

International Centre for Settlement of Investment Disputes

Burlington Resources Inc.

Claimant

v.

Republic of Ecuador

Respondent

ICSID Case No. ARB/08/5

DECISION ON RECONSIDERATION AND AWARD

Arbitral Tribunal

Prof. Gabrielle Kaufmann-Kohler, President

Prof. Brigitte Stern, Arbitrator

Mr. Stephen Drymer, Arbitrator

Secretary of the Tribunal

Mr. Marco Tulio Montañés-Rumayor

Assistant to the Tribunal

Dr. Magnus Jesko Langer

Date: 7 February 2017

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TABLE OF ABBREVIATIONS AND DEFINITIONS

Aguilar ER2	Second Expert Report of Dr. Juan Pablo Aguilar Andrade of 7 January 2011
Aguilar ER3	Third Expert Report of Dr. Juan Pablo Aguilar Andrade of 23 May 2014
Aguilar ER4	Fourth Report of Dr. Juan Pablo Aguilar Andrade of 12 January 2015
Arbitration Rules	ICSID Rules of Procedure for Arbitration Proceedings
BIT	Bilateral Investment Treaty; specifically “Treaty between the United States and Ecuador concerning the Encouragement and Reciprocal Protection of Investments” of 11 May 1997
Brent	North Sea Brent crude
Burlington	Burlington Resources Inc.
CAPEX	Capital Expenditures
CM	Ecuador’s Motion for Reconsideration and Counter-Memorial on Quantum of 23 May 2014
Compass Lexecon ER1	Expert Report on Damages of Compass Lexecon of 24 June 2013
Compass Lexecon ER2	Supplemental Expert Report on Damages of Compass Lexecon of 2 October 2014
Consortium	Consortium formed by Perenco Ecuador Limited and Burlington Resources Oriente Limited
C-PHB	Claimants’ Post-Hearing Brief on Quantum and Reconsideration of 29 May 2015
Crick WS1	First Witness Statement of Mr. John Crick of 24 June 2013
Crick WS2	Second Witness Statement of Mr. John Crick of 3 October 2014
Crick WS3	Supplemental Witness Statement of Mr. John Crick of 16 February 2015
DCF	Discounted Cash Flow
DoJ	Decision on Jurisdiction of 2 June 2010
DoL	Decision on Liability of 14 December 2012
ER	Expert Report
EUR	Estimated Ultimate Recovery
Exh.	Exhibit
Exh. C-	Claimant [Burlington]’s Exhibits
Exh. CL-	Claimant [Burlington]’s Legal Exhibits
Exh. E-	Respondent [Ecuador]’s Exhibits

Exh. EL-	Respondent [Ecuador]'s Legal Exhibits
Fair Links ER2	Expert Report on Damages of Fair Links of 23 May 2014
Fair Links ER3	Second Expert Report on Damages of Fair Links of 12 January 2015
FMV	Fair Market Value
Hearing	Hearing on quantum and motion for reconsideration of 2-6 March 2015, unless otherwise noted
HL	Hydrocarbons Law (<i>Ley de Hidrocarburos</i>)
ICSID	International Centre for Settlement of Investment Disputes
ICSID Convention	Convention on the Settlement of Investment Disputes between States and Nationals of other States
IRR	Internal Rate of Return
Johnson WS	Witness Statement of Mr. James P. Johnson of 3 October 2014
Martinez WS1 Supp.	First Supplemental Witness Statement of Mr. Alex Martinez of 17 April 2009
Martinez WS4 Supp.	Fourth Supplemental Witness Statement of Mr. Alex Martinez of 20 June 2013
Martinez WS5 Supp.	Fifth Supplemental Witness Statement of Mr. Alex Martinez of 26 September 2014
Mem.	Burlington's Memorial on Quantum of 24 June 2013
Model	Joint Valuation Model of 24 April 2015 prepared by Compass Lexecon and Fair Links
Motion	Ecuador's Motion for Reconsideration of the Decision on Liability
Moyes ER1	First Expert Report of Dr. Christopher P. Moyes of 21 June 2013
Moyes ER2	Second Expert Report of Dr. Christopher P. Moyes of 3 October 2014
OPEX	Operating Expenditures
PCIJ	Permanent Court of International Justice
Perenco	Perenco Ecuador Limited
Pérez Loose ER	Expert Report of Dr. Hernán Pérez Loose of 3 October 2014
PHB	Post-Hearing Brief
PSC	Production Sharing Contract
PO [No.]	Procedural Order [number]
RAF	Reserves Adjustment Factor
Rejoinder	Ecuador's Motion for Reconsideration and Rejoinder on Quantum of 12 January 2015
Reply	Burlington's Reply on Quantum and Counter-Memorial on Reconsideration

