rates in fact corresponded to an internal rate of return ("IRR"), which serves a distinct purpose.¹⁵⁵⁹
- ii. The Respondents refer to a public hearing of the Legislative Budget and Audit Committee of the Alaska State Legislature where ConocoPhillips' Chief Economist, Ms. Marianne Kah, and the late Dr. Anthony Finizza, one of

¹⁵⁵⁵ C-PHB, §§ 908-913.

¹⁵⁵⁶ C-PHB, § 914.

¹⁵⁵⁷ *ConocoPhillips Petrozuata B.V. et al. v. The Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/30, Transcript of the Hearing on Jurisdiction, Merits and Quantum held on 31 May – 12 June, 21 July and 23 July 2010, **R-74**, pp. 731-732.

¹⁵⁵⁸ *ConocoPhillips Analyst Meeting, Thompson Reuters StreetEvents*, 28 February 2013, **App. BF-131**, p. 7.

¹⁵⁵⁹ C-PHB, §§ 919-924.

Venezuela’s damages experts at Econ One during the merits phase of the ICSID Arbitration, identified certain rates in relation to a 3640-mile pipeline to transport natural gas from Alaska to Chicago. In particular, the Respondents stress that in Ms. Kah’s opinion 12% would be an appropriate discount rate for “energy projects in the United States”; a figure that she considered would be “higher” elsewhere due to the “risks involved”.¹⁵⁶⁰ The Respondents also highlight Dr. Finizza’s opinion that a 25% discount rate would be appropriate for projects in Venezuela,¹⁵⁶¹ meaning that an investor would require a threshold IRR above said “risk-premium” to invest in Venezuela.¹⁵⁶² However, in the Claimants’ view the pipeline discussed before the Alaskan State Legislature (which has not yet been built) is not comparable with either of the Projects because, in addition to being a different class of project, it concerned the “largest, most technically complex and most expensive construction projects in the world, and thus one of the riskiest”.¹⁵⁶³ The Claimants also argue that Dr. Finizza’s comments are inapposite as, “[a]t most, they stand for the unremarkable proposition that a project in Venezuela faces higher country risk than would an identical project in the United States”.¹⁵⁶⁴

- iii. The Respondents refer to an expert report submitted by ConocoPhillips in a commercial ICC arbitration against PDVSA, PDVSA Petróleo, and PDVSA subsidiaries, proposing a discount rate between 20% and 30% with respect to the valuation of an oil refinery in Texas.¹⁵⁶⁵ However, as a procedural matter, the Claimants “object to Respondents’ introduction of that expert report—which has been sealed by a U.S. Federal Court in a case in which affiliates of PDVSA, represented by Curtis Mallet, are involved—into this proceeding, and renew their request that it be struck from the record”.¹⁵⁶⁶ In any event, the

¹⁵⁶⁰ Alaska State Legislature, Legislative Budget and Audit Committee, Minutes of Meetings held on 14-15 June 2006, **App. BF-129**, pp. 123-124.

¹⁵⁶¹ Dr. Anthony Finizza, Consultant, Econ One Research, Inc., Presentation, *Presentation on Alaska Gas Pipeline Project to Alaska State Legislative Budget & Audit Committee: Investment Decision-Making by Oil and Gas Companies*, 31 August 2005, **App. BF-132**, slide 13.

¹⁵⁶² Alaska State Legislature, Legislative Budget and Audit Committee, Minutes of Meetings held on 14-15 June 2006, **App. BF-129**, p. 43.

¹⁵⁶³ C-PHB, §§ 928-929.

¹⁵⁶⁴ C-PHB, §§ 930.

¹⁵⁶⁵ *ConocoPhillips Petrozuata B.V. et al. v. The Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/30, E-mail from Counsel for Respondent to the Tribunal, of 10 August 10 2012 (attaching *PDV Sweeny, Inc. et al. v. ConocoPhillips Company and Sweeny Coker Investor Sub, Inc.*, ICC Case No. 16982/JRF/CA (C-17336/JRF), Report Concerning the Value of Merey Sweeny L.P. by Garfield L. Miller, III, Aegis Energy Advisors Corp. Of 6 August 2012) (henceforth, *Merey Sweeney* report), **R-178**, pp. 4, 7, 14-15 (of the report).

¹⁵⁶⁶ C-PHB, § 931.

Claimants argue that the *Merey Sweeney* report dealt with a project that “had specific and atypical characteristics, such as lack of control, lack of strategic upside, and lack of liquidity. In particular, the refinery components at issue were captured within a large refinery complex that the joint venture did not own”, making it “essentially unmarketable to third parties”.¹⁵⁶⁷

- iv. The Respondents rely on the *Himpurna*,¹⁵⁶⁸ *Lemire*,¹⁵⁶⁹ and both the *Mobil ICC*¹⁵⁷⁰ and *Mobil ICSID*¹⁵⁷¹ cases, applying discount rates of about 18%. However, neither of these decisions should guide the Tribunal given that, *inter alia*, said cases either: (i) entailed particular factual circumstances not applicable to the case at hand; (ii) concerned nascent and/or greenfield projects that were thus exposed to higher operational and construction risks; (iii) confused the notion of IRR with that of discount rate; or (iv) based their discount rate calculation on the project’s CoE as opposed to the project’s WACC, which generally yields a higher discount rate; (v) were confronted with what was deemed unreasonable discount rate proposals by the respective claimants, and therefore left with no alternative but to adopt the high discount rate submitted by the respondents; (vi) did not undertake an independent analysis of the applicable discount rate in order to avoid inconsistent outcomes between similar cases; and/or (vii) rendered their decision in the context of a lawful expropriation.¹⁵⁷²

2. The Respondents’ position

1023. Also adopting a “building blocks” approach considering ICAPM, but also other methods “that are free from the strictures of that theory’s assumptions”,¹⁵⁷³ the

¹⁵⁶⁷ C-PHB, §§ 932-933.

¹⁵⁶⁸ *Himpurna California Energy Ltd. v. PT (Persero) Perusahaan Listrik Negara*, UNCITRAL, Final Award dated May 4, 1999 (Excerpt), in YEARBOOK COMMERCIAL ARBITRATION 2000, VOL. XXV, 11 (A. Jan van den Berg ed., Kluwer Law International 2000)(henceforth, *Himpurna*), **RLA-65**.

¹⁵⁶⁹ *Joseph Charles Lemire v. Ukraine*, ICSID Case No. ARB/06/18, Award, 28 March 2011 (henceforth, *Lemire*), **RLA-68**.

¹⁵⁷⁰ *Mobil Cerro Negro, Ltd. v. Petróleos de Venezuela, S.A. and PDVSA Cerro Negro, S.A.*, ICC Case No. 15416/JRF/CA, Final Award, 23 December 2011 (henceforth, *Mobil ICC* case), **CLA-16**,

¹⁵⁷¹ *Venezuela Holdings, B.V. et al. v. The Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/27, Award, 9 October 2014 (henceforth, *Mobil ICSID* case), **RLA-2**.

¹⁵⁷² C-PHB, §§ 934-944.

¹⁵⁷³ Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, § 357. The other non ICAPM methods used by the Respondents’ quantum experts include other country risk rating models, discount rates published by the Society of Petroleum Evaluation Engineers for project evaluation and transactions, and the Texas Comptroller Public Accounts for tax assessment (Brailovsky & Flores ER I, **RER-3**, § 247(a), 362-366, 247(c), 369-376, 247(d), 377-379).

Respondents and their quantum experts argue in favor of a WACC or discount rate for the DA scenario of 27.7%.¹⁵⁷⁴ They arrive at this figure by:¹⁵⁷⁵

- i. Establishing a base line **2.1%** risk-free rate;
- ii. Computing a **5.8%** industry risk premium;
- iii. Adding a **17.8%** country risk premium;

1024. Supplementing the above figures with a **2.0%** liquidity premium accounting for an estimate discount for lack of marketability (“DLOM”).

1025. The Respondents opt for a WACC approach, as opposed to an unlevered CoE analysis, given their disagreement with the Claimants’ assumption that, under the DA provisions, “the yearly indemnification amounts owing to Claimants are tantamount to a stream of equity cash flows to Claimants, which ought to be paid by the state-owned equity holder in each Project”.¹⁵⁷⁶ According to the Respondents’ quantum experts, the valuation with respect to the AAs (be it under the Willful Breach Claim or the DA Claim) must respond to the “correct fair market value of the projects” vis-à-vis any “prospective arm’s-length buyer of the Projects”.¹⁵⁷⁷ Hence, as far as the discount rate applicable to future cash flows is concerned, there are no reasons to make distinctions between the Willful Breach and DA scenarios.

1026. In light of the above, the Respondents contend that their 27.7% discount rate is appropriate, as the only one consistent with: (i) “those of other tribunals in cases involving the very same nationalization as is at issue here;”¹⁵⁷⁸ (ii) the relation between the notions of IRR and discount rate;¹⁵⁷⁹ and (iii) the statements made by Claimants’

¹⁵⁷⁴ R-PHB, § 822; Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, § 347.

¹⁵⁷⁵ Brailovsky & Flores ER I, **RER-3**, § 230; Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, Figure 11, Table 34. Further to Mr. Brailovsky’s and Mr. Flores’ indications, the Tribunal notes that the details in Figure 11 “may not add to total due to rounding” (Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, fn. 774). Indeed, Figure 11 refers to a 2.1% risk-free rate, a 5.7% industry risk premium, a 17.8% country risk premium, and a 2.0% liquidity premium, which adds to a discount rate of 27.6%, not 27.7%. Given that Mr. Brailovsky and Mr. Flores do not seem to disaggregate their 27.7% discount rate into the same categories elsewhere in their Consolidated ICSID Report, for the sake of consistency the Tribunal refers to a 5.8% industry risk premium as opposed to the 5.7% industry risk premium as in Figure 11. This adjustment in any event has no bearing on the Tribunal’s final determination on discount rate. This is so because, save for certain exceptions (*infra*, § 1051), the Tribunal shall decide on the applicable discount rate as a whole (*infra*, § 1052).

¹⁵⁷⁶ Abdala ER I, **CER-3**, fn. 36; Abdala ER II, **CER-8**, fn. 110, 162; *supra*, § 1016.

¹⁵⁷⁷ Brailovsky & Flores ER I, **RER-3**, § 384.

¹⁵⁷⁸ R-PHB, § 823.

¹⁵⁷⁹ Rejoinder, §§ 577-579.

own representatives and the positions taken by Claimants, their experts and their counsel in other proceedings”.¹⁵⁸⁰

1027. In relation to the first point, the Respondents rely, chiefly, on the *Mobil ICC* and *ICSID* cases (both adopting a discount rate of 18%),¹⁵⁸¹ *Tidewater* (considering a country risk premium of 14.75% to be “reasonable” and “conservative” for Venezuela in 2009),¹⁵⁸² and *Saint-Gobain* (setting a nominal discount rate of 19.88%).¹⁵⁸³
1028. In particular, the Respondents contend that it is indeed appropriate to calculate a country risk premium commensurate to the political risk of doing business in a particular state – an analysis that may entail a but-for scenario accounting for the risk of being expropriated. Such an approach, the Respondents submit, must not be misconstrued as allowing States to benefit from their own wrongdoing, it simply represents the assessment that a hypothetical buyer would undertake when determining the amount it would be willing to pay for the asset in question at a particular point in time.¹⁵⁸⁴ The consideration of expropriation risk thus responds to an economic question that is distinct from that of liability resulting from the issuance of certain State measures.¹⁵⁸⁵
1029. With respect to the Claimants’ attempt to differentiate between the notions of IRR and discount rate, the Respondents submit that “it is elementary that the minimum expected IRR or “hurdle rate” that an investor requires in order to invest in a project is precisely equivalent to the discount rate”.¹⁵⁸⁶ According to the Respondents, the “connection between minimum IRR or hurdle rate, on the one hand, and discount rate, on the other, [...] is also well established in all literature on the subject”.¹⁵⁸⁷
1030. In this context, the Respondents submit that it is “insultin[g]” for the Claimants to argue that the *ICC Mobil* tribunal misunderstood the distinction between discount rate

¹⁵⁸⁰ R-PHB, § 823.

¹⁵⁸¹ *Mobil ICC* case, **CLA-16**, § 777; *Mobil ICSID* case, **RLA-2**, § 368.

¹⁵⁸² *Tidewater Investment SRL and Tidewater Caribe, C.A. v. The Bolivarian Republic of Venezuela*, ICSID Case No. ARB/10/5, Award, 13 March 2015 (henceforth, *Tidewater*), **RLA-069**, §§ 190, 197.

¹⁵⁸³ *Saint-Gobain Performance Plastics Europe v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/12/13, Decision on Liability and the Principles of Quantum, dated 30 December 2016 (henceforth, *Saint-Gobain*), **RLA-147**, § 758.

¹⁵⁸⁴ *Himpurna*, **RLA-65**, § 358, 364; R-PHB, §§ 821, 829.

¹⁵⁸⁵ *Saint-Gobain*, **RLA-147**, § 717.

¹⁵⁸⁶ Rejoinder, § 577.

¹⁵⁸⁷ Rejoinder, § 578.

and IRR.¹⁵⁸⁸ Referring to the position adopted by Venezuela in the ICSID Arbitration, the Respondents argue:

First, Claimants criticize the ICC tribunal, consisting of three distinguished and experienced international arbitrators, for not understanding the discount rate issue, but the fact is that the tribunal had before it the extensive expert reports and live testimony of four accomplished discount rate experts, including Respondent's two experts in this case, and understood the issue quite well. Claimants, on the other hand, can only fall back on their mantra of "full compensation" under *Chorzów Factory*, which says nothing about what an appropriate discount rate to arrive at full compensation would be in this case. Claimants are the ones who misunderstand what the ICC tribunal was doing, which obviously was to select a discount rate to obtain the present value of future cash flows, exactly the exercise that this Tribunal would be performing if the claim for compensation for the 2007 nationalization were to survive the jurisdictional objections.

Claimants confuse a number of concepts, including IRR [internal rate of return] and hurdle rate, ignoring their relationship to the concept of market value and the basic issue of how a "willing buyer" would go about calculating the amount it would be willing to pay in an acquisition of an oil property of the type at issue in this case. The actual IRR of a particular project is not, as Claimants seem to think, what the ICC tribunal relied on. Nor is it what we have argued in this case. But the minimum expected IRR a buyer would demand in determining whether to enter into the project, also known as the "hurdle rate", is of course relevant. As all the dictionary definitions of hurdle rate make clear, if a project is not expected to yield an IRR at least equal to the hurdle rate, the company will not invest. One is supposed to jump over a hurdle, not crawl underneath. While Claimants repeatedly refer to what a willing buyer would do, they have never been able to explain why a willing buyer would be willing to pay anything to invest in a project that yields a return less than the minimum return it requires.

Our experts referred to historical profitability as one of four submethods of calculating a discount rate, all of which ended up in the 16.3 to 22.5% range, with the historical submethod actually yielding the lowest rate. If our experts had taken only the latter, the recommended discount rate would have been 21.7% instead of 19.8%. The relevance of the historical data was to show the kind of returns that companies in the industry, including these Claimants, expect from their projects, which is relevant in determining the hurdle rate prospective buyers would likely use in deciding whether to invest in the projects at issue in this case. [...]¹⁵⁸⁹

1031. The Respondents further argue that the Claimants' own representatives understood well the reciprocity between these two concepts when making various statements unfavorable to the Claimants' proposed discount rate.¹⁵⁹⁰ In this regard, the Respondents point to how Mr. McKee acknowledged that Conoco's hurdle rate for the Petrozuata Project was 20%:

¹⁵⁸⁸ R-PHB, § 826.

¹⁵⁸⁹ *ConocoPhillips Petrozuata B.V. et al. v. The Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/30, Letter from Counsel for Respondent to the Tribunal, 18 March 2012, **R-181**, pp. 2-3.

¹⁵⁹⁰ *Supra*, fn. 1580.

[W]hen this Project was approved, as I recall, it was approved at about a 20 percent IRR, which is about the minimum that I or the DuPont Board or Conoco or other Conoco Management would have tolerated for an investment this large, so concentrated, and in the place where it was, in the products, the business products that we were going. [...] [T]hat is more or less the hurdle rate we would demand for a project that has this degree of variable risk attached to it.¹⁵⁹¹

1032. The Respondents submit that Mr. McKee's understanding that there is indeed a relation between the notions of IRR and discount rate was confirmed by Mr. Jeff Sheets ("another senior executive testifying for the ICSID Claimants"),¹⁵⁹² who stated the following:

Q. Okay. I'm confused by this notion of IRR in relationship with the discount rate. Help me out on this. Are you telling this Tribunal that there is no relationship between what we call in the industry a "hurdle rate" and the discount rate? Is that what your testimony is?

A. No, I think there is – when we do a project evaluation, we will look at all the information that we have; and, if we are making a capital investment, we will determine what kind of return we would get on that capital investment, and that's what we refer to as the "internal rate of return."

Q. Okay. Mr. McKee was saying that he would demand, as a minimum, a 20 percent return in order to buy into this Project, let's say; is that fair?

A. That's what his testimony says.

Q. That's what his testimony says. Now, if this Tribunal were to use a 10 percent discount rate, it would come up, if it ever got to that point, with a higher value than if you would use a 19 percent discount rate; isn't that correct?

A. That's correct.¹⁵⁹³

1033. According to the Respondents, Mr. Fox took a similar view when, in his capacity as Conoco's Executive Vice President for Exploration and Production in 2013, he referred to the "rate of return for unconventional oil programs in Western Canada",¹⁵⁹⁴ stating: "[a]ll of these projects have rates of return above 20%. We're not going to invest in them unless they do".¹⁵⁹⁵ For the Respondents, were the foregoing projects

¹⁵⁹¹ *ConocoPhillips Petrozuata B.V. et al. v. The Bolivarian Republic of Venezuela*, ICSID Case No. RB/07/30, Transcript of the Hearing on Jurisdiction, Merits and Quantum held on 31 May – 12 June, 21 July and 23 July 2010, **R-74**, pp. 731-732.

¹⁵⁹² R-PHB, § 839.

¹⁵⁹³ *ConocoPhillips Petrozuata B.V. et al. v. The Bolivarian Republic of Venezuela*, ICSID Case No. RB/07/30, Transcript of the Hearing on Jurisdiction, Merits and Quantum held on 31 May – 12 June, 21 July and 23 July 2010, **C-381**, pp. 1696-1697.

¹⁵⁹⁴ R-PHB, § 840.

¹⁵⁹⁵ *ConocoPhillips Analyst Meeting, Thompson Reuters StreetEvents*, 28 February 2013, **App. BF-131**, p. 7.

in Venezuela, “the country risk premium would drive the discount rate to be used in project evaluation considerably higher”.¹⁵⁹⁶

1034. The Respondents further point to a presentation published by Moyes & Co., whose president, Mr. Christopher Moyes, appeared as “one of the ICSID Claimants’ experts”.¹⁵⁹⁷ In its presentation, Moyes & Co indicates that the oil industry “appear[s] to accept that a 20-30% Expected Rate of Return in Acceptable”.¹⁵⁹⁸

1035. The Respondents also rely on the declarations made by Ms. Kah and Dr. Finizza during a 2006 public hearing of the Legislative Budget and Audit Committee of the Alaska State Legislature. In particular, the Respondents point to how, in his 2005 presentation prior to the public hearing, Dr. Finizza:

[...] started by explaining that “[p]rojects need to be evaluated at the risk-adjusted cost of capital, which may be above the Weighted Average Cost of Capital,” and that a project is made riskier by “Uncertainty,” “Political risk” and “Economic risk.” He went on to distinguish between the expected IRR of a project and the “threshold rate of return” required to undertake an investment (or the “hurdle rate”), and explained that a threshold rate of return of 12% to 15% would be appropriate for a project that was “without significant risk factors.” Dr. Finizza then referred to discount rates that would have been appropriate as of 2005 for hypothetical projects in various countries, and stated that a 25% discount rate would be appropriate for an oil project in Venezuela.¹⁵⁹⁹

1036. The Respondents then refer to Dr. Finizza’s responses during the examination of his presentation before the Alaska State Legislature, where he confirmed “his view that the appropriate risk-adjusted discount rate for an oil project in Venezuela in 2005 would be 25%, meaning that an investor would require a premium above the rate of return required in less risky countries to invest in Venezuela”.¹⁶⁰⁰

1037. Turning to Ms. Kah’s declarations during the same public hearing, the Respondents submit that her view confirms that a 12% to 15% IRR would be necessary for an energy project in the United States. As such, “[f]or a project in a developing economy with a country risk rating like that of Venezuela, the required return would be much

¹⁵⁹⁶ R-PHB, § 840.

¹⁵⁹⁷ R-PHB, § 841.

¹⁵⁹⁸ Moyes & Co., Presentation, *Negotiation of Host Government Instruments in Emerging Markets and Interactions with NOC*, 2013, available at www.moyesco.com, **R-239, Slide 5**

¹⁵⁹⁹ R-PHB, § 843.

¹⁶⁰⁰ R-PHB, § 844; Dr. Anthony Finizza, Consultant, Econ One Research, Inc., Presentation, *Presentation on Alaska Gas Pipeline Project to Alaska State Legislative Budget & Audit Committee: Investment Decision-Making by Oil and Gas Companies*, 31 August 2005, App. BF-132, slides 4, 8, 13; Alaska State Legislature, Legislative Budget and Audit Committee, Minutes of Meetings held on 14-15 June 2006, App. BF-129, p. 43.

higher, which was precisely the point of Dr. Finizza's presentation [...].¹⁶⁰¹ In particular, Ms. Kah opined:

First I wanted to say that companies really do look at a range of measures; we don't look at one measure. And IRR is a very important measure that we take very seriously[...]. So it's very important that we look at return on capital employ[ed] and make sure we don't invest in a project that will have such a low return that it will dilute our return on capital employed. We also, of course, do look at net present value. [...] Our industry doesn't necessarily use the 10 percent discount rate. And I think you even presented some material yesterday indicating that a U.S. risk discount rate was more like 12 percent, and that's for the U.S. in general. If you looked at the energy industry it would probably be higher than that in terms of the risk involved in energy projects in the United States.¹⁶⁰²

1038. In any event, the Respondents offer evidence directly discussing the issue of discount rate allegedly in support of their now proposed 27.7% discount rate, such as: (i) a table produced by IHS Global Insight, "a well-known consulting firm in the oil industry",¹⁶⁰³ calculating discount rates adjusted for country risk in Venezuela ranging between 20.30% (in 2005) and 22.79%(in 2009);¹⁶⁰⁴ and (ii) the *Merey Sweeney* report, involving the valuation of a refinery in Texas, in which the ConocoPhillips expert argued for a discount rate between 20% and 30%.¹⁶⁰⁵ In these circumstances, "if this Tribunal were simply to take the average of the discount rates – or "hurdle rates" – proposed by ConocoPhillips and its experts for oil projects and adjust them to the Projects in Venezuela, it would be using a discount rate at or higher than the level proposed by Respondents' experts, and that would be even including the indefensibly low discount rate of Claimants' expert here in the average".¹⁶⁰⁶

1039. With respect to relevant case law, the Respondents contend that, contrary to the Claimants' allegations, the *Mobil ICC* tribunal had other alternatives than to simply "accept the respondents' proposed rate because the claimant had been [...]"

¹⁶⁰¹ R-PHB, § 848.

¹⁶⁰² Alaska State Legislature, Legislative Budget and Audit Committee, Minutes of Meetings held on 14-15 June 2006, **App. BF-129**, pp. 123-124 (emphasis and brackets added by the Respondents).

¹⁶⁰³ R-PHB, § 849.

¹⁶⁰⁴ IHS Global Insight, *Country Risk Adjusted Discount Rate (Venezuela)*, 25 January 2010, **App. BF-192**, p. 2; R-PHB, §§ 850-853.

¹⁶⁰⁵ R-PHB, §§ 854-856; *ConocoPhillips Petrozuata B.V. et al. v. The Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/30, E-mail from Counsel for Respondent to the Tribunal, of 10 August 10 2012 (attaching *PDV Sweeny, Inc. et al. v. ConocoPhillips Company and Sweeny Coker Investor Sub, Inc.*, ICC Case No. 16982/JRF/CA (C-17336/JRF), Report Concerning the Value of Merey Sweeney L.P. by Garfield L. Miller, III, Aegis Energy Advisors Corp. of 6 August 2012) (henceforth, *Merey Sweeney* report), **R-178**, pp. 4, 7, 14-15 (of the report).

¹⁶⁰⁶ R-PHB, § 857.

unreasonable” in that regard.¹⁶⁰⁷ Referring to their position in the ICSID Arbitration, the Respondents submit:

Perhaps the most remarkable argument Claimants make about the *Mobil* [ICC] case is that the tribunal selected the lowest of three rates proposed by respondents there because the rate proposed by Mobil was so low as to be unacceptable and the tribunal felt it had no choice but to accept the next most reasonable rate before it. This bit of tribunal psychoanalysis would be interesting but for one fact which Claimants overlooked in the decision. Respondents in *Mobil* did indeed present three alternative rates to the ICC tribunal for illustration purposes: 16%, 18% and 19.8%. Thus, contrary to Claimants’ misstatement, the rate adopted by the tribunal, 18%, was not the lowest of the three presented by respondents. Tribunal psychoanalysis is a difficult exercise even when based on actual facts; it crosses into the realm of fantasy when based on imaginary facts. Moreover, as Claimants’ counsel is well aware, arbitral tribunals do not always limit themselves to the rates proposed by the parties. The 19% selected in the *Himpurna* case and the 21% selected in *Patuha* were not proposed by either side in those cases. The ICC tribunal in *Mobil* obviously selected 18% not because it was the lowest proposal on the table, but rather because it considered that to be an appropriate rate.¹⁶⁰⁸

1040. Similarly, the Respondents argue that the Claimants err in asserting that the *Mobil* ICSID tribunal did not undertake an independent analysis with respect to the applicable discount rate in order to avoid inconsistent decisions. Indeed, albeit acknowledging that “other arbitral tribunals [had] adopted discount rates in [comparable circumstances] ranging from 18.5% to 21%”,¹⁶⁰⁹ after “examining voluminous submission and expert reports and hearing the expert testimony on the discount rate issue”,¹⁶¹⁰ the Mobil ICSID tribunal concluded that “a 18% discount appropriately reflect[ed] the existing risks in [that] case”.¹⁶¹¹

1041. *A contrario*, the Respondents submit that the case law relied upon by the Claimants is inapposite:

Claimants have cited a number of other decisions applying discount rates in the 10 to 12% range. [...]. None of the tribunals referred to by Claimants was presented with the discount rate analysis in the two *Mobil* cases, in *Tidewater* and in *Saint-Gobain*, and three of those cases did not even involve oil-producing projects anywhere, much less in Venezuela. With respect to *Occidental v. Ecuador*, the tribunal’s decision indicates that there was no real dispute over the discount rate, even though it is impossible to understand how a discount rate for an oil project in Ecuador could be lower than that for an oil project in Venezuela. [...]. With respect to *Gold Reserve*, which involved a gold mining project in Venezuela, the tribunal adopted in part the approach of the

¹⁶⁰⁷ R-PHB, § 827.

¹⁶⁰⁸ *ConocoPhillips Petrozuata B.V. et al. v. The Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/30, Letter from Counsel for Respondent to the Tribunal, 18 March 2012, **R-181**, pp. 3-4.

¹⁶⁰⁹ *Mobil* ICSID, **RLA-2**, § 367.

¹⁶¹⁰ R-PHB, § 828.

¹⁶¹¹ *Mobil* ICSID, **RLA-2**, § 368.

claimant's expert, whereas that same expert's approach was the one roundly rejected in the *Tidewater* case. [...] It may also be noted that one of the arbitrators in the *Tidewater* case, who adopted a discount rate of around 26% after seeing and hearing the submissions of Mr. Brailovsky and Dr. Flores, was also an arbitrator in *Occidental*. Suffice it to say that facts are important, and that the precedents most directly relevant to this case both on the facts and on the principles adopted are the *Mobil* cases, *Tidewater* and *Saint-Gobain*.¹⁶¹²

3. Analysis

a. Preliminary matters

1042. In consideration of the above arguments and allegations, the Tribunal will make a first observation: it agrees with the Claimants' and their quantum expert's assumption that the indemnification amounts owing under the DA provisions are properly characterized as: (i) "cash flows to equity holders";¹⁶¹³ or (ii) a "stream of equity cash flows to Claimants, which ought to be paid by the state-owned equity holder in each Project".¹⁶¹⁴
1043. Indeed, the Willful Breach Claim and the DA Claim are considerably different in terms of their nature and implications. Indeed, the former stems from general applicable law and thus requires meeting all the elements of civil liability, while the latter consists of the application of specific contractual provisions previously agreed upon by the Parties. Therefore, contrary to what the Respondents' quantum experts suggest,¹⁶¹⁵ it cannot be that both scenarios must be discounted on the same basis. The Tribunal therefore finds that the Claimants' preference for the unlevered CoE approach used to calculate their proposed discount applicable to their DA Claim (over the WACC approach employed to the same effect vis-à-vis their Willful Breach Claim) is warranted.¹⁶¹⁶
1044. The previous finding, however, does not dispose of the matter at hand in favor of either Party. On the one hand, it is common ground that the purpose of a discount rate is to estimate the net present value of future cash flows.¹⁶¹⁷ On the other hand, regardless of the method used, both Parties essentially use the same inputs to arrive at their respective discount rates, i.e., the computation of a risk-free rate, an industry

¹⁶¹² R-PHB, fn. 1766.

¹⁶¹³ C-PHB, fn. 1581; Abdala ER I, **CER-3**, fn. 36; Abdala ER II, **CER-8**, fn. 110, 162.

¹⁶¹⁴ Abdala ER I, **CER-3**, fn. 36; Abdala ER II, **CER-8**, fn. 110, 162.

¹⁶¹⁵ Brailovsky & Flores ER I, **RER-3**, § 384.

¹⁶¹⁶ *Supra*, fn. 1532.

¹⁶¹⁷ SoC, §§ 320-321; SoD, §§ 505, 510.

risk premium, and a country risk premium. Hence the Tribunal must still determine the appropriateness of the Parties' calculations.

1045. In this regard, the Tribunal notes that the Claimants argue in favor of a discount rate of **15.21%** (comprised of a 2.11% risk-free rate, a 6.22% industry risk premium multiplied by a 1.13 unlevered beta, and a 6.1% country risk premium).¹⁶¹⁸ The Respondents in turn argue in favor of a discount rate of **27.7%** (comprised of a 2.1% risk-free rate, a 5.8% industry risk premium, a 17.8% country risk-premium, and a 2.0% DLOM).¹⁶¹⁹

1046. The overarching contentions in terms of the applicable discount rate are thus two-fold. First, to the extent that the Claimants do not account for it, the Respondents' 2.0% DLOM. Second, the considerable difference between the Parties' estimation of the country risk premium.

b. The 2.0% discount for lack of marketability (DLOM)

1047. The Respondents do not directly address the 2.0% DLOM in their written submissions. Rather, the issue is mainly dealt with through their quantum experts. The same goes for the Claimants.

1048. The discussion between the Parties' experts on this point is summarized in Mr. Brailovsky's and Mr. Flores' second expert report:

The Second Abdala Report argues that DLOMs do not apply when the compensation formulas are used because, in this case, the claim is based "on the specific formulas in the Projects' Association Agreements, and not on the transactional value of the Projects." On the contrary, we maintain that the scenario which uses the compensation formulas represents the true "transactional value" of the Projects, insofar as any hypothetical third party buyer will take them fully into account when establishing a bid price. Dr. Abdala also argues that [...] DLOMs do not apply due to the "Projects' nature as crude oil producers, as the stability of the Projects' cash flows and their economic fundamentals ensures minimal exit costs for a willing seller." Note that Dr. Abdala uses the word "minimal" which is not the same as "zero." To the extent that he is accepting that there are exit costs, he should have tried to estimate them in order to arrive at a truly fair market value for the Projects, but he simply decided not to do so. The discussion should have been whether our measurement of DLOM is accurate, not about whether it is applicable.

Dr. Abdala accepts that DLOMs are used in "distress" cases, and that the Projects are not distressed. He may be right that the Projects are not

¹⁶¹⁸ C-PHB, § 875. The Tribunal in any event notes that the Claimants just broadly acknowledge that Mr. Abdala calculated the discount rate applicable to their DA Claim pursuant to an unlevered CoE method. The Claimants' written submissions are by-and-large dedicated to argue of the 13.8% calculated pursuant to the WACC approach.

¹⁶¹⁹ *Supra*, fn. 1575.

distressed, but it is wrong to say that DLOMs only apply in such cases. They apply whenever there is a lack of marketability, which is a condition external to the assets to be valued. Thus, a distressed company whose stock trades on the New York Exchange may easily sell, albeit at a very low price. In contrast, a perfectly healthy company may have difficulties in finding a buyer if it is located in an oligopolistic market where there are few buyers or when government authorizations are required. And in fact, given the complex nature of the Projects, not many companies exist in the world able and willing to participate in them. Moreover, recall that the Projects were authorized at the highest level by special authorizations, and therefore selling them would inevitably attract much government scrutiny.¹⁶²⁰

1049. The Tribunal cannot agree with the position taken by the Respondents' quantum experts. Whether or not the DA formulae represent the true transactional value of the Projects, the Tribunal finds that a DLOM is not justified on the mere basis that the Projects might face "minimal" exit costs. This is particularly so given that:

- i. The notion of "marketability" relied upon by Mr. Brailovsky and Mr. Flores is precisely defined as "the ability to quickly convert property to cash at **minimal cost**".¹⁶²¹ This suggests that exit costs, especially if they are minimal, may not necessarily warrant adjustment through a DLOM.
- ii. Mr. Brailovsky's and Mr. Flores' 2% DLOM is not based on data reflecting the particular factual circumstances of the Projects. At most, their volatility coefficient (one of the assumptions necessary for calculating DLOMs) is defined in terms of, *inter alia*, the Venezuelan stock market;¹⁶²² a reference that is unlikely to serve as an adequate proxy for privately traded oil extraction undertakings in the Venezuelan Orinoco Belt. The remaining assumptions and fundamentals of the proposed DLOM are of a theoretical nature and appear to share no straightforward connection with the Projects.¹⁶²³ As such, the Tribunal finds them exceedingly speculative and generic. In these circumstances, being the Party alleging the need to apply a DLOM, the Respondents bear the burden of proof: a DLOM rate cannot be granted simply because the Claimants' quantum expert did not provide an alternative rate.

¹⁶²⁰ Brailovsky & Flores ER II, **RER-7**, §§ 210-211.

¹⁶²¹ Brailovsky & Flores ER I, **RER-3**, § 347 (emphasis added); Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, § 500.