	of 3 October 2014
R-PHB	Respondent's Post-Hearing Brief on Reconsideration and Quantum of 29 May 2015
RPS ER3	Expert Report of RPS of 23 May 2014
RPS ER4	Expert Report of RPS of 9 January 2015
Strickland ER	Expert Report of Dr. Richard F. Strickland of 3 October 2014
Tr. Liability [(Day)] [(language)], [page:line]	Transcript of the hearing on liability of 8-11 March 2011, English or Spanish version, as indicated
Tr. Provisional Measures [(Day)] [(language)], [page:line]	Transcript of the hearing on provisional measures of 17 April 2009, English or Spanish version, as indicated
Tr. Quantum [(Day)] [(language)], [page:line]	Transcript of the hearing on quantum and motion for reconsideration of 2-6 March 2015, English or Spanish version, as indicated
Updated Model	Updated Joint Valuation Model of 20 September 2016 prepared by Compass Lexecon and Fair Links
USD	United States Dollar
WS	Witness Statement

I. THE PARTIES

A. THE CLAIMANT

1. The Claimant is Burlington Resources Inc. (“Burlington” or the “Claimant”), a corporation created under the laws of the State of Delaware, United States of America, in 1988 and active in the exploitation of natural resources. On 31 March 2006, Burlington was acquired by ConocoPhillips, a multinational energy company with headquarters in the State of Texas, United States of America.
2. The Claimant is represented in this phase of the proceedings by Mr. Nigel Blackaby, Mr. Elliot Friedman, Mr. Carlos Ramos-Mrosovsky, Mr. Leon Skornicki, and Ms. Bonnie Doyle of the law firm FRESHFIELDS BRUCKHAUS DERINGER US LLP; by Mr. Craig Miles, Mr. Wade Coriell, Ms. Elizabeth M. Silbert, Ms. Jamie Miller, and Ms. Kate E. Hill of the law firm KING & SPALDING LLP; by Mr. Jan Paulsson of the law firm THREE CROWNS LLP; and by Mr. Javier Robalino of the law firm FERRERE (ECUADOR).

B. THE RESPONDENT

3. The Respondent is the Republic of Ecuador (“Ecuador” or “Respondent”).
4. The Respondent is represented in this arbitration by Dr. Diego García Carrión, Procurador General del Estado, Dra. Blanca Gómez de la Torre, Directora de Asuntos Internacionales y Arbitraje, Dr. Christel Gaibor and Dr. Diana Moya from the PROCURADURÍA GENERAL DEL ESTADO, REPÚBLICA DEL ECUADOR; by Prof. Eduardo Silva Romero, Mr. Philip Dunham, Mr. José Manuel García Represa, Mr. Alvaro Galindo, Ms. Erica Stein, Ms. Maria Claudia Procopiak, and Ms. Audrey Caminades of the law firm DECHERT (Paris) LLP; and by Professor Pierre Mayer who left DECHERT (Paris) LLP on 1 June 2015.

II. PROCEDURAL HISTORY

A. DECISIONS ON JURISDICTION AND LIABILITY

5. On 2 June 2010, the Tribunal issued its Decision on Jurisdiction, informing the Parties that it would take the necessary steps for the continuation of the proceedings towards the merits phase.

6. On 14 December 2012, the Tribunal rendered its Decision on Liability and informed the Parties that it would take the necessary steps for the continuation of the proceedings towards the quantum phase.
7. The Decisions on Jurisdiction and Liability are made an integral part of this Award.