¹⁶²² Brailovsky & Flores ER I, **RER-3**, § 353; Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, § 509. The Tribunal acknowledges that, according to Mr. Brailovsky and Mr. Flores, basing their volatility coefficient partly on publicly traded stocks would tend to underestimate the true volatility of the Projects. Such an assumption, however, lacks support: neither the Respondents nor their quantum experts have provided evidence accounting for a relation between privately traded companies and increased price volatility.

¹⁶²³ Brailovsky & Flores ER I, **RER-3**, §§ 345-356; Brailovsky/Flores ICSID Consolidated Report, **App. BF-406**, §§ 498-509.

1050. The Tribunal further finds Mr. Brailovsky's and Mr. Flores' assertion that DLOMs apply both to distressed and perfectly healthy companies (the latter when placed in an oligopolistic market with few potential buyers or when government authorizations are required) to be unsubstantiated. As noted by Mr. Abdala, the Respondents' quantum experts "cite studies by O'Hara and Abbott to support the inclusion of a DLOM in the discount rate. The aspect of illiquidity that is discussed in these studies, however, mostly relates to assets in distress, and transaction costs. This is inapposite to the valuation of the Projects, because the Projects were not in distress and Claimants were not under compulsion to divest".¹⁶²⁴ Differently stated, the application of DLOMs to non-distressed companies is unsubstantiated. Indeed, the Respondents and their quantum experts overall fail to: (i) account for the already particularly qualified and sophisticated nature of the Projects' potential buyers; and/or (ii) specify and prove how and to what extent governmental authorizations could hinder the marketability of the Projects.

1051. For the reasons set out above, the Tribunal is of the view that the DLOM is not justified in this case. The Respondents' proposed discount rate can thus only amount to 25.7% at most.

c. *The country risk premium and the overall applicable discount rate*

1052. Having dismissed the Respondents' 2.0% DLOM, the Parties' calculations of the base line risk-free rate are on par with a 2.1%, and differ by 0.4% (without the unlevered beta) and by 11.7% in relation to the industry risk premium and the country risk premium, respectively.¹⁶²⁵ However, despite the foregoing disparity in terms of both industry risk and country risk premiums, the Parties do not address the former separately from the latter. Indeed, the Parties' submission mostly deal either with: (i) the country risk premium in particular; and/or (ii) their respective proposed discount rates as a whole. The Tribunal shall follow the same approach.

1053. In this regard, the Tribunal finds merit in several of the Claimants' arguments. First, the Tribunal agrees with the importance of making a distinction between the notions of IRR and minimal IRR (or hurdle rate), on the one hand, and discount rate, on the other.

¹⁶²⁴ Abdala ER II, **CER-8**, § 114.

¹⁶²⁵ *Supra*, §§ 1051, 1044.

1054. As already noted above, it is not controversial that the discount rate seeks to determine the net present value of future cash flows.¹⁶²⁶ It does so by, chiefly, factoring-in the industry and country risks that impact the cash flows; this is not controversial either. In turn, the IRR appears to serve as a profitability index: a rate that may well be commensurate with a specific project's past profitability or, in the case of new or greenfield projects, the projected return on a plausible investment. Correspondingly, a minimal IRR or hurdle rate constitutes the minimal expected profitability yield warranted to justify an investment. In this sense, it does seem to be the case that only the discount rate directly measures risk.¹⁶²⁷
1055. The evidence on record confirms the Tribunal's understanding. The divide between an expected IRR and an estimated discount is evident in the agreement concluded between Venezuela and China in relation to the Junín 4 Block project.¹⁶²⁸ This agreement (ratified by Venezuela in May 2010) provides for the creation of a mixed company involving CNPC and CVP for the implementation of the Junín 4 Block oil project in the Orinoco Belt.¹⁶²⁹ It states: (i) "the activities" of the mixed company "will be aimed at obtaining an **Internal Rate of Return ("IRR")** [...] equal or above eighteen percent (**18%**), without constituting a contractual obligation for [Venezuela] that this **profit** will be obtained [...]; and (ii) "[b]ased on this level of **profitability**, [...] the "Recovery Time" for the "Investments" [...] is understood to be the number of years necessary for the Mixed Company to recover the Investment [...] based on **net cash flow**, discounted at an annual **discount rate** of ten per cent (10%)".¹⁶³⁰
1056. The Tribunal notes that Mr. Figuera, "former General Manager of PDVSA's Junín Division",¹⁶³¹ refers to the foregoing figures as "guidelines", "premises", and "assumptions" for the purposes of establishing an "economic evaluation prior to [the parties] taking [a] final investment decision".¹⁶³² In particular, Mr. Figuera referred to the 18% IRR as a "corporate target" (as opposed to a "commitment" or an

¹⁶²⁶ *Supra*, fn. 1617; Brailovsky & Flores ER II, **RER-7**, § 256.

¹⁶²⁷ C-PHB, fn. 1676

¹⁶²⁸ Reply, § 493.

¹⁶²⁹ *Law Ratifying the Convention Between the Bolivarian Republic of Venezuela and the People's Republic of China on the Cooperation to Develop Junín 4 Block in the Orinoco Belt*, OFFICIAL GAZETTE No. 39,527, 20 May 2010, **C-307**, Article 1.

¹⁶³⁰ *Law Ratifying the Convention Between the Bolivarian Republic of Venezuela and the People's Republic of China on the Cooperation to Develop Junín 4 Block in the Orinoco Belt*, OFFICIAL GAZETTE No. 39,527, 20 May 2010, **C-307**, Article 6 (emphasis added).

¹⁶³¹ C-PHB, § 924.

¹⁶³² Tr. (Day 5) 1881:6-8 (Figuera).

“objective”),¹⁶³³ and to the 10% discount rate as “an estimation of their [Recovery Time, namely, as an] economic evaluation to make the final investment decision” (as opposed to an analysis of “the economy of the business”).¹⁶³⁴ Be that as it may, the IRR and discount rate were clearly given different functions (and even value) at the moment of considering the initial investment: the IRR was associated with expected profitability, while the discount rate with the net present value of cash flows necessary to recoup the said investment.

1057. Most of the evidence relied upon by the Respondents points in the same direction. Indeed, while the Respondents assert that “all the literature on” IRR, hurdle rates and discount rates establish a “connection” between these concepts,¹⁶³⁵ only one doctrinal account appears to employ these terms interchangeably.¹⁶³⁶ Yet, it does so for the purposes of that particular “text” and/or in the context of how these rates are used in “common practice”;¹⁶³⁷ something that does not belie the technical differences between them.

1058. The remaining authorities relied upon by the Respondents simply define the notion of “hurdle rate” as:¹⁶³⁸

- i. The minimum rate of return on a project or investment required by a manager or investor. In order to compensate for risk, the riskier the project, the higher the hurdle rate;¹⁶³⁹
- ii. [A] particular amount of profit that someone expects to get before they will decide to INVEST in something;¹⁶⁴⁰
- iii. [T]he rate of return that a proposed project must provide if it is to be worth considering: usually calculated as the cost of the capital involved adjusted by a risk factor;¹⁶⁴¹ and

¹⁶³³ Tr. (Day 5) 1778:8-24 (Figuera).

¹⁶³⁴ Tr. (Day 5) 1779:1-7 (Figuera).

¹⁶³⁵ *Supra*, § 1029.

¹⁶³⁶ Franklin J. Stermole and John M. Stermole, *ECONOMIC EVALUATION AND INVESTMENT DECISION METHODS*, (12th ed., Investment Evaluations Corporation 2009), App. BF-134, pp. 12-13 (“The terms minimum rate of return,” “hurdle rate,” “discount rate,” “minimum discount rate,” and “opportunity cost of capital” are all **interchangeable** with the term “cost of capital” **as used in this text and common practice**. These interchangeable terms which represent “opportunity cost of capital” must not be confused with the “financial cost of capital” which is the cost of raising money by borrowing or issuing”) (emphasis added).

¹⁶³⁷ *Supra*, fn. 1636.

¹⁶³⁸ R-PHB, § 837.

¹⁶³⁹ INVESTOPEDIA, Definition of “Hurdle Rate,” *available at* www.investopedia.com, **R-172**.

¹⁶⁴⁰ LONGMAN DICTIONARY OF CONTEMPORARY ENGLISH, Definition of “Hurdle Rate,” *available at* www.ldoceonline.com, **R-173**.

- iv. In capital budgeting, the required return for a project. That is, when a company is planning its outlays in the medium and long-term, it requires a certain rate of return on projects, because they can be quite expensive and the outlays tie up capital that can be used elsewhere. This required return is called the hurdle rate.¹⁶⁴²

1059. Nothing of the above, however, equates an estimated IRR or a necessary hurdle rate with the discount rate appropriate to bring future cash flows back to the net present value. To be clear, the Tribunal is not of the view that the concepts of IRR and hurdle rate are to be disassociated from the notion of investment risk. Indeed, the Tribunal accepts that, the riskier the project, the higher an IRR or hurdle rate is likely to be required. Otherwise, the project in question could face “a low return that [might] dilute [the] return on capital employed”.¹⁶⁴³ That, however, is different from stating that a firms’ (minimal) IRR is a tool for directly or independently measuring the risk pertaining to the cost of capital. Differently stated, while it might well be that an IRR interplays with the appropriate discount rate, arriving at an IRR does not necessarily determine the applicable discount rate.

1060. The position of the Parties’ quantum experts is vastly different on this point. Mr. Brailovsky and Mr. Flores illustrate their view with the following example:

For illustrative purposes, assume that an asset has a lifetime of one year. At the end of that year it is expected to yield a net cash flow of US\$ 125. Assume that the asset is purchased for a price of US\$ 100 to be paid at the beginning of the year. This is tantamount to saying that the buyer considers that a profit rate of 25% satisfies its expectations, as the transaction is anticipated to provide US\$ 25 after covering the initial investment of US\$ 100. Alternatively, one can say that the buyer has applied a discount rate of 25%. In multi-year projects the same simple concept applies, although the computation is slightly more complicated. This example underlines the fundamental point that, in a situation where no debt exists, a discount rate is no more and no less than an expected rate of profit.¹⁶⁴⁴

1061. The Respondents complement their experts’ opinion by affirming that “[a]nyone using a discount rate lower than the hurdle rate in determining whether to enter into a project would be grossly overpaying for that project, **a business approach that no rational company would adopt**”.¹⁶⁴⁵

¹⁶⁴¹ THE FREE DICTIONARY BY FARLEX, Definition of “Hurdle Rate,” *available* at www.thefreedictionary.com, **R-174**.

¹⁶⁴² FARLEX FINANCIAL DICTIONARY, Definition of “Hurdle Rate,” *available* at financial-dictionary.thefreedictionary.com, **R-175**.

¹⁶⁴³ Alaska State Legislature, Legislative Budget and Audit Committee, Minutes of Meetings held on 14-15 June 2006, **App. BF-129**, pp. 124.

¹⁶⁴⁴ Brailovsky & Flores, **RER-3**, §§ 254-255.

¹⁶⁴⁵ Rejoinder, § 579; R-PHB, § 837.

1062. Mr. Abdala in turn offers the following hypothetical:

Assume that the target asset exhibited high profitability (i.e., returns of 25% per year) that is expected to be maintained in the future. Assume, in addition, that investors can source capital, at an average cost of 10%. According to Brailovsky and Flores's long-term profitability proposition, a buyer should use the 25% as discount rate to value this asset (thus yielding a much lower price than if the buyer's actual cost of capital, 10%, had been used as a discount rate). In this environment, however, the seller will never voluntarily transfer the asset at the (low) price implied by a 25% discount rate, as otherwise it would be giving away significantly more value than it would receive. Further, because the seller knows that alternative buyers could source funds at an average of 10% cost of capital, this implies that, in a competitive environment, the seller would just wait for other buyers that would be willing to earn a normal return on equity at 10% (or marginally higher). Although the buyer would like to pay a low price (consistent with a discount rate above the 10% cost of capital), competition among buyers will drive the price upwards, such that buyers will obtain just a normal expected return on the investment and no more. That is, the transaction price in a competitive market will reflect an implicit discount rate equal to the cost of capital, and not the historic profitability rate.¹⁶⁴⁶

1063. The evidence relied upon by the Respondents again seems to run contrary to their position. In her intervention at the 2006 public hearing before the Alaska State Legislature, Ms. Kah indeed referred to a 12% rate that, in her view, could be higher in projects located elsewhere than in the United States. However, contrary to the Respondents' submission,¹⁶⁴⁷ Ms. Kah's reference pertained to the applicable "discount rate".¹⁶⁴⁸ While Ms. Kah also dealt with the notion of IRR, she did so separately. In particular, Ms. Kah stated:

First I wanted to say that companies really do look at a range of measures; we don't look at one measure. **And IRR is a very important measure that we take very seriously. We also** take some measures seriously that economists, including myself, really gasp at: return on capital employed. A very important measure to us as an accounting measure and economists hate it, but Wall Street pays attention to it, it actually access price-earnings ratio, in terms of stock prices. So it's very important that we look at return on capital employ and make sure we don't invest in a project that will have such a low return that it will dilute our return on capital employed. **We also, of course, do look at net present value.** But I would like to comment that if it is true that this project [...], the Alaska pipeline, has the highest net present value of any project in the world that that's because it requires the most investment and it's the largest project. **That doesn't mean the returns are going to be commensurate with that.** [...] Some of the comments that **Econ One** made about the way we look at projects and even **discount rates** that we use, I would disagree with. Our industry doesn't necessarily use the **10 percent** discount rate. And I think you even presented some material yesterday indicating that a U.S. risk **discount rate** was more like **12 percent**, and that's for the U.S. in general. If you looked at the energy industry it would probably be higher than that in terms of the risk involved in energy projects in the United States. [...] and this may sound like a small detail to people, but [...] you even said in your analysis yesterday that 1

¹⁶⁴⁶ Abdala ER I, **CER-1**, § 162.a.i.

¹⁶⁴⁷ *Supra*, § 1037.

¹⁶⁴⁸ *Supra*, fn. 1602.

percentage point in a discount rate is worth \$5 billion in **MPV [market present value]**.¹⁶⁴⁹

1064. In line with Mr. Abdala's hypothetical,¹⁶⁵⁰ Ms. Kah's intervention: (i) does not treat the notions of IRR and discount rate interchangeably; (ii) associates the notion of discount with the notion of net present value; (iii) sets apart the high net present value of a project from the IRR yield; and (iv) recognizes the important effect of the applicable discount rate on the market present value of a project.
1065. The Respondents similarly rely on Dr. Finizza's (i.e. Econ One) presentation made for the purposes of the same public hearing before the Alaska State Legislature (and to which Ms. Kah reacted).¹⁶⁵¹ However, Dr. Finizza's intervention is again unfavorable to the Respondents' position on this issue.
1066. As recounted by the Respondents, Dr. Finizza's presentation commenced by explaining that "[p]rojects need to be evaluated at the risk-adjusted cost of capital, which may be above the Weighted Average Cost of Capital," and that a project is made riskier by "Uncertainty," "Political risk" and "Economic risk".¹⁶⁵² He made these observations when dealing with the notion of discount rate.¹⁶⁵³ Notably, Dr. Finizza identified several discount rates, namely, a 10% "Gasline discount rate", as well as discount rates applicable as of 2005 to the United States (12%), Norway (13%), Qatar (21%), and Venezuela (25%).¹⁶⁵⁴
1067. Dr. Finizza's presentation, however, did not stop there. He went on to separately define IRR as the "rate at which the NPV of a project equals zero" (the same mathematical definition used by the Claimants),¹⁶⁵⁵ and to distinguish it from the

¹⁶⁴⁹ Alaska State Legislature, Legislative Budget and Audit Committee, Minutes of Meetings held on 14-15 June 2006, **App. BF-129**, pp. 123-124 (emphasis added, brackets and abbreviations in the original).

¹⁶⁵⁰ *Supra*, § 1062.

¹⁶⁵¹ *Supra*, § 1036

¹⁶⁵² *Supra*, fn. 1599

¹⁶⁵³ Dr. Anthony Finizza, Consultant, Econ One Research, Inc., Presentation, *Presentation on Alaska Gas Pipeline Project to Alaska State Legislative Budget & Audit Committee: Investment Decision-Making by Oil and Gas Companies*, 31 August 2005, **App. BF-132**, slide 4.

¹⁶⁵⁴ Dr. Anthony Finizza, Consultant, Econ One Research, Inc., Presentation, *Presentation on Alaska Gas Pipeline Project to Alaska State Legislative Budget & Audit Committee: Investment Decision-Making by Oil and Gas Companies*, 31 August 2005, **App. BF-132**, slides 4, 13. In this regard, the Tribunal notes that, contrary to the Respondents' assertion, Ms. Kah did not opine that a "return of higher than 12% presumably at least 15%, would be necessary for an energy project in the United States" (R-PHB, § 848). Rather, it seems that, reacting to Dr. Finizza's presentation, Ms. Kah disagreed with his 10% "Gasline discount rate" yet to some extent concurred with his 12% discount rate applicable to energy projects in the United States.

¹⁶⁵⁵ Dr. Anthony Finizza, Consultant, Econ One Research, Inc., Presentation, *Presentation on Alaska Gas Pipeline Project to Alaska State Legislative Budget & Audit Committee: Investment Decision-Making by Oil and Gas Companies*, 31 August 2005, **App. BF-132**, slide 8; C-PHB, fn. 1676 ("An IRR is a mathematical construct: it is the rate of return at which the net present value of cash flows from a project equals zero").

“threshold rate of return” (or hurdle rate), which he then estimated to be between 12%-15% for projects without “significant risk factors”.¹⁶⁵⁶ Dr. Finizza’s differentiation between these concepts went as far as stating that “[a]ll projects with an **IRR greater than the risk-adjusted cost of capital** [i.e. discount rate] should be **accepted** when there are no capital budget restraints [and] [c]hoose [even] higher **IRR projects** when there are capital budget restraints”.¹⁶⁵⁷ Dr. Finizza’s “business approach”, which in fact reflects the Venezuela-China agreement for the development of the Junin 4 Block,¹⁶⁵⁸ is unfathomably characterized by the Respondents as the one that “**no rational company would adopt**”.¹⁶⁵⁹

1068. Dr. Finizza remained consistent during questioning before the Legislative Budget and Audit Committee. As noted by the Respondents, the exchange between Senator Wilken and Dr. Finizza went as follows:

SENATOR WILKEN referred to the language on page 16, which shows that the [lbbotson Associates] work indicated the following international costs of capital, based on market data and country credit ratings: U.S. - 12 percent; Norway - 13 percent; Qatar - 21 percent; and Venezuela - 25 percent. He said there has been discussion about an 8-10 percent discount rate. He asked, "And so, if we were going to build this project in ... Venezuela, instead of using a 10 [percent discount rate], we'd be using a 25 [percent rate]?"

DR. FINIZZA answered yes. He continued:

Let's say you had an IRR from a project in ... Norway, and it had an IRR of 15, and you had an IRR in Venezuela of, say, 20. You would probably say, "I'm more happy with the Norwegian one, because of ... [the] risk premium, ... and I would reject, perhaps, the Venezuela one, even though it had a higher IRR at the same discount rate, but it didn't pass the hurdle of 25."¹⁶⁶⁰

1069. The Tribunal disagrees with the Respondents’ reading of Dr. Finizza’s answer. It is not that “an investor would require a premium above the rate of return required in less risky countries to invest in Venezuela”.¹⁶⁶¹ Rather it is more likely that Dr. Finizza precisely reaffirmed the business approach that the Respondents deem inapposite: the reason why the Norwegian project would be a better option in that particular

¹⁶⁵⁶ Dr. Anthony Finizza, Consultant, Econ One Research, Inc., Presentation, *Presentation on Alaska Gas Pipeline Project to Alaska State Legislative Budget & Audit Committee: Investment Decision-Making by Oil and Gas Companies*, 31 August 2005, **App. BF-132**, slide 8; C-PHB, fn. 1676 (“An IRR is a mathematical construct: it is the rate of return at which the net present value of cash flows from a project equals zero”).

¹⁶⁵⁷ Dr. Anthony Finizza, Consultant, Econ One Research, Inc., Presentation, *Presentation on Alaska Gas Pipeline Project to Alaska State Legislative Budget & Audit Committee: Investment Decision-Making by Oil and Gas Companies*, 31 August 2005, **App. BF-132**, slide 8.

¹⁶⁵⁸ *Supra*, §§ 1055-1056.

¹⁶⁵⁹ *Supra*, § 1061.

¹⁶⁶⁰ Alaska State Legislature, Legislative Budget and Audit Committee, Minutes of Meetings held on 14-15 June 2006, **App. BF-129**, p. 43.

¹⁶⁶¹ *Supra*, § 1036.

scenario is because, despite its lower IRR (15%), it would still be higher than its 13% discount rate. Conversely, despite the Venezuelan projects' higher IRR (20%), it would be lower than its 25% discount rate. Regardless, Dr. Finizza's approach further confirms that the notions of IRR, hurdle rate and discount rate are not synonymous.

1070. In light of the above, the Tribunal finds that the statements made by Mr. McKee, Mr. Sheets, Mr. Fox, and Mr. Moyes, on which the Respondents rely to support their proposed discount rate, are besides the point.¹⁶⁶² They all refer to IRRs or hurdle rates ranging from 20% to 30%, not to discount rates.¹⁶⁶³

1071. Similarly, whether or not the *ICC Mobil* tribunal "misunderstood" the distinction between discount rate and IRR is immaterial.¹⁶⁶⁴ For the Tribunal, it suffices to note that the *ICC Mobil* tribunal did base its 18% discount rate determination, at least partly, on the "volatility in rates of return", on "long-term historical rates of return", and on "average [rates of] return" of both ExxonMobil (the claimant's parent company) and other "comparable oil companies".¹⁶⁶⁵ In view of this, the Tribunal agrees with the Claimants' quantum expert that paying regard to measurements of past or actual profitability to calculate a discount rate:

- i. Induces certain level of survivorship bias (i.e. only measuring the success of the "largest crude oil companies" as opposed to those that failed).¹⁶⁶⁶ This is particularly so if the profitability of a parent company is factored-in. The rate of return of a parent company "has no necessary connection to what a willing buyer would pay for a specific asset owned by that company".¹⁶⁶⁷
- ii. "[M]ay have nothing to do with what willing buyers and willing sellers may be willing to pay for an asset if they discount" cash flows either at the cost of capital or the cost of equity.¹⁶⁶⁸

1072. The findings of the *ICC Mobil* award therefore do not serve as useful guidance for the Tribunal in reaching its determination of the appropriate discount rate in the case at hand.¹⁶⁶⁹ The same can be said of the *ICSID Mobil* award which, although the tribunal

¹⁶⁶² *Supra*, §§ 1031-1034.

¹⁶⁶³ *Supra*, § 1022.i.

¹⁶⁶⁴ *Supra*, § 1030; Reply, § 536.

¹⁶⁶⁵ *Mobil Cerro Negro, Ltd. v. Petróleos de Venezuela, S.A. and PDVSA Cerro Negro, S.A.*, ICC Case No. 15416/JRF/CA, Final Award, 23 December 2011, **CLA-16**, §§ 774-775.

¹⁶⁶⁶ Abdala ER II, **CER-8**, § 162.b.

¹⁶⁶⁷ C-PHB, § 942(a).

¹⁶⁶⁸ Tr. (Day 10) 2730:3-18 (Abdala).

¹⁶⁶⁹ Accordingly, the Tribunal needs not determine whether the *ICC Mobil* tribunal had no alternative other than opting for an 18% discount rate in light of the alleged unreasonableness of the one proposed by the claimant in that case (C-PHB, § 942(b); R-PHB, § 828).

certainly undertook an independent analysis of the case before it (contrary to what the Claimants appear to imply),¹⁶⁷⁰ nonetheless endorsed the discount rate methodology adopted in the *ICC Mobil* award to some extent.¹⁶⁷¹

1073. The Tribunal finds further merit in the Claimants' arguments with respect to the inadequacy of Venezuela's sovereign debt in the calculation of the discount rate.¹⁶⁷² According to the Respondents' quantum experts, the yields of the private sector bonds denominated in foreign currencies are not impervious to the behavior of the sovereign bond of their jurisdiction. Therefore, downward trends in the latter affect the former; a factor that must be accounted for when determining the country risk premium in the discount rate.¹⁶⁷³ Mr. Brailovsky's and Mr. Flores' main example to that effect concerned the corporate bond rating of Repsol-YPF ("YPF") operating in Argentina around its sovereign default in the early 2000s.¹⁶⁷⁴ The figures provided by the Respondents' quantum experts indeed show that YPF's corporate bond rating dropped various credit notches during that time.¹⁶⁷⁵ However, as pointed out by the Claimants and their expert, and rightly so, Mr. Brailovsky and Mr. Flores failed to compare YPF's bond yields to those of Argentina during the same period. Had they done so, says Mr. Abdala, they would have noted that the bonds moved independently.¹⁶⁷⁶

1074. Notably, when confronted with this data during the Hearing, Mr. Brailovsky was unable to account for the autonomous behaviour of the bond yields besides noting some occasional parallel evolution.¹⁶⁷⁷ Yet, the Tribunal finds that concurrence is far from correlation and even more so from causation. Accordingly, the Tribunal

¹⁶⁷⁰ C-PHB, § 943; R-PHB, § 828.

¹⁶⁷¹ *Mobil ICSID*, **RLA-2**, §§ 367-368.

¹⁶⁷² *Supra*, § 1021.i

¹⁶⁷³ Brailovsky & Flores, **RER-7**, §§ 190-194.

¹⁶⁷⁴ Brailovsky & Flores, **RER-7**, §§ 195-198.

¹⁶⁷⁵ Brailovsky & Flores, **RER-7**, § 197.

¹⁶⁷⁶ Abdala Hearing Presentation, slide 22; C-PHB, § 901 ("For example, between April and December 2001, when Argentina's yield skyrocketed from 18% to 60%, YPF's bond yield actually *decreased*. YPF's yield increased temporarily several months after Argentina defaulted, for reasons unrelated to that default, but then returned to its previous, stable level below 10% in April 2003. It maintained that stable level for the next several years—while at the same time, the sovereign bond spread continued to fluctuate between 50 and 70%, with high volatility")

¹⁶⁷⁷ Tr. (Day 11) 2870:11 – 2871:9 (Brailovsky).

considers that the status of Venezuela's sovereign debt has no place in the calculation of the discount rate to be applied here.¹⁶⁷⁸

1075. Moreover, the Claimants submit that the Projects would not have been fully exposed to Venezuelan country risk.¹⁶⁷⁹ The Tribunal partially agrees. As suggested elsewhere in this Award, while the Claimants produced and traded a commodity whose revenues were primarily obtained in USD, it is not accurate to state that such revenues could have remained in USD.¹⁶⁸⁰ Further, while it might be true that the Projects acquired critical items from international markets (in terms "of transport pipelines to the port, the upgraders and fuel for the upgraders, and the port to transport the [CCO] to market"),¹⁶⁸¹ they did use local capital (in terms of workforce at least) and were thus not immune to supply chain disruptions.¹⁶⁸² In addition, the Projects' production facilities (i.e., oil fields and upgraders) are unmovable. Hence, it is spurious to accept that all country-specific factors affecting production schedules and profits would have been avoided.
1076. Nevertheless, the Claimants are fully correct in that the Projects counted "with legal protections designed to reduce their exposure to adverse governmental actions",¹⁶⁸³ such as the DA provisions themselves and investment treaty arbitration. The Respondents disagree:

[T]he argument that the Projects were protected from regulatory risk by treaty [...] and that regulatory risk should therefore be excluded from the calculation of the country risk premium evinces a fundamental misunderstanding of the concept of country risk. That argument would effectively eliminate the concept of political risk as an integral part of country risk, thereby distorting the discount rate analysis. Moreover, the factual premise of Claimants' argument is incorrect. Absent a stabilization agreement, a treaty does not protect an investor from most regulatory risks and does not prevent expropriation. Treaties do provide for the calculation of compensation based on fair market value before an expropriatory measure is implemented or announced, but they do not direct that the calculation of compensation should be based on a pretend universe where the generalized regulatory risk in the host State never existed.¹⁶⁸⁴

¹⁶⁷⁸ The Tribunal therefore needs not make a determination on the Claimants' argument that the Respondents' quantum experts inadequately "anchor their country risk premium on the [...] present-day borrowing costs of the Venezuelan government". (*supra*, § 1021.i).

¹⁶⁷⁹ *Supra*, § 1021.iii; Abdala ER I, **CER-3**, §§ 97-98; Abdala ER II, **CER-8**, § 100.

¹⁶⁸⁰ *Supra*, §§ 936-946.

¹⁶⁸¹ Abdala ER II, **CER-8**, § 100.c.

¹⁶⁸² Abdala ER I, **CER-3**, §§ 97-98; Brailovsky & Flores, **RER-7**, § 52.

¹⁶⁸³ C-PHB, fn. 1663.

¹⁶⁸⁴ SoD, § 529.

1077. The Respondents' position is misguided. An investment treaty does not prevent an expropriation or, in fact, any other public measure possibly impacting a particular undertaking. Yet, that is beside the point. An investment treaty does accord some foreign investors additional protection against state measures that other investors (even within the same affected industry) might not otherwise have. The ICSID Arbitration initiated by the Claimants attests to that fact. The point is not that an applicable treaty would have eliminated regulatory or country risk, but rather that it would have managed or mitigated it.

1078. The same goes for the DA provisions, as clearly conceded by Mr. Brailovsky at the Hearing:

Q. Okay. And then, finally, you suggest that the DA Provisions were the instruments that ConocoPhillips used to “**manage**” political and expropriation risks”; yes?

A. (Mr. Brailovsky) Yes.

Q. So, what you're saying in these last two sentences is that ConocoPhillips **managed** its exposure to country risk through the DA Clauses; yes?

A. (Mr. Brailovsky) Yes.

Q. So, you're saying that contractual protections can be used to manage exposure to country risk?

A. (Mr. Brailovsky) well, that's what they thought, yes.

Q. But do you believe it?

A. (Mr. Brailovsky) Well, they didn't get full fiscal stabilization.

Q. That wasn't my question. My question was: You're saying that contractual protections can be used to **manage**—I didn't say, “**eliminate**”, to “**manage**”—country risk; yes?

A. (Mr. Brailovsky) Yes, correct.

Q. And this is why a discount rate calculation **needs** to take into account **the individual characteristics** of the company or Project; yes?

A. (Mr. Brailovsky) Yes.¹⁶⁸⁵

1079. In this regard, the Tribunal doubts that the discount rates referred to by Ms. Kah,¹⁶⁸⁶ Dr. Finizza,¹⁶⁸⁷ IHS Global Insight,¹⁶⁸⁸ and the *Merey Sweeney* report¹⁶⁸⁹ account for

¹⁶⁸⁵ Tr. (Day 11) 2854:22 – 2855:20 (Brailovsky) (emphasis added).

¹⁶⁸⁶ *Supra*, § 1037.

¹⁶⁸⁷ *Supra*, §§ 1035-1036.

¹⁶⁸⁸ *Supra*, fn. 1604.

any of the foregoing risk-mitigating circumstances. Indeed, these discount rates, all of which the Respondents rely upon, appear to either accommodate “generic” country-risk assessments,¹⁶⁹⁰ or involve assets located outside Venezuela.¹⁶⁹¹ As such, they are of little assistance for evaluating the specific risk exposure of the Projects and even less to determine the discount rate applicable to the stream of cash flows germane to the compensation owed under the DA provisions of each AA.¹⁶⁹²

1080. For similar reasons, the Tribunal finds only limited guidance in the discount rates relied upon by the Claimants. The Claimants refer to: (i) a report prepared for the Petrozuata Project and a Financing Memorandum for the Hamaca Project, both dated 2000, and estimating a discount rate of 8.53% and 10%, respectively;¹⁶⁹³ and (ii) a presentation bearing the logos of PDVSA, the Government, and the Ministry, projecting a discount rate between 8% to 12% “to value these very Projects” in 2008 (i.e. soon after the Expropriation).¹⁶⁹⁴ While these discount rates were identified by the Projects’ participants themselves (and thus presumably denote the specifics of the Projects), they were set considerably prior to the relevant valuation date of the present case.

1081. As already established,¹⁶⁹⁵ in accordance with the Parties’ agreement the compensation owed under the DA provisions must be determined pursuant to an *ex post* date-of-award valuation. Notably, the Claimants themselves have stated that the application of a discount rate responds to the need of “bring[ing] cash flows *back to present value* as of the **date of the Award**”.¹⁶⁹⁶ It follows that the discount rate and its components must reflect the circumstances at the date of valuation.¹⁶⁹⁷ Further, the Tribunal agrees with the Respondents that the “discount rate varies depending upon

¹⁶⁸⁹ *Supra*, fn. 1605.

¹⁶⁹⁰ *Gold Reserve*, **CLA-21**, § 840.

¹⁶⁹¹ In relation to the *Merey Sweeney* report, the Tribunal in any event agrees with the Claimants that the refinery dealt with therein had specific characteristics that made it particularly unmarketable and thus notably risky: “[t]he *Merey Sweeney* case [...] concerned the termination of a 50% interest in a joint venture agreement relating to the construction and operation of refinery components in Texas [which] were captured within a large refinery complex that the joint venture did not own” (C-PHB, § 931.932). The Tribunal therefore needs not make a determination on the Claimants’ procedural objection to the introduction of the *Merey Sweeney* report in this arbitration.

¹⁶⁹² The same applies to arbitral case law setting discount rates with respects to assets located elsewhere than in Venezuela. Accordingly, the Tribunal shall not follow the determination in *Himpurna*, *Lemire*, *Occidental Petroleum*, and *Enron*.

¹⁶⁹³ *Supra*, fn. 1534-1535.

¹⁶⁹⁴ *Supra*, fn. 1536-1537; Slide deck by PDVSA bearing the date January 2008 filed by Venezuela in the ICSID Arbitration on 31 August 2016, January 2008, **C-374**, Slide 3.

¹⁶⁹⁵ *Supra*, § 580.

¹⁶⁹⁶ C-PHB, § 873 (emphasis added, cursive in the original).

¹⁶⁹⁷ *Supra*, § 585.

conditions prevailing as of the valuation date”.¹⁶⁹⁸ In short, the country risk faced by the Projects in 2000 or in 2008 is not the same as the country risk they would face today: the now applicable discount rate must therefore take that difference into account. The same can be said of the 10% discount rate estimated for the Junín 4 Block project back in 2010.¹⁶⁹⁹

1082. That being said, as pointed out by the Claimants,¹⁷⁰⁰ the Tribunal notes that the Respondents have not countered the 8% to 10% discount rates that the Claimants submit have been used in: (i) the 2008-2014 Consolidated Financial Statements for PDVSA and its subsidiaries;¹⁷⁰¹ and (ii) the 2014 Cardón project between PDVSA and ENI/Repsol.¹⁷⁰² Being closer to the relevant valuation date, the Tribunal cannot but take them into consideration.