B. DECISION ON COUNTERCLAIMS

8. In the course of this arbitration, on 17 January 2011, Ecuador raised counterclaims seeking compensation for damage to the environment and to the infrastructure of the oilfields allegedly caused by the Consortium. The Parties later entered into an agreement conferring jurisdiction over the counterclaims to this Tribunal, as recounted in Procedural Order No. 8 dated 21 July 2011 (Procedural Orders are referred to herein as “PO” followed by their respective numbers).¹
9. The proceedings on the counterclaims gave rise to a Decision on Counterclaims issued shortly before this Award. The Decision on Counterclaims is made an integral part of this Award.

C. WRITTEN PHASE ON QUANTUM

10. On 28 January 2013, Ecuador sought leave to submit (i) additional document requests and (ii) a motion for reconsideration of the Decision on Liability. Ecuador further requested the Tribunal to suspend the quantum proceedings or, in the alternative, organize parallel proceedings, set out a briefing schedule and reserve a 2-3 day hearing on the motion for reconsideration. In its letters of 1 and 5 February 2013, Burlington responded that it did not object to additional document production requests, nor did it contest the right of either Party to request reconsideration or clarification, but it did object to the suspension of the quantum proceedings requested by Respondent.
11. On 22 March 2013, the Tribunal set a document production schedule allowing the Parties to make requests before the first round of quantum briefs. In PO11, the Tribunal authorized Ecuador to file a motion for reconsideration, but denied the suspension of the quantum proceedings or the holding of parallel proceedings.
12. On 30 April 2013, the Tribunal issued PO12 addressing Burlington’s quantum-related document requests.

¹ The POs not referred to here, for instance, POs No. 9, 10, 13, 14, 16, 17, 19, 20, 21, 24, 30, 31, dealt with another aspect of these proceedings, for instance with the counterclaims.

13. On 24 June 2013, Burlington filed its Memorial on Quantum.
14. On 24 July 2013, Ecuador proposed the disqualification of Professor Orrego Vicuña, following which the Centre informed the Parties on 25 July 2013 that the proceedings were suspended pursuant to Rule 9(6) of the ICSID Rules of Procedure for Arbitration Proceedings ("Arbitration Rules"). On 13 December 2013, the Centre issued its decision disqualifying Professor Orrego Vicuña. On 11 January 2014, the Centre informed the Parties that the proceedings resumed upon Mr. Stephen Drymer's acceptance of his appointment as arbitrator in replacement of Professor Orrego Vicuña.
15. On 31 January 2014, the Parties agreed to a revised calendar setting out the procedural steps for the counterclaims as well as the quantum proceedings. On 10 February 2014, the Tribunal issued PO15 addressing Ecuador's quantum-related document requests.
16. In PO18, issued on 22 April 2014, the Tribunal addressed Ecuador's renewed request seeking a decision from the Tribunal ordering Burlington to comply with PO15.
17. On 23 May 2014, Ecuador filed its Counter-Memorial on Quantum together with a Motion for Reconsideration. In addition, Ecuador made a renewed attempt to bifurcate its motion for reconsideration, to suspend the quantum proceedings, or alternatively, to organize parallel proceedings allowing the Tribunal to rule on the motion for reconsideration as a matter of urgency. On 7 July 2014, the Tribunal issued PO22 denying Ecuador's request to bifurcate the motion for reconsideration from the proceedings on quantum.
18. On 9 August 2014, the Tribunal issued PO23, addressing Burlington's request for updated documents.
19. On 3 October 2014, Burlington filed its Reply on Quantum and Counter-Memorial on Reconsideration.
20. In PO24 issued on 22 December 2014 the Tribunal ruled on Burlington's request for quantum-related documents and in PO25 issued on 23 December 2014, the Tribunal resolved Ecuador's quantum-related document requests.
21. Thereafter, Ecuador filed its Rejoinder on Quantum and Motion for Reconsideration on 12 January 2015.

22. On 20 January 2015, the Tribunal and the Parties held a telephone conference to discuss procedural aspects relating to the organization of the hearing on quantum and Ecuador's motion for reconsideration.
23. On 29 January 2015, the Tribunal issued PO26 setting out the organizational aspects of the upcoming hearing.
24. On 11 February 2015, the Tribunal issued PO27 deciding Burlington's request to introduce new evidence into the record, and on 18 February 2015, in PO28, the Tribunal resolved Ecuador's request to introduce additional evidence.
25. On the same day, 18 February 2015, Burlington filed a supplemental witness statement of Mr. Crick.