1083. Notwithstanding the foregoing, the Tribunal agrees with the rationale behind *Tidewater* and *Saint Gobain* as argued by the Respondents, which essentially runs as follows: a proper but-for scenario must reflect the country risk exposure in full, that is, even the possibility of Venezuela adopting measures affecting the Projects including but not limited to expropriatory measures.¹⁷⁰³ Indeed, contrary to the Claimants’ arguments, the issue here is not “rewarding [Venezuela’s] violations of international law [or] creat[ing] an incentive for [it] to take property in violation of its international obligations”.¹⁷⁰⁴ Rather, it is to properly assess the political risk of doing business in a particular state; a query that is economic and not legal.¹⁷⁰⁵ Hence, whether or not the underlying public measure is deemed lawful or not, is irrelevant.¹⁷⁰⁶ This is particularly so in the case at hand, where the Respondents’ obligation to provide limited indemnity to the Claimants under the DA provisions corresponds to a contractual characterization of a determined qualified measure as a DA: it does not necessarily

¹⁶⁹⁸ R-PHB, fn. 1747; *infra*, § 1083 ss.

¹⁶⁹⁹ *Supra*, fn. 1540. In any event, bearing in mind that the first drilling in that project only took place in 2012 (Tr. (Day 5) 1775:9-10 (Figuera)), Mr. Figuera is likely right in qualifying said discount rate more as a guideline, premise or assumption (*Supra*, fn. 1632)

¹⁷⁰⁰ C-PHB, §§ 883-884.

¹⁷⁰¹ PDVSA, Consolidated Financial Statements for years 2008-2010, **C-304**, p. 84; PDVSA, Consolidated Financial Statements for years 2011-2013, **C-338**, p. 102; PDVSA, Consolidated Financial Statements for years 2012-14, **C-354**, p. 126.

¹⁷⁰² Einstein Millán Arcia, PDVSA: Secretos del Proyecto Cardon IV – Campo Perla, SOBERANÍA, 14 July 2014, **C-343**, p. 2 (of PDF); PDVSA Presentation: Avances – Proyecto de Gas Rafael Urdaneta, Bloque Cardón IV, June 2014, **C-341**, pp. 2-3; C-PHB, § 884.

¹⁷⁰³ R-PHB, §§ 829, 831-832.

¹⁷⁰⁴ C-PHB, § 907.

¹⁷⁰⁵ *Supra*, § 1028.

¹⁷⁰⁶ *Saint-Gobain*, **RLA-147**, §§ 717-719; *Tidewater*, **RLA-069**, §§ 186-198.

hinge on whether the said measure is previously or subsequently declared legal or illegal.

1084. In light of the foregoing considerations, the Tribunal considers that the country risk premium (or better, the equity impact of country risk), can be appropriately set at 8.89%. Following the Claimants' unlevered CoE approach,¹⁷⁰⁷ the Tribunal therefore determines that the applicable discount rate is 18%. Overall, in the circumstances, the Tribunal considers that an 18% discount rate is reasonable.

H. OTHERS

1. Fiscal maximization

1085. The Parties' experts have quantified the damages recoverable by the Claimants under two scenarios which correspond to the two claims asserted in the arbitration, namely, for the Willful Breach Claims and for the DA Claims.¹⁷⁰⁸ However, the experts disagree on the assumptions regarding the applicable fiscal regime to be taken into account when quantifying the damages under each scenario.¹⁷⁰⁹

1086. In a nutshell, the Respondents' experts assume that:

For royalties and taxes for the period June 26, 2007 through the end of the original terms of the Association Agreements, [...] the Government of Venezuela [...] would have exercised its sovereign powers to enact such measures as would enable it to capture the maximum amount of revenue, after deduction of any compensation that would be payable by the State companies participating in the Projects under the compensation provisions of the Association Agreements.¹⁷¹⁰

1087. Elaborating on the above assertion, it is the Respondents' case that the Projects did not enjoy any fiscal stability and were subject to a very precise compensation mechanism. This mechanism limited the Claimants' compensation entitlement to the

¹⁷⁰⁷ *Supra*, §§ 1042-1043.

¹⁷⁰⁸ Abdala ER I, **CER-3**, § 3; Brailovsky & Flores ER I, **RER-3**, § 5.

¹⁷⁰⁹ The Tribunal notes that the disagreement arises out of the difference in instructions given to each expert by its Party.

¹⁷¹⁰ Brailovsky & Flores ER I, **RER-3**, §§ 6, 30; Tr. (Day 9), 2483:12 – 2484:15 (**Louis T. Wells**: Claimants and their Expert also assume in their calculations a frozen fiscal regime; that is, that nothing changes after the nationalization. I think this is unrealistic. [...] To assume that there – If one assumes there was no nationalization, which one has to do in a but-for analysis, then one must expect that the Government would have taken other steps to increase Government take in face of the continuing escalation of oil prices, the dependence of the country on oil revenue in its budget, its need for funds as social projects expanded and the changed political environment. So, in conclusion, I think it's unreasonable to assume that, having retained the right to take Government measures affecting the Projects, Venezuela would not have continued to exercise its sovereign powers to increase Government take in high-price scenarios; that is, after the nationalization, if the nationalization had not occurred--and at least up to a level that would not be offset by obligations incurred by the State enterprise").

“equitable compensation” payable under the DA provisions and nothing further.¹⁷¹¹ Thus, but-for the Expropriation, it is perfectly reasonable to assume that the Government would not have stood by and allowed the associations to capture the benefits of high oil prices. Rather, as “[t]he owner of the resource” it would have exercised its sovereign powers “to obtain the benefit of [these] exceptional profits.”¹⁷¹² By way of example, the Respondents contend that if the Expropriation had not taken place, the Government would have imposed a royalty on the Projects such that they “would be left with a profit margin of approximately US\$ 1 per barrel.”¹⁷¹³ The Respondents submit that this conclusion makes undeniable “economic, business and common sense” and the Claimants’ attempt to argue that there is no automatic “value cap” or “compensation cap” in the AAs is baseless and futile.¹⁷¹⁴

1088. According to the Claimants’ expert, the Respondents’ above assumption of “fiscal maximization” by the Government is inconsistent with the actual taxation policy implemented by Venezuela after the Expropriation and is in any event “commercially unreasonable”.¹⁷¹⁵

1089. First, the Claimants submit that post-Expropriation, Venezuela has not imposed any taxes on the revenues from either of the Projects “such that the projects would be left with a profit margin of approximately US\$ 1 per barrel.”¹⁷¹⁶ Consequently, the Respondents’ argument that the Government would tax away all revenues above the DA compensation deals in mere hypotheticals and is thus untenable.¹⁷¹⁷

1090. Second, the Claimants submit that the Respondents’ fiscal maximization assumption erroneously attempts to impose a “value cap” or “compensation cap” on the profits/compensation from the Projects which is not borne out by either the terms of the AAs or their negotiating history.¹⁷¹⁸ In this regard, the Claimants submit that there is no provision in the AAs that states that the Claimants shall forego all revenues generated above the DA compensation level in the event of breaches by the

¹⁷¹¹ R-PHB, § 574; Reply, § 1155.

¹⁷¹² R-PHB, §§ 582; PDVSA Strategic Business Committee Executive Summary and Presentation, 1995, **R-76**, p. 3; Mommer WS I, **RWS-1 Annex 4**, § 11 (“If the nationalization had not taken place, I definitely would have pursued such additional taxes, and I have no doubt that the Government would have adopted additional fiscal measures to take what it was entitled to under the terms of the agreements”).

¹⁷¹³ R-PHB, § 590.

¹⁷¹⁴ R-PHB, § 575.

¹⁷¹⁵ Abdala ER II, **CER-8**, §§ 4.a, 5.

¹⁷¹⁶ R-PHB, § 590.

¹⁷¹⁷ C-PHB, § 849.

¹⁷¹⁸ C-PHB, §§ 515-517.

Respondents. Quite to the contrary, the Claimants submit that the DA provisions are a “special additional mechanism for compensation against adverse government conduct”, i.e. the actions of a third party, and they cannot be distorted to otherwise limit the flow of compensation to the Claimants for the Respondents’ breaches of their own contractual obligations.¹⁷¹⁹

1091. In light of the Parties’ submissions, the Tribunal finds that the fiscal maximization assumption is relevant to the quantification of damages arising out of the Willful Breach Claims only. Indeed, this is common ground between the Parties.¹⁷²⁰ The Tribunal has previously concluded that the Respondents are not liable for willfully breaching the AAs.¹⁷²¹

1092. The Tribunal further notes that the fiscal maximization assumption plays no role in the quantification of compensation under the DA Claims: the Claimants do not dispute that there is a cap on the compensation recoverable from the Respondents for DAs pursuant to the DA provisions in the AAs.¹⁷²²

1093. In the circumstances, as the fiscal maximization assumption does not play a role in the assessment of compensation payable to the Claimants for their DA Claims, the Tribunal does not need to determine the correctness of this assumption. However, the Tribunal implements this decision in the AUVM by toggling the appropriate toggle in favor of the Claimants.¹⁷²³ Otherwise, the Tribunal would give effect to an argument by the Respondents that, by definition, ought not to have any effect in the DA scenario.

¹⁷¹⁹ C-PHB, §§ 523-524.

¹⁷²⁰ SoD, § 346 (“Respondents will present their main quantum calculations for the first category of claims [i.e., the Willful Breach Claims] applying the price cap mechanism in the [AAs], based on the logical assumption that the Government would have done what it insisted on preserving the right to do, which is enforce the ‘upside cap on project economics’); R-PHB, § 591 (“Claimants’ assumption that the fiscal regime would be frozen as of June 26, 2007 is untenable as a basis for calculating compensation on the first category of claims. If the 2007 Nationalization were to be unwound in a hypothetical world and the associations were to continue operating [...], the Government would have had every incentive to take measures to maximize its revenues from the Projects [...]); C-PHB, § 531 (“PDVSA’s indemnity for a Discriminatory Action is limited in certain price scenarios. But there is no basis in the contract for suggesting that such a limit [...] functions as an overall cap on the revenues to which Claimants are entitled under the AA”), 552 (“The text of the AAs does not reference, much less impose, any [...] ‘value cap,’ and the [...] ‘compensation cap’ [...] in the DA provisions, does not limit the value of the contract, nor does it limit the compensation owed by Respondents to Claimants for their own willful breaches of the AAs).

¹⁷²¹ *Supra*, § 491.xi.

¹⁷²² C-PHB, § 531 (“PDVSA’s indemnity for a Discriminatory Action is limited in certain price scenarios”), 563 (“What was negotiated was a limit on the indemnification payable by *Respondents* for Discriminatory Actions by the *Government*”); Tr. (Day 2), 410:9-15 (Mr. Manning) (“So there is one cap, only under the Association Agreement, and that cap is for Corpoven’s indemnity for the Foreign Parties for a Government action, that there is no cap for the amount of income that we could make, whether the price is \$100 or \$150 or \$200 a barrel – there is no cap on the price that we could make under the Contract”).

¹⁷²³ *Infra*, § 1128.viii.a).

2. Hamaca Project debt

1094. In calculating the compensation payable under the DA provisions for the Hamaca Project, Mr. Brailovsky and Mr. Flores deduct the amount of debt payable by the Hamaca Project to its lenders from the Project's annual cash flows.¹⁷²⁴ Mr. Abdala, on the other hand, does not deduct the outstanding debt while calculating compensation for the DA Claims.¹⁷²⁵
1095. According to Mr. Abdala, while ordinarily a quantum analysis based on a market value approach would take into account financial debt repayments by subtracting them from the company's cash flows, this need not be done here when calculating compensation for DAs under the Hamaca AA. This is so because the DA compensation formula in the Hamaca AA does not contemplate the deduction of outstanding debt, thus reflecting the Parties' specific understanding of the DA compensation mechanism.¹⁷²⁶
1096. Mr. Brailovsky and Mr. Flores disagree. In their view, nothing in the DA formula of the Hamaca AA prevents the netting out of financial debt, especially as this is the standard approach to determining compensation. They submit that the absence of a debt repayment component in the DA formula of the Hamaca AA does not negate the need to deduct outstanding debt in order to arrive at the appropriate compensation calculation. They explain that in the ordinary course of business, the Claimants would have received DA compensation but would have to simultaneously pay their share of the Project debt. To argue otherwise creates a windfall for the Claimants which cannot be permitted.¹⁷²⁷ Accordingly, they submit that the debt must be deducted from the Hamaca Project's cash flows.¹⁷²⁸
1097. As an initial observation, the Tribunal notes that the above point in dispute between the Parties' quantum experts only pertains to the compensation payable under the Hamaca AA. It is common ground between the Parties' experts that insofar as the Petrozuata AA is concerned, compensation is arrived at using a "standard economic

¹⁷²⁴ For the period between 26 June 2007 (i.e. date of the Expropriation) and 30 June 2015, Brailovsky and Flores subtract annual principle and interest payments from the Project's annual cash flows. Then, they subtract the amount of debt outstanding as of 30 June 2015 from the net present value ("NPV") of the annual cash flows projected after that date. Brailovsky & Flores ER I, **RER-3**, § 222.

¹⁷²⁵ Compare Compass Lexecon Hamaca Breach Scenario Model, Tab "DCF", Abdala ER I, **CER-3 CLEX-002** with Compass Lexecon Hamaca Discriminatory Provisions Scenario Model, Tab "Contract Calculation", Abdala ER I, **CER-3 CLEX-002**.

¹⁷²⁶ Abdala ER II, **CER-8**, §§ 131-135.

¹⁷²⁷ Brailovsky & Flores ER II, **RER-7**, §§ 111-113.

¹⁷²⁸ Brailovsky & Flores ER I, **RER-3**, § 24; Brailovsky & Flores ER II, **RER-7**, § 115.

approach” which computes the Project’s revenues, costs, taxes, change in working capital, and debt repayments.¹⁷²⁹

1098. Turning to the Hamaca AA, the Tribunal is persuaded by the position adopted by Mr. Abdala. It is clear that an ordinary market valuation of the compensation due to the Claimants for a harmful act could have required the deduction of outstanding debt from the Hamaca Project’s revenues. However, the situation is not the same in this instance: the calculation of compensation is not based on the standard market approach. It is governed by a specific formula which has been agreed upon by the Parties as reflective of the compensation/indemnity that shall be payable by the Respondents to the Claimants in case of a DA.
1099. In these circumstances, the Tribunal finds that the outstanding debt of the Hamaca Project need not be deducted from the Project’s cash flows in order to arrive at the compensation payable to the Claimants under the Hamaca AA. The Respondents’ quantum experts may be correct that, in the ordinary course of business, the Claimants would have been required to pay their share of the Hamaca Project debt. That does not mean, however, that the Respondents’ obligation to compensate the Claimants under the DA provision was contingent on the payment of the said Project debt by the Claimants.
1100. The DA provisions at issue have a specific purpose: providing limited indemnity to the Claimants in the event a discriminatory and unjust qualified measure causes MAE to the Hamaca Project. As such, the application of the Hamaca DA provisions certainly finds itself outside the ordinary course of business. Accordingly, the Respondents’ reliance on general compensation principles, without any specific reference to how debt repayment (between Project participants) may fall under either the RNCF or the TCF formulae, is insufficient.
1101. For the sake of clarity, the Tribunal does not make a determination as to whether the repayment of the Hamaca Project debt remains an outstanding obligation on behalf of the Claimants. It might be that the Respondents could still be entitled to recover said amount as far as general civil liability is concerned. Nevertheless, the Tribunal considers that the specific DA compensation provisions are inapposite to that effect. As such, the Tribunal is of the view that discounting the Hamaca Project debt from the indemnity owed to the Claimants pursuant to the Hamaca DA provisions is unwarranted.

¹⁷²⁹ *Supra*, §§ 550-551.

3. Science and Technology Contribution

1102. It is common ground between the Parties' quantum experts that Article 35 of the *Ley Orgánica de Ciencia, Tecnología e Innovación* of 2005,¹⁷³⁰ and Article 26 of the *Ley de Reforma de la Ley Orgánica de Ciencia, Tecnología e Innovación* of 2010 (together, "Science and Technology Contribution" or "STC"),¹⁷³¹ require oil and gas companies to contribute a certain percentage of their yearly gross revenues to the advancement of science, technology, and innovation in Venezuela: 2% from 2005 through 2010 and 1% from 2011 onwards (i.e. until the expiration of the Projects).¹⁷³²
1103. The Parties' experts, however, disagree on the implementation of the STC. According to Mr. Abdala, the STC would apply to the Projects' current year gross revenues obtained from the sale of hydrocarbons only.¹⁷³³ Mr. Brailovksly and Mr. Flores in turn submit that the STC applies to the Project's previous year total gross revenues.¹⁷³⁴
1104. As to whether the STC is applicable to the previous or the current year's gross revenues, the statutory provisions of this measure alone are enough to dispose of the issue. While from 2005 to 2010 the temporal scope of the STC was not entirely clear,¹⁷³⁵ it has been quite straightforward thereafter. Indeed, since 2011 the STC requires the payment of an "annua[l]" contribution of 1% of the "gross income obtained in the immediately preceding fiscal year".¹⁷³⁶ The Tribunal finds no reason, and the Claimants have provided none, to conclude that such an inter-temporal principle was any different before the STC's reform in 2010.
1105. As to whether the STC is applicable to the gross revenues obtained from the sale of hydrocarbons alone, its statutory provisions are, again, broadly dispositive of the issue. Since its adoption in 2005 the STC has been applicable to the gross revenues obtained from the exercise of the activities established in the "Hydrocarbons

¹⁷³⁰ Science and Technology Contribution 2005, **App. BF-114**, Article 35.

¹⁷³¹ Science and Technology Contribution 2010, **App. BF-115**, Article 26.

¹⁷³² Abdala ER I, **CER-3**, § 235.c; Brailovsky & Flores ER I, **RER-3**, § 218.b.

¹⁷³³ C-PHB, Appendix F, § 39(c); Brailovsky & Flores ER II, **RER-7**, Table 6.

¹⁷³⁴ Brailovsky & Flores ER I, **RER-3**, § 218.b; Brailovsky & Flores ER II, **RER-7**, Table 6.

¹⁷³⁵ Science and Technology Contribution 2005, **App. BF-114**, Article 35 ("Large companies operating in this country dedicated to the activities listed in the Hydrocarbon Act and the and Gaseous Hydrocarbon Act, will contribute an annual amount corresponding to two percent (2%) of the gross revenue earned in the national territory [...]").

¹⁷³⁶ Science and Technology Contribution 2010, **App. BF-115**, Article 26.

[Law]”.¹⁷³⁷ In the absence of a substantiated explanation to the contrary by the interested Party, namely, the Claimants, the Tribunal finds that the STC’s subject-matter scope covers more than just the revenues obtained from the sale of hydrocarbon.

1106. For the reasons set out above, the Tribunal determines that the STC must be applied to the *ex post* scenario as calculated by the Respondents.

4. Post-award interest

1107. The Claimants request “post-award compound interest at a rate to be fixed by the Tribunal”.¹⁷³⁸ The Respondents do not seem to dispute the possibility of allowing post-award interest.

1108. In consideration of the second *tranche* of Article 530 of the VCoC,¹⁷³⁹ the Tribunal thus finds it apposite to compound post-award interest over the amount awarded to the Claimants under the DA provisions of the AAs (already incorporating pre-award interests at the contractually agreed rates). That, however, does not mean that post-award interests in and of themselves can or must be allowed to independently accrue on a compounded basis. To the contrary, given that the simple interest on the lost cash flows are predicated on the Respondents’ belated compliance with their indemnity obligations under the DA provisions (i.e. delayed payment), the Tribunal finds no reason “to differentiate between the [interest] rate [and conditions] applicable to [the] delayed payment of damages prior to or after the [a]ward”.¹⁷⁴⁰

1109. The Tribunal shall therefore grant post-award interest, on a simple interest basis, to run from 27 May 2016 in accordance with the AUVM¹⁷⁴¹ and until the date of full and final payment of the awarded amounts at: (i) 12-month LIBOR in relation to the lump sum (including interest) awarded pursuant to the Petrozuata AA; and (ii) 3-month LIBOR in relation to the lump sum (including interest) awarded pursuant to the Hamaca AA.

¹⁷³⁷ Science and Technology Contribution 2005, **App. BF-114**, Article 35; Science and Technology Contribution 2010, **App. BF-115**, Article 26.

¹⁷³⁸ C-PHB, § 1027(p).

¹⁷³⁹ *Supra*, fn. 1525.

¹⁷⁴⁰ SoC, § 337.

¹⁷⁴¹ The Tribunal finds it consistent and appropriate, in view of the established valuation date, to award post-award interest as of 27 May 2016, this date being the date until which pre-award interest is granted.

5. Methodology for calculating net present value of equity

1110. In order to calculate the net present value of equity for the DA claim in the post-date of valuation period, Mr. Abdala applies the “free cash flows to equity” (FCFE) method of valuation.¹⁷⁴² By contrast, the Respondents apply a “free cash flows to firm” (FCFF) method of valuation. On balance, the Tribunal finds that the Claimants’ approach is to be preferred. As the Claimants rightly point out, applying the Respondents’ methodology results in a situation where the Projects become uneconomical on a post-tax basis starting from 2015 and become permanently loss making in and around 2023 (Petrozuata) and 2027 (Hamaca).¹⁷⁴³

1111. Moreover, the models appear to assume that despite the permanent losses suffered by the Projects, they will continue to run until the end of their contract terms, thereby reducing the value of the Projects even further.¹⁷⁴⁴ The Tribunal finds that this assumption does not comport with the manner in which any rational commercially driven operator would run the Projects. While the Claimants dispute that the Respondents had commercial incentives, the Tribunal has previously concluded that this is not the case. Moreover, at least the Hamaca Project also involved a “commercial minded entity” comparable with the Claimants (i.e. Chevron). It is arguable that irrespective of the Respondents, it is not likely that Chevron would have remained involved with a loss making enterprise. Accordingly, the Tribunal finds that the Claimants’ method of calculating the net present value of equity on the basis of the FCFE should be applied.

6. Working Capital, depreciation and other revenues

1112. In this section, the Tribunal addresses certain remaining DCF inputs on which the Parties’ experts differ, namely, working capital requirements and depreciation.

1113. Working capital refers to the amount of cash that a company needs to retain to ensure the sound operation of its business on a day to day basis (as opposed to

¹⁷⁴² Free cash flow to equity is a measure of cash flow available to the equity holders of the asset, whereas free cash flow to the firm is a measure of cash flow available to the firm (i.e., to all its stakeholders – equity and debt holders). Abdala/Spiller ICSID Consolidated Report, §§ 33-36, 42-43, fn 34.

¹⁷⁴³ Abdala/Spiller, ICSID Consolidated Report, §§ 113, figure 18, figure 19; Tr. (Day 10), 2603:22-2604:13 (Mr. Abdala).

¹⁷⁴⁴ Abdala/Spiller, ICSID Consolidated Report, § 115.

distribution to the company's equity and debt holders). It is defined as current assets less current liabilities.¹⁷⁴⁵

1114. Mr. Abdala forecasts working capital by taking a simple average of values representing the ratio between working capital and relevant cash flow accounts (revenues, operating expenses, capital expenditure, or royalties) for the historical period.¹⁷⁴⁶ The Respondents' experts, Mr. Brailovsky and Mr. Flores, follow the same methodology but substitute their inputs (for revenues, OPEX, CAPEX etc.) instead.¹⁷⁴⁷
1115. Depreciation is an accounting mechanism whereby certain expenditures are not fully deducted against income in the year in which they are incurred, but deducted over a period of several years at a certain rate, i.e. certain portion of their value is deducted year on year.¹⁷⁴⁸ Depreciation is deducted from operating expenses in order to arrive at the net taxable income.
1116. Mr. Abdala states that he depreciates and amortizes expenses on the basis of the methodology followed in the Projects' financial statements. Depreciation of property, plant, and equipment is computed according to the "unit of production" methodology, which considers the ratio of production to the aggregate remaining hydrocarbons until the end of the term of the concession. The upgrader facilities are depreciated on the basis of a straight-line methodology over a period of 17 years. Intangible assets are amortized using a straight-line approach.¹⁷⁴⁹
1117. According to Mr. Brailovsky and Mr. Flores, the methodology followed by Mr. Abdala is not supported by the financial statements of the Project available on record.¹⁷⁵⁰ They point to the 2005/2006 financial statements of the Petrozuata Project which allegedly follow a different depreciation methodology. For instance, "assets used in

¹⁷⁴⁵ Abdala ER I, **CER-3**, § 227; Brailovsky & Flores ER I, **RER-3**, § 220. Brailovsky and Flores explain that an increase in working capital from one year to the next represents a decrease in the cash that can be distributed to the company's equity and debt holders, while a decrease in working capital is a release of tied-up cash, thus increasing the cash that can be distributed to the company's equity and debt holders.

¹⁷⁴⁶ Abdala ER I, **CER-3**, § 228; Petrozuata CA Financial Statements for fiscal years ending, 31 December 2002, 2003, 2004, 2005 and 2006, Abdala ER I, **CER-3 CLEX-059**; Hamaca Project Financial Statements for fiscal years ending 31 December 2003 (Abdala ER I, **CER-3 CLEX-047**), 2004 (Abdala ER I, **CER-3 CLEX-046**), 2005 (Abdala ER I, **CER-3 CLEX-045**), and 2006 (Abdala ER I, **CER-3 CLEX-042**).

¹⁷⁴⁷ Brailovsky & Flores ER I, **RER-3**, §§ 220-221; Brailovsky/Flores ICSID Consolidated Report, § 343.

¹⁷⁴⁸ Brailovsky & Flores ER I, **RER-3**, § 207.

¹⁷⁴⁹ Abdala ER I, **CER-3**, § 226. As per Mr. Abdala's methodology, all assets are fully depreciated by the end of the concession period. This means that if the useful life of any asset is longer than the remaining years of the AAs, the asset is depreciated at a faster rate than the rate corresponding to its actual useful remaining life.

¹⁷⁵⁰ Brailovsky & Flores ER I, **RER-3**, § 209.

the production of hydrocarbons are amortized or depreciated using the unit of production method based on proved developed reserves estimated for the 35-year operating life of the [AA]”, “assets related to pipeline investments are depreciated using the straight-line method over a period of 23 years”, “capitalized costs of all other support equipment and facilities are depreciated on a straight-line method over an average estimated useful life of five years”.¹⁷⁵¹

1118. In light of the above, Mr. Brailovsky and Mr. Flores reject the straight-line methodology which assumes a 17 year useful life for the upgrader facilities. Instead they depreciate the Projects’ assets on the basis of the methodology that is followed in the 2005/2006 financial statements. They depreciate assets used in the production of hydrocarbons and in the transformation of hydrocarbons using the unit of production method. They depreciate turnaround CAPEX using a straight-line method over 4-year periods and all other CAPEX for supporting equipment and facilities using Mr. Abdala’s methodology.¹⁷⁵²

1119. Having examined the Parties’ submissions and the supporting documents, the Tribunal finds that the key issue in dispute pertains to the methodology to be followed for depreciating the Projects’ assets. In particular, the disputed issue concerns how the upgrader should be depreciated. Although Mr. Abdala has stated that he applies the depreciation methodology in the Projects’ financial statements, he has not supported this statement with documentary evidence. In fact, having examined the Petrozuata Project’s financial statements, the Tribunal notes that none of them point to depreciation over a 17 year period as alleged by Mr. Abdala.¹⁷⁵³ Rather, these financial statements reflect the methodology applied by the Respondents and constitute sufficient basis for the same to be accepted. In any event, the Tribunal notes that despite the Respondents’ opposition to his calculation of depreciation, Mr. Abdala ultimately opines that the differences in calculation of these DCF inputs “does not give rise to material valuation differences”.¹⁷⁵⁴ Thus Mr. Abdala appears to accept the Respondents’ calculation of depreciation will not produce significantly erroneous results. In the circumstances, the Tribunal is of the view that the Respondents’ calculations of depreciation should be accepted.

¹⁷⁵¹ Petrolera Zuata, Petrozuata CA Financial Statements for fiscal years ending 31 December 2002, 2003, 2004, 2005 and 2006, Abdala ER I, **CER-3 CLEX-059**, pp. 242, 243. It appears that the Hamaca Project follows a similar methodology.

¹⁷⁵² Brailovsky & Flores ER I, **RER-3**, §§ 210-211.

¹⁷⁵³ Petrolera Zuata, Petrozuata CA Financial Statements for fiscal years ending 31 December 2002, 2003, 2004, 2005 and 2006, Abdala ER I, **CER-3 CLEX-059**, pp. 242, 243

¹⁷⁵⁴ Abdala ER II, **CER-8**, fn. 12.

1120. The Tribunal also notes that the Parties' experts agree on the methodology to be adopted to arrive at working capital requirements but differ only as to the inputs, i.e. revenue, OPEX and CAPEX. Even in this respect, Mr. Abdala opines that the differences in calculation do not give rise to material valuation differences. Hence, the Tribunal considers it appropriate to adopt the Respondents' working capital estimates.

7. Tax net award

1121. The Claimants submit that, "[b]ecause Dr. Abdala's DCF calculation takes account of all applicable Venezuelan taxes, no further Venezuelan taxes should be payable on this Tribunal's Award. [A]ny taxation of the Award would result in Claimants impermissibly being taxed twice for the same income".¹⁷⁵⁵

1122. In this regard, "in order to ensure the finality of the Tribunal's Award, secure full reparation under Venezuelan law, and prevent double taxation",¹⁷⁵⁶ the Claimants request: (i) for the award to be net of all applicable Venezuelan taxes; and (ii) for the Tribunal to hold that any taxes applying under Venezuelan law to the payment of the award to be borne by the Respondents.¹⁷⁵⁷ In short, the Claimants request for the "amount effectively received [...] after deduction of all applicable taxes corresponds to the full amount granted by the Tribunal".¹⁷⁵⁸

1123. The Tribunal notes that the Claimants' argument is premised on the assumptions germane to their Willful Breach Claim. Indeed, it is under that claim that the Claimants have instructed their quantum expert to "assume that all taxes imposed by Venezuela on the Projects would apply in the but for scenario, with the exception of the [SPEC]".¹⁷⁵⁹ On the other hand, under their DA Claim the Claimants have instructed their quantum expert to exclude the Royalty Measure, the Extraction Tax, the Income Tax Increase, the SOCO, and the SPAT.¹⁷⁶⁰ Further, Mr. Abdala has assumed that the ADCO would not have applied to the Hamaca AA, an assumption that the Claimants endorse.¹⁷⁶¹

¹⁷⁵⁵ C-PHB, § 869; SoC, § 315.

¹⁷⁵⁶ C-PHB, § 871.

¹⁷⁵⁷ C-PHB, § 871.

¹⁷⁵⁸ C-PHB, § 1027(u).

¹⁷⁵⁹ C-PHB, § 845.

¹⁷⁶⁰ *Supra*, §§ 949-951.

¹⁷⁶¹ *Supra*, § 951.

1124. Nevertheless, the Tribunal has determined that all of the taxation measures at issue are either applicable or not applicable in the but-for world, or constitute (or would have constituted) DAs. Therefore, the Tribunal considers that, in light of its determinations, the Claimants' DA Claim stands on par with their Willful Breach in this regard: the amount awarded is net of taxes. To that extent, the Tribunal agrees with the Claimants that applying taxes to the amount awarded would undermine the principle of full compensation and would allow, in part, impermissible double taxation.¹⁷⁶² The Tribunal further notes that the Respondents do not seem to have opposed the Claimants' request either in their written submissions or during the Hearing. Therefore, the Tribunal shall grant the Claimants' request for a tax net Award.

8. Reimbursement to the Respondents

1125. The Tribunal recalls that the Claimants have clarified that they do not seek double recovery for the damage suffered. In the context of their DA Claim in particular, the Claimants have stated the following:

[A]ny monetary reparation (after deduction of legal and expert costs incurred in connection therewith) that the ICSID Claimants actually recover (*i.e.*, awarded and paid by Venezuela) in the ICSID Arbitration, before recovery in this ICC proceeding, will reduce Respondents' liability in respect of the claims asserted in this ICC proceeding, to the extent that such reparation is based on the same actions by the Government and/or PDVSA. The converse is true as well. If Claimants receive payment for damages or indemnification in connection with this ICC proceeding and are later awarded monetary reparation in connection with the ICSID Arbitration (to the extent that such damages are based on the same actions by the Government and/or PDVSA), Claimants will reimburse Respondents for the amount that Respondents have paid in this ICC Arbitration, after deduction of Claimants' legal and expert costs, to the extent necessary to prevent double recovery.¹⁷⁶³

1126. The Claimants clarify, however, that "the ICSID Tribunal has found that it could not award compensation under the BIT for these pre-dispossession fiscal measures due to a carve-out for tax measures in the BIT. As a result of that ruling in the ICSID Arbitration, these ICC proceedings are the only viable recourse for Claimants' losses flowing from the Royalty Increase, the Extraction Tax, and the Income Tax Increase, presented as part of the DA Claim".¹⁷⁶⁴

¹⁷⁶² C-PHB, § 869-871; SoC, § 317-319; Reply, § 568(s).

¹⁷⁶³ C-PHB, § 164; *supra*, § 69.

¹⁷⁶⁴ C-PHB, fn. 27.

I. CONCLUSION (APPLICATION OF THE AUVM)

1127. As established at the very outset, the Tribunal shall ascertain the amounts owed to the Claimants under the DA provisions in accordance with the *ex post* date-of-award valuation provided in the Abdala Updated Valuation Model (with a valuation date of 27 May 2016 as the most appropriate proxy for the date of the Award).¹⁷⁶⁵ In light of the Tribunal's determinations on the multiple issues in dispute, the present section sets out the way in which the Tribunal has toggled the various inputs of the AUVM. When relevant, the Tribunal also explains the edits made to the AUVM in order to reflect some of its findings on both liability and quantum.