D. HEARING ON QUANTUM

26. The hearing on quantum and on Ecuador's motion for reconsideration took place from 2 to 6 March 2015 in Paris (the "Hearing"). The following persons attended the Hearing:

The Tribunal

Members of the Tribunal

Professor Gabrielle Kaufmann-Kohler, *President*

Professor Brigitte Stern, *Arbitrator*

Mr. Stephen L. Drymer, *Arbitrator*

Secretary of the Tribunal

Mr. Marco Tulio Montañés-Rumayor

Assistant to the Tribunal

Mr. Magnus Jesko Langer

For the Claimant

For Burlington

Mr. Kerr Johnson

Ms. Janet Kelly

Ms. Laura Robertson

Mrs. Suzana Blades

Mr. Fernando Avila

ConocoPhillips, President, Other International

ConocoPhillips, SVP Legal, General Counsel & Corporate Secretary

ConocoPhillips, Deputy General Counsel Litigation & Arbitration

ConocoPhillips, Lead Counsel Arbitrations

ConocoPhillips, Senior Counsel E&P Americas

Counsel

Mr. Nigel Blackaby	Freshfields Bruckhaus Deringer US LLP
Mr. Elliot Friedman	Freshfields Bruckhaus Deringer US LLP
Mr. Carlos Ramos-Mrosovsky	Freshfields Bruckhaus Deringer US LLP
Mr. Leon Skornicki	Freshfields Bruckhaus Deringer US LLP
Ms. Lauren Friedman	Freshfields Bruckhaus Deringer US LLP
Ms. Bonnie Doyle	Freshfields Bruckhaus Deringer US LLP
Ms. Janet Tasigianis	Freshfields Bruckhaus Deringer US LLP
Ms. Cassia Cheung	Freshfields Bruckhaus Deringer US LLP
Mr. Alkesh Mcween	Freshfields Bruckhaus Deringer US LLP
Ms. Mandeep Dhaliwal	Freshfields Bruckhaus Deringer US LLP
Mr. Craig S. Miles	King & Spalding
Mr. Wade M. Coriell	King & Spalding
Ms. Elizabeth Silbert	King & Spalding
Ms. Jamie M. Miller	King & Spalding
Ms. Kate E. Hill	King & Spalding
Ms. Lisa Wong	King & Spalding
Mr. Jan Paulsson	Three Crowns LLP
Mr. Constantine Partasides	Three Crowns LLP
Mr. Javier Robalino Orellana	Paz Horowitz Robalino Garcés

Counsel for Perenco

Ms. Terra L. Gearhart-Serna	Debevoise & Plimpton LLP
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For the Respondent

For Ecuador

Dr. Diego García Carrión	Procuraduría General de la República del Ecuador
Dra. Blanca Gómez de la Torre	Procuraduría General de la República del Ecuador
Dra. Diana Moya	Procuraduría General de la República del Ecuador

Counsel

Prof. Pierre Mayer	Dechert (Paris) LLP
Mr. Eduardo Silva Romero	Dechert (Paris) LLP
Mr. Philip Dunham	Dechert (Paris) LLP
Mr. José Manuel García Represa	Dechert (Paris) LLP
Mrs. Erica Stein	Dechert (Paris) LLP
Ms. Audrey Caminades	Dechert (Paris) LLP
Ms. Véronique Moutot	Dechert (Paris) LLP
Ms. Marie Bouchard	Dechert (Paris) LLP
Ms. Gabriela González Giráldez	Dechert (Paris) LLP