1128. The following step-by-step explanation thus attempts to reflect the order in which every issue has been dealt with in the present Award as per the AUVM. For the sake of clarity, the headings, subheadings, and terms in quotations expanded below are entitled as they appear in the AUVM's Control Panel, or in the AUVM generally. When necessary, reference is also made to the term or terms most used in this Award identifying said heading or subheading:

i. Preliminary Matters

- a) **"Willful Breach Damages Percentage"**: The Tribunal has rejected the Claimants' Willful Breach Claim in its entirety. As such, this option has been set to "0%".
- b) **"Petrozuata DA Compensation"**: The Tribunal has set this toggle to "From 2007". However, the Tribunal has established elsewhere that the Claimants are only entitled to receive compensation under the DA provisions of the Petrozuata AA from 2007 onwards with respect to the Expropriation. In turn, the Tribunal has determined that, pursuant to Section 9.07(e) of the Petrozuata AA, the Claimants may only receive compensation with respect to the Income Tax Increase as from 2013 (i.e. the fiscal year before the initiation of this arbitration).¹⁷⁶⁶ The AUVM's Control Panel does not allow making the foregoing distinction. However, pursuant to its finding, the Tribunal has edited the AUVM's "DA FCF (PZ)" tab accordingly. In particular, the Tribunal has altered the Cells S22 to X22 of said tab, by

¹⁷⁶⁵ *Supra*, §§ 581 ss .

¹⁷⁶⁶ *Supra*, § 294.xi.

replacing the references to Cells D22 and E22 with “50.5%” and “51.5%”, respectively.

ii. **“Production Volumes”**

- a) **“Petrozuata”**: This toggle has been set to “B&F”.¹⁷⁶⁷
- b) **“Hamaca”**: This toggle has been set to “B&F”.¹⁷⁶⁸
- c) **“Upgrader Failure (Hamaca)”**: This toggle has been set to “Abdala”.¹⁷⁶⁹

iii. **“Prices”**

- a) **“Brent Price”**: This toggle has been set to “B&F”. However, the Tribunal has determined that the Respondents’ calculations on this input cannot be taken wholesale. While the Tribunal finds that the Respondents’ Brent price projections up to 2020 are apposite, it has deemed unreasonable their assumption of a nominally flat Brent price of USD 67.50 per barrel from 2021 until the expiration of both Projects. Accordingly, the Tribunal has decided to apply a yearly 2% inflation rate to the Respondents’ post-2020 Brent forecast.¹⁷⁷⁰ The AUVM’s Control Panel does not allow the foregoing distinction. To reflect its finding the Tribunal has thus edited the AUVM’s “Price Inputs” tab. In particular, the Tribunal has edited Cells U7 (year 2021) to AK7 (year 2037), by increasing by 2% the Brent price projected for the year before.
- b) **“Maya Differential”**: This toggle has been set to “B&F”.¹⁷⁷¹ However, the Tribunal has edited the AUVM’s “Price Input” tab to better reflect the Respondents’ position on the applicable Brent-Maya differential. In particular, the Tribunal has edited Cell D10 of said tab, by replacing the “85.88%” with a “85.89%”. This has the effect of altering Cell G10 of the AUVM’s “DA Price” tab, which,

¹⁷⁶⁷ *Supra*, §§ 696, 717, 737-739

¹⁷⁶⁸ *Supra*, §§ 696, 717, 774-785.

¹⁷⁶⁹ *Supra*, § 788.

¹⁷⁷⁰ *Supra*, §§ 813-815.

¹⁷⁷¹ *Supra*, § 820.

subsequent to the Tribunal's edit, reflects a 14.11% Brent-Maya differential (as argued by the Respondents),¹⁷⁷² as opposed to a 14.12% differential (as appears in the AUVM as filed by the Claimants).

- c) **“Project Crude Oil Prices”**: This toggle has been set to “B&F”.¹⁷⁷³ However, in order to better reflect the Respondents' position on the applicable Maya-Petrozuata CCO and Maya-Hamaca CCO differentials, the Tribunal has carried out certain edits to the AUVM. In particular, the Tribunal has edited the AUVM's “Price Input” tab by replacing the “100.09” in Cell D16 with a “100.08%”, and the “98.37%” in Cell D15 with a “98.36%”. This in turn alters Cells G18 and G15 of the “DA Price” tab, by reflecting a 100.08% Maya-Petrozuata CCO differential (as argued by the Respondents),¹⁷⁷⁴ as opposed to a 100.09% differential (as appears in the AUVM as filed by the Claimants), and a -1.64% Maya-Hamaca CCO differential (as argued by the Respondents),¹⁷⁷⁵ as opposed to a -1.63% differential (as appears in the AUVM as filed by the Claimants).
- d) **“Other Product Prices”**: This toggle has been set to “Abdala”. However, the Tribunal has determined that the Respondents' LPG calculations are more reliable than the Claimants'.¹⁷⁷⁶ Given that the AUVM's Control Panel does not distinguish between the various by-products sold by the Projects (the foregone volumes of which are only compensable under the Petrozuata AA),¹⁷⁷⁷ the Tribunal has edited Cell F29 of the AUVM's “DA Price” tab by changing the Claimants' LPG differential from 74.49% to 57.86%.

iv. **“Costs”**

- a) **“Operating Expenses (OPEX)”**:¹⁷⁷⁸

¹⁷⁷² *Supra*, § 796.ii.

¹⁷⁷³ *Supra*, §§ 826, 829.

¹⁷⁷⁴ *Supra*, § 796.iii.

¹⁷⁷⁵ *Supra*, § 796.iv.

¹⁷⁷⁶ *Supra*, § 835.

¹⁷⁷⁷ *Supra*, § 832.

¹⁷⁷⁸ *Supra*, §§ 885-894.

- **“Well Repairs”**: This toggle has been set to “Abdala”.
 - **“Others”**: This toggle has been set to “Abdala”.
- b) **“Capital Expenses (CAPEX)”**:¹⁷⁷⁹
- **“Drilling and Wellpads”**: This toggle has been set to “Abdala”.
 - **“Turnarounds”**: This toggle has been set to “Abdala”.
 - **“Others”**: This toggle has been set to “B&F”.
- c) **“Inflation and Costs in USD”**: This toggle has been set to “B&F”.¹⁷⁸⁰
- d) **“Exchange Rate and Costs in Bolivars”**: This toggle has been set to “B&F”, with a “50% DICOM” and a “No” to the “Most Favorable Exchange Rate” toggle.¹⁷⁸¹
- v. **“Fiscal Regime”**
- a) **“Windfall Profit Tax”** (Special Contribution or SPEC): This toggle has been set to “Applies” and “Not a DA”.¹⁷⁸²
- b) **“Anti-Drug Contribution (Hamaca)”** (ADCO): This toggle has been set to “Does not apply”.¹⁷⁸³
- c) **“Social Contribution”** (SOCO): This toggle has been set to “Not a DA”.¹⁷⁸⁴
- d) **“Shadow Tax”** (Special Advantage Tax or SPAT): This toggle has been set to “Not a DA”.¹⁷⁸⁵
- e) **“Income Tax”** (Income Tax Increase): This toggle has been set to “DA”.¹⁷⁸⁶

¹⁷⁷⁹ *Supra*, §§ 908-909.

¹⁷⁸⁰ *Supra*, § 937.

¹⁷⁸¹ *Supra*, § 948.

¹⁷⁸² *Supra*, §§ 963-964, 982, 990, 996.

¹⁷⁸³ *Supra*, §§ 987-989.

¹⁷⁸⁴ *Supra*, §§ 985-986, 997-998.

¹⁷⁸⁵ *Supra*, §§ 963-964, 985-986, 997-998.

- f) **“Extraction Tax”**: This toggle has been set to “Not a DA”.¹⁷⁸⁷
- g) **“1% Royalty Holiday”** (Royalty Measure): This toggle has been set to “Not a DA”.¹⁷⁸⁸

vi. **“Interest (DA)”**: This toggle has been set to “B&F”.¹⁷⁸⁹

vii. **“Discount Rate”**: This toggle has been set to “Custom” with an “18%” rate.¹⁷⁹⁰

viii. **Others**

- a) **“Fiscal Maximization”**: This toggle has been set to “No”.¹⁷⁹¹
- b) **“Debt in Hamaca”**: This toggle has been set to “Abdala”.¹⁷⁹²
- c) **“Science Contribution Tax Implementation”**: This toggle has been set to “B&F”.¹⁷⁹³
- d) **“Free Cash Flow Method”**: This toggle has been set to “Abdala”.¹⁷⁹⁴
- e) **“WK, Depreciation, Other Revenues & Costs”**: This toggle has been set to “Abdala”.¹⁷⁹⁵

1129. In light of the above, the Tribunal finds that the Respondents’ indemnity obligation pursuant to the DA provisions of the AAs amounts to: (i) USD 489,334,468.87, under the Petrozuata AA; and (ii) USD 1,496,712,745.85, under the Hamaca AA. As such, the total compensation owed to the Claimants as a result of the Income Tax Increase and the Expropriation amounts to USD 1,986,047,214.72. In accordance with the

¹⁷⁸⁶ *Supra*, §§ 959-960, 1128.i.b).

¹⁷⁸⁷ *Supra*, §§ 959-960.

¹⁷⁸⁸ *Supra*, §§ 959-960.

¹⁷⁸⁹ *Supra*, §§ 1000, 1014.

¹⁷⁹⁰ *Supra*, § 1084.

¹⁷⁹¹ *Supra*, § 1093.

¹⁷⁹² *Supra*, §§ 1099-1101.

¹⁷⁹³ *Supra*, § 1106.

¹⁷⁹⁴ *Supra*, § 1111.

¹⁷⁹⁵ *Supra*, §§ 1119-1120.

AUVM and the Claimants' Prayer for Relief, the foregoing amounts are calculated as of 27 May 2016 and already include pre-award interest.¹⁷⁹⁶

V. COSTS

1130. Each Party contends that all costs incurred in this arbitration, including the fees and expenses of legal representation, experts, witnesses and party representatives, the fees and expenses of the Tribunal, as well as the ICC administrative expenses should be borne by the other side.¹⁷⁹⁷

1131. The Claimants submit that a full award of costs in their favour is warranted in light of the Respondents' conduct in these proceedings. In particular, they argue that the Respondents' approach to document production was abusive as they (i) refused to produce documents relevant to establishing the nexus between the Government and PDVSA in the period leading up to the Expropriation, as well as (ii) made "burdensome, irrelevant, immaterial, and overlapping document production requests" to the Claimants.¹⁷⁹⁸

1132. The Claimants also argue that the Respondents' strategy of obscuring the issues in the arbitration similarly warrants an award of costs in the Claimants' favor. In this context, they point to the fact that (i) the Respondents refused to produce either Mr. Ramírez as a witness or the documents in his possession, even though the crux of the Respondents' defense to the Willful Breach Claims was the alleged separation between his roles as Minister and President of PDVSA,¹⁷⁹⁹ and (ii) the Respondents' "bloated and repetitive" pleadings in this arbitration coupled with their "frivolous" line of questioning regarding the alleged "value-cap" applicable to the Projects during the Hearing amounted to a waste of time.¹⁸⁰⁰

1133. Finally, the Claimants also observe that the Respondents' unsuccessful bifurcation requests caused unnecessary delays in the proceedings.¹⁸⁰¹

1134. In their submissions on costs,¹⁸⁰² the Claimants request the following amounts:

¹⁷⁹⁶ For the sake of further precision, the Tribunal notes that it formatted Cells F28 to H28 of the AUVM's Control Panel in order to reflect 8 decimals (as opposed to 0 decimals as originally filed). This way, the results in the AUVM's Control Panel better represent the model's underlying data.

¹⁷⁹⁷ C-PHB, § 1014; R-PHB, § 902.

¹⁷⁹⁸ C-PHB, §§ 1015-1019.

¹⁷⁹⁹ C-PHB, § 1020.

¹⁸⁰⁰ C-PHB, § 1021.

¹⁸⁰¹ C-PHB, §§ 1023-1025.

Sr. No.	Description	Amount Charged (in USD)
1.	Fees and expenses of the Tribunal Expenses of the Tribunal Secretary	1,253,392.50
2.	ICC administrative costs	56,607.50
3.	Contribution towards MCLF	145,355.00
4.	Total Legal Fees	9,739,332.61
5.	Fees charged by experts ¹⁸⁰³	3,357,338.28
6.	Travel and other expenses	901,542.90
	TOTAL COSTS CLAIMED	15,453,568.79

1135. In contrast, the Respondents argue that:

Given (i) the extraordinary delay of Claimants in bringing these claims after never mentioning them for a decade; (ii) the claims' total lack of merit, including the fact that Claimants themselves, despite all their bluster about royalty and tax measures, assert no [Willfull Breach Claims] for those measures, and, with respect to the [DA Claims], actually concede that the first two measures do not constitute "Discriminatory Actions"; and (iii) Claimants' strategy of grossly exaggerating virtually all elements of quantum while at the same time pretending to be "conservative", all costs of this Arbitration should be assessed against Claimants.¹⁸⁰⁴

1136. As to the Claimants' arguments regarding the Respondents' alleged strategy of obscuring the issues in the arbitration, the Respondents had observed in turn that the Claimants withheld documents in their possession. Such documents would have supported their interpretation of the compensation structure of the Projects, i.e., that the DA provisions capped the overall compensation that could be recovered by the Claimants for any breach of the AAs. Accordingly, the Respondents requested the Tribunal to draw an adverse inference against the Claimants in that regard.

1137. Furthermore, in response to the Claimants' argument that the Respondents failed to produce Mr. Ramírez as a witness or "internal PDVSA documents [...] relating to the 'conception and formulation' of the [E]xpropriation",¹⁸⁰⁵ the Respondents emphasized

¹⁸⁰² Fees and Expenses of Freshfields Bruckhaus Deringer US LLP of 17 April 2017; Fees and Expenses incurred by the Claimants of 17 April 2017 and 28 June 2017; Fees and Expenses of Three Crowns LLP of 17 April 2017; Three Crowns Costs Letter of 16 June 2017.

¹⁸⁰³ The Claimants have indicated that the fees charged by three of their expert witnesses, i.e. Prof. Brewer-Carías, Prof. Mata Borjas, and Prof. Mares form part of the expenses claimed by their counsel (see Fees and Expenses incurred by the Claimants of 28 June 2017, fn 1; Fees and Expenses of Three Crowns LLP of 17 April 2017, § 2). In order to reflect the Parties' break-up of costs in a similar manner, the Tribunal has reflected the fees charged by the experts separately and deducted the total amount charged by Prof. Brewer-Carías, Prof. Mata Borjas, and Prof. Mares from the expenses claimed by the Claimants' counsel.

¹⁸⁰⁴ R-PHB, § 902.

¹⁸⁰⁵ R-PHB, fn. 625.

that “there are no internal PDVSA documents or documents exchanged with the Government relating to the ‘conception and formulation’ of the expropriation, as PDVSA and the other Respondents played no role in that decision.”¹⁸⁰⁶ The Respondents thus resist the Claimants’ allegation that they have “obscured the issues in this arbitration” by not producing relevant documents in their possession.

1138. Accordingly, in their submissions,¹⁸⁰⁷ the Respondents claim the following costs:

Sr. No.	Description	Amount Charged (in USD)
1.	Fees and expenses of the Tribunal Expenses of the Tribunal Secretary ¹⁸⁰⁸	1,253,392.50
2.	ICC administrative fees	56,607.50
3.	Contribution towards MCLF	145,355.00
4.	Legal Fees	11,545,355.95
5.	Fees charged by experts	4,989,929.48
6.	Travel and other expenses	1,201,129.97
	TOTAL COSTS CLAIMED	19,191,768

1139. With due regard to the Parties’ submissions, the Tribunal will first set out the relevant legal provisions on costs under the AAs and the Guarantees, the ICC Rules, and the *lex arbitri*, and then proceed to assess the allocation of costs under these rules.

¹⁸⁰⁶ R-PHB, fn. 625; Reply, § 53; Tr. (Day 1), 140:14-141:23 (Respondents’ Opening Submissions), Mr. Kahale: “Finally, a word about documents. They keep saying that there must be a ton of documents internal to PdVSA or exchanged between PdVSA and the Government formulating the nationalization. I mean, that’s completely silly. My experience is a little bit different from Mr. Paulsson’s. In fact, many times, nationalizations don’t take ten years in the making. Many times they actually do happen relatively quickly. [...] Let’s take a look at how the nationalization—the first mention of nationalization came about here [...] it’s not Mr. Ramírez who is telling Mr. Chávez what to do, it’s the other way around [...] There are no documents internal to PdVSA formulating the nationalization. Right after that, he went to Congress, President Chávez did, asked for an Enabling Law, Congress gave him the Enabling Law, and Decree Law 5.200 was issued, and then PdVSA comes in to implement that Decree. There are no documents. There are no negative inferences to be made. PdVSA was not involved in formulating the nationalization. It was President Chávez who instructed the nationalization. And, thereafter, there was implementation”.

¹⁸⁰⁷ Respondents’ Counsel’s Letters of 17 April 2017 and of 27 April 2017.

¹⁸⁰⁸ The Tribunal notes that at the time of making their Cost Submissions in April 2017, both Parties had claimed a sum of USD 1,030,000 towards the advance on costs paid to the ICC to cover the fees and expenses of the Arbitral Tribunal, the expenses of the Tribunal Secretary, and the ICC administrative fees. Following the Parties’ Cost Submissions, in May 2017, the ICC requested a further advance on costs of USD 280,000 from each of the Parties. In light of this request, and having paid an amount of USD 280,000 to the ICC in June 2017, the Claimants amended their costs submissions to include the aforesaid amount (See Three Crowns Costs Letter of 16 June 2017; Fees and Expenses incurred by the Claimants of 28 June 2017). Similarly, the Respondents paid the said advances of USD 280,000 on 13 September 2017 (See ICC Letter and Financial Table of 13 September 2017). However, the Respondents have not filed a similarly amended Costs Submission to reflect such payment. In the circumstances, and as this reflects the correct position on advances paid to the ICC, the Tribunal has included the USD 280,000 in the Respondents’ costs claim under the category “Fees and expenses of the Tribunal and the Tribunal Secretary”.

1. Relevant legal provisions on costs

a. *The AAs and the Guarantees*

1140. The AAs and Guarantees both contain provisions on the Tribunal's authority to award costs.

1141. As further discussed below, the arbitration clause in Section 13.16 of the Petrozuata AA is silent as to the allocation of costs. However, Section 13.06(a) of the Petrozuata AA provides that:

All costs, legal fees and other expenses incurred by each Party in connection with the preparation, execution, delivery, administration and enforcement of this Agreement or any Business Contract shall be for the account of, and paid by, such Party.¹⁸⁰⁹

1142. Further, the Petrozuata Guaranty stipulates that "PDVSA shall [...] indemnify Conoco against all reasonable expenses and attorneys' fees that may be incurred by Conoco in enforcing such obligations and liabilities of [Respondent PDVSA Petróleo] and in enforcing the covenants and agreements of PDVSA contained herein."¹⁸¹⁰

1143. The Hamaca AA contains similar provisions and provides in Article 17.6 as follows:

The costs of the arbitration proceedings (other than costs of arrangements for translations), including attorneys' fees and costs, shall be borne in the manner determined by the arbitral tribunal.¹⁸¹¹

1144. The Hamaca Guarantee further provides that "[t]he cost of the arbitration (other than costs related to translation arrangements), including attorneys' fees and costs, will be assumed in the manner specified by the arbitration court."¹⁸¹²

b. *The ICC Rules*

1145. Turning to the allocation of costs under the ICC Rules, the relevant provisions are set out in Article 37, which provides as follows:

- 1) The costs of the arbitration shall include the fees and expenses of the arbitrators and the ICC administrative expenses fixed by the Court, in accordance with the scale in force at the time of the commencement of the arbitration, as well as the fees and expenses of any experts appointed by the arbitral tribunal and the reasonable legal and other costs incurred by the parties for the arbitration.

¹⁸⁰⁹ Petrozuata AA, **C-1**, Section 13.06(a).

¹⁸¹⁰ Petrozuata Guaranty, **C-2**, Section 3.

¹⁸¹¹ Hamaca AA, **C-3**, Article 17.6.

¹⁸¹² Hamaca Guarantee, **C-4**, Clause 13.

- 2) The Court may fix the fees of the arbitrators at a figure higher or lower than that which would result from the application of the relevant scale should this be deemed necessary due to the exceptional circumstances of the case.
- 3) At any time during the arbitral proceedings, the arbitral tribunal may make decisions on costs, other than those to be fixed by the Court, and order payment.
- 4) The final award shall fix the costs of the arbitration and decide which of the parties shall bear them or in what proportion they shall be borne by the parties.
- 5) In making decisions as to costs, the arbitral tribunal may take into account such circumstances as it considers relevant, including the extent to which each party has conducted the arbitration in an expeditious and cost-effective manner.

1146. These provisions confirm the Tribunal's authority to (i) decide which of the parties shall bear the costs or in what proportion they shall be borne, and (ii) determine the criteria which the Tribunal may take into consideration when coming to such costs determination.

c. *Lex Arbitri*

1147. Lastly, under the *lex arbitri*, i.e. New York law, subject to the parties agreeing to the contrary, "the arbitrator's expenses and fees, together with other expenses, not including attorney's fees, incurred in the conduct of the arbitration, shall be paid as provided in the award."¹⁸¹³

2. Analysis

1148. The relevant legal provisions above accord to the Tribunal wide discretion in determining the allocation of costs of the arbitration, including legal fees and expenses. That said, such discretion should of course be exercised with care and with due regard to the relevant criteria.

1149. In this respect, both Parties agree that the key principle governing the allocation of costs in international commercial arbitration is that costs "follow the event i.e. for the costs to be borne by the unsuccessful party".¹⁸¹⁴ Thus, "[a] claimant that succeeds in its primary claim, which took up much of the time and effort of the arbitration, may be entitled to recover a substantial portion of its costs, even if it fails on a number of secondary or ancillary claims. Similarly, if a claimant succeeds with its major liability claim and is awarded a significant amount of damages sought under that claim, then it is reasonable to conclude that the claimant was in essence the successful party and

¹⁸¹³ N.Y. C.P.L.R., **CLA-117**, § 7531.

¹⁸¹⁴ C-PHB, § 1010, fn. 1832; R-PHB, § 902, fn. 1909; ICC Commission Report, *Decisions on Costs in International Arbitration*, ICC Dispute Resolution Bulletin, Issue 2 (2015), **CLA-116 (RLA-155)**, pp. 11, 13.

is entitled to be treated as such.”¹⁸¹⁵ Conversely, if the claimant is unsuccessful in its primary and major liability claim, it is not entitled to recover a significant portion and/or its entire claim for costs.

1150. Thus, in a nutshell, both Parties agree¹⁸¹⁶ that in determining the allocation of costs, the Tribunal may take into consideration “the relative success or failure of the parties [...] by: (i) assuming that if a claimant or respondent succeeded in its core or primary claim or outcome, then it is entitled to all of its reasonable costs; (ii) apportioning costs on a claim-by-claim or issue-by-issue basis according to relative success and failure; or (iii) apportioning success against the amount of damages originally claimed or the value of the property in dispute.”¹⁸¹⁷

1151. In addition to the above, another factor that the Tribunal may take into consideration is the manner in which the Parties have conducted the case, keeping in mind the complexity of the case that a party has prosecuted/defended.

1152. With these considerations in mind, the Tribunal notes that the Claimants have not prevailed on their primary claim, namely the Willful Breach Claims, quantified at USD 17.89 billion. Nor have the Claimants succeeded in establishing the entirety of their DA Claims as a consequence of (i) the Royalty Measure and the Extraction Tax not constituting DAs and thus not contributing to the Claimants’ losses; and (ii) the lack of proper notice of the DAs by the Claimants under the Petrozuata AA. At the same time, the Claimants legitimately and by no means in bad faith initiated arbitration proceedings, successfully established that the Income Tax Increase and the Expropriation itself constituted DAs under the AAs, entitling them to compensation. Moreover, the Claimants demonstrated that the Respondents did not perform the AAs as of the date of the Expropriation, even if that claim was ultimately unsuccessful due to lack of causality.

1153. On the other hand, the Respondents admitted that the Expropriation constituted a DA under the AAs. They were also found liable to compensate the Claimants for the Income Tax Increase (although for a reduced amount than what was claimed). In addition, the Respondents did not prevail on their counterclaim under the Hamaca AA for the buy-out of the Claimants’ Project interest.

¹⁸¹⁵ Michael W. Bühler, *Costs of Arbitration: Some Further Considerations*, in LIBER AMICORUM IN HONOUR OF ROBERT BRINER (2005), **CLA-112**, p. 189.

¹⁸¹⁶ C-PHB, § 1010, fn. 1832; R-PHB, § 902, fn. 1909.

¹⁸¹⁷ ICC Commission Report, *Decisions on Costs in International Arbitration*, ICC Dispute Resolution Bulletin, Issue 2 (2015), **CLA-116 (RLA-155)**, pp. 11.

1154. On the other hand, the Respondents successfully defended the Willful Breach Claims, which have been dismissed in their entirety.
1155. The Tribunal also observes that, as evidenced by the preceding sections of this Award, this case has raised several complex legal and factual questions, the determination of which has not been a straightforward exercise. In that regard, the Tribunal would like to acknowledge the well-reasoned and detailed pleadings of both Parties, as well as the skilled presentation of the Parties' cases by their respective Counsel during the Hearing. These have greatly aided the Tribunal in its task of determining the final outcome of this case. In general, the Tribunal considers that both sides conducted this arbitration fairly and professionally, and avoided conduct (such as acting in bad faith or raising irrelevant or spurious arguments) that would justify an allocation of costs in favor of one Party.¹⁸¹⁸ Similarly, both Parties conducted the arbitration with the same professional ethics and dedication, as also reflected by the similarity of costs claimed by each Party.
1156. Having regard to these circumstances, the Tribunal is of the view that the relative success and failure of the Parties on the various claims and issues raised in this arbitration is very evenly balanced. As such, the Tribunal is of the view that it would be appropriate, just and fair for each Party to bear its own legal fees, costs and expenses, including the expenses related to its expert and fact witnesses. As a result, the question of any interest on the Parties' legal fees and other costs does not arise.
1157. Furthermore, the Tribunal is of the view that the costs of the Arbitration, including the fees and expenses of the Tribunal and the expenses of the Tribunal's Secretary as well as the ICC administrative expenses, have to be evenly divided between the Parties. In that regard, the Tribunal notes that up to a certain stage both Parties had paid an equal sum of USD 1,310,000.00 towards advance on costs to the ICC.¹⁸¹⁹ However, following (i) the ICC's further increase of advance on costs and (ii) the Respondents' non-payment of their share, the entire amount was paid by the Claimants. Thus, as determined in the ICC's letters of 27 and 30 March 2018, the

¹⁸¹⁸ The Tribunal acknowledges that the Claimants' case on the Willful Breach Claims underwent an evolution throughout this arbitration. In fact, it acquired its final form – namely the First Willful Breach Claim regarding breach of the “reasonable commercial efforts” obligation and the Second Willful Breach Claim regarding the non-performance of the AAs – only in the Claimants' post-hearing submissions as a result of a new line of argument that developed at the Hearing. Be that as it may, taking into account the Parties' pleadings and arguments at the Hearing, the Tribunal considers that the Claimants' changing position did not detract from the overall efficient and fair conduct of this case so as to warrant the allocation of costs in favour of the Respondents.

¹⁸¹⁹ *Supra*, §§ 1134, 1138 with accompanying footnotes.

final amount of advance of costs paid by the Claimants amounts to USD 1,840,000, while the final amount paid by the Respondents amounts to USD 1,310,000.

1158. The ICC Secretariat holds a balance of USD 100,000, which it shall reimburse to the Claimants. The Tribunal furthermore determines that, in order for the Claimants to recover the amount paid above their share of the costs of the arbitration (i.e., USD 315,000), the Respondents shall reimburse the Claimants USD 215,000 that the Claimants have paid on their behalf. The Tribunal also determines that to this sum simple interest will accrue at 12-month Libor starting from the date of the Award.
1159. Similarly, considering that the 4% of the Italian MCLF applied to the fees of co-arbitrator Prof. Avv. Giardina corresponds to USD 32,400.00, and that such sum is to be paid from the amount deposited solely by the Claimants in the Special Account created and administrated for this purpose with the ICC, the Respondents are requested to reimburse half of the amount in question (i.e. USD 16,200.00) to the Claimants. The Tribunal also determines that to this sum simple interest will accrue at 12-month Libor starting from the date of the Award. The ICC will return to the Claimants the sum remaining in the Special Account.
1160. For the sake of completeness, the Tribunal notes that it has paid due regard to the fact that the Petrozuata AA and the Petrozuata Guaranty contained some provisions regarding the Parties' obligation to pay the costs, legal fees and expenses in connection with, *inter alia*, "the preparation, execution, delivery, administration and enforcement" of the obligations under the Petrozuata AA. In that respect, the Petrozuata AA stipulates that each party shall bear its own costs, legal fees and expenses.¹⁸²⁰ On the other hand, the Petrozuata Guaranty stipulates that the costs, legal fees and expenses incurred by the Claimants towards the enforcement of the AA shall be indemnified/guaranteed by the Respondents.¹⁸²¹
1161. However, as the Claimants have rightly observed, these provisions do not form part of the respective arbitration clauses in the Petrozuata AA and the Petrozuata Guaranty.¹⁸²² Indeed, they appear to deal with costs more generally, as can be ascertained from the fact that they also concern costs, legal fees and expenses incurred in connection with the "preperation, execution, delivery, [and]

¹⁸²⁰ Petrozuata AA, **C-1**, Section 13.06(a).

¹⁸²¹ Petrozuata Guaranty, **C-2**, Section 3.

¹⁸²² C-PHB, fn. 1824.

administration”¹⁸²³ of the Petrozuata AA. Accordingly, in the Tribunal’s view the reference to costs incurred towards “enforcement” of the Petrozuata AA does not pertain to cost assessment in arbitration which falls within the domain of the Tribunal’s authority. The Tribunal thus finds that such a general provision on costs does not curtail its authority and discretion to allocate costs as a result of these arbitration proceedings.

1162. The Tribunal’s above conclusion regarding the language and purpose of these provisions is buttressed by the contrasting language of the costs provisions in the Hamaca AA and the Hamaca Guarantee, both of which specifically refer to the “costs of the arbitration”.¹⁸²⁴ Thus, despite the contractual silence on this question under the Petrozuata AA, it seems logical to conclude that if the Parties had intended for the respective clauses in the Petrozuata AA and Guaranty to extend to arbitration costs, they would have used appropriate language to this effect. In the circumstances, the costs provisions in the Petrozuata AA and Guaranty do not impact or alter the Tribunal’s decision to split the costs evenly, because the Claimants have been partially unsuccessful in “enforcing the AAs”, which in turn has resulted in costs being incurred by the Respondents in defending against these claims.

¹⁸²³ Petrozuata AA, **C-1**, Section 13.06(a).

¹⁸²⁴ Hamaca AA, **C-3**, Article 17.6; Hamaca Guarantee, **C-4**, Article 13.

VI. DECISION


1163. In light of all the foregoing considerations and determinations on both liability and quantum, the Tribunal:

- i. **DISMISSES** the entirety of the Claimants' claims regarding the alleged willful breaches by PDVSA Petróleo, Corpoguanipa, and/or PDVSA of their contractual obligations and duty of good faith with respect to the Association Agreements and/or the Petrozuata Guaranty or the Hamaca Guarantee;
- ii. **DECLARES** that the Respondents' actions do not constitute an *hecho ilícito* under Venezuelan law and dismisses the Claimants' claim in this regard;
- iii. **DECLARES** that the Income Tax Increase and the Expropriation constitute Discriminatory Actions under the Association Agreements, whereas the Royalty Measure and the Extraction Tax do not constitute Discriminatory Actions;
- iv. **DECLARES** that PDVSA Petróleo is liable to compensate CPZ for the Discriminatory Actions under the terms of the Petrozuata Association Agreement, in an amount quantified at USD 489,334,468.87, including interest (as of 27 May 2016);
- v. **DECLARES** that PDVSA is liable to compensate CPZ for the Discriminatory Actions under the terms of the Petrozuata Guaranty, in an amount quantified at USD 489,334,468.87, including interest (as of 27 May 2016);
- vi. **DECLARES** that Corpoguanipa is liable to compensate CPH for the Discriminatory Actions under the terms of the Hamaca Association Agreement, in an amount quantified at USD 1,496,712,745.85, including interest (as of 27 May 2016);
- vii. **DECLARES** that PDVSA is liable to compensate CPH for the Discriminatory Actions under the terms of the Hamaca Guarantee, in an amount quantified at USD 1,496,712,745.85, including interest (as of 27 May 2016);
- viii. **AWARDS** the Claimants compensation for the Discriminatory Actions, in an amount quantified at USD 1,986,047,214.72, already including pre-award interest (as of 27 May 2016) (i.e. the sum of the amounts identified in paragraphs 1163.iv and 1163.vi above);

- ix. **AWARDS** the Claimants post-award interest, on a simple interest basis, to run from 27 May 2016 until the date of full and final payment of the amounts indicated in paragraphs 1163.iv and 1163.vi above, at: (i) 12-month LIBOR in relation to the sum indicated in paragraph 1163.iv above; and (ii) 3-month LIBOR in relation to the sum indicated in paragraph and 1163.vi above;
- x. **DISMISSES** the counterclaim of Respondent 2 in its entirety;
- xi. **DECLARES** that each Party is to bear its own legal fees, costs and expenses;
- xii. **DECLARES** that the fees and expenses of the Tribunal and the expenses of the Tribunal's Secretary as well as the ICC administrative expenses are to be evenly divided between the Parties. The Respondents shall reimburse to the Claimants the payments of the advance on costs in the amount of USD 215,000 and the payment of the Italian MCLF in the amount of USD 16,200 which were made by the Claimants on behalf of the Respondents, with simple interest to accrue on these amounts at 12-month LIBOR starting from the date of the Award;
- xiii. **DECLARES** that this Award is net of all applicable Venezuelan taxes and that any taxes under Venezuelan law with respect to the payment of the net amounts awarded herein shall be born jointly and severally by the Respondents, so that the amount effectively received by the Claimants after deduction of all applicable taxes corresponds to the full amount granted by the Tribunal;
- xiv. **DISMISSES** any and all other claims.

Place of the arbitration: New York City, New York (U.S.A.)

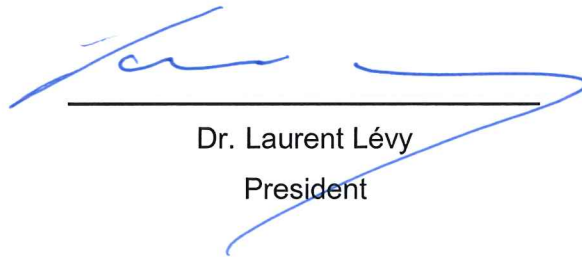
Date: April 24, 2018



Prof. Laurent Aynès
Co-arbitrator



Prof. Andrea Giardina
Co-arbitrator



Dr. Laurent Lévy
President