27. The following persons provided technical support to the Claimant during the Hearing: Mr. James Haase, Immersion Legal, and Mr. Matt Simmons, FTI Consultants.
28. The following law clerks from Dechert (Paris) LLP provided support during the Hearing: Mr. Hugo Garcia Larriva, Ms. Ruxandra Esanu, Mrs. Djamila Rabhi, and Ms. Katherine Marami. The following persons from Dechert (Paris) LLP provided technical support to the Respondent during the Hearing: Mr. Loic Cropage (IT), Mr. Sébastien Brondy (IT), Ms. Isabelle Riviere, Ms. Mariele Coulet Diaz, Ms. Jessica Mutton, and Ms. Raphaelle Legru.
29. Burlington presented the following witnesses: Mr. John Crick (Perenco), Mr. James Johnson (ConocoPhillips), Mr. Alex Martinez (ConocoPhillips), Mr. Eric d'Argentré (Perenco). Burlington further presented the following experts: Mr. Manuel Abdala (Compass Lexecon), Mr. Pablo Lopez Zadicoff (Compass Lexecon), Mr. Mark S. Sheiness (Compass Lexecon), Dr. Geoffrey Egan (Papanui Resources), Mr. Christopher P. Moyes (Moyes & Co.), Dr. Hernán Pérez Loose (Coronel y Pérez Abogados), and Dr. Richard Strickland (The Strickland Group).
30. Ecuador presented the following experts: Mr. Juan Pablo Aguilar (legal expert), Mr. René Daigre (RPS), Mr. Ivor Ellul (RPS), Mr. Anton Mélard de Feuarent (Fair Links), Mr. Benjamin Roux (Fair Links), Mr. Arthur Salaun (Fair Links), and Mr. Antoine Antoun (Fair Links).

E. POST HEARING PHASE

31. On 29 May 2015, the Parties simultaneously filed their Post-Hearing Briefs (“PHBs”).
32. The Parties simultaneously filed their cost submissions on 2 May 2016, and their reply submissions on 23 May 2016.
33. At the Tribunal’s request (as discussed and agreed with the Parties and their experts prior to the close of the Hearing), in accordance with PO29 dated 13 March 2015, on 24 April 2015 the Parties’ experts submitted a joint valuation model allowing for the calculation of potential damages according to the DCF methodology under different assumptions and scenarios (the “Model”). The Tribunal understands that, to the extent that each Party’s assumptions are applied as described in each expert’s individual report, the result of the joint model replaces the experts’ previous

damages figures. This is particularly relevant for valuations using the date of the award or valuations of interest, which vary with time.

34. On 27 July 2016, the Tribunal invited the experts to update the Model, providing additional assumptions and specifications (the “Updated Model”). The experts did so on 20 September 2016 and the Parties commented on the Updated Model on 4 October 2016.
35. On several occasions after the PHBs, specifically on 25 February 2016, 27 July 2016, and 29 November 2016, the Tribunal reported to the Parties on the progress of its deliberations.
36. On 25 January 2017, the Tribunal declared the proceeding closed.

III. REQUESTS FOR RELIEF

A. BURLINGTON’S REQUEST FOR RELIEF

37. Burlington submitted the following Request for Relief in its Memorial:²

“For the foregoing reasons, Burlington respectfully requests that the Tribunal:

- (a) ORDER Ecuador to pay damages to Burlington in the amount of US\$1,139.1 million;
- (b) ORDER Ecuador to pay compound interest on the sum awarded in (a), above, until the date of effective and complete payment, at a rate of 12.1 percent compounded annually, or at such a rate and for such a period of compounding as the Tribunal considers just and appropriate in the circumstances;
- (c) DECLARE that:
 - i. the Award is net of all applicable Ecuadorian taxes;
 - ii. Ecuador may not tax or attempt to tax the Award; and
 - iii. Burlington has no further taxation obligations to Ecuador;
- (d) ORDER Ecuador to pay all of the costs and expenses of this arbitration, including Burlington’s legal and expert fees, the fees and expenses of any experts appointed by the Tribunal, and ICSID’s other costs;
- (e) ORDER Ecuador to pay compound interest on the sum awarded in (d) above, until the date of effective and complete payment, at a rate of 4 percent compounded annually, or at such a rate and for such a period of compounding as the Tribunal considers just and appropriate in the circumstances; and

² Mem., ¶ 208.

- (f) AWARD such further and other relief as the Tribunal considers appropriate”.

38. It its Reply, Burlington submitted the following Request for Relief:³

“For the foregoing reasons, as well as those presented in the Memorial on Quantum, Burlington respectfully requests that the Tribunal:

- (a) DENY Ecuador’s motion for reconsideration;
- (b) ORDER Ecuador to pay damages to Burlington in the amount of \$1,350.3 million;
- (c) ORDER Ecuador to pay compound interest on the sum awarded in (b), above, until the date of effective and complete payment, at a rate of 12.5 percent compounded annually, or at such a rate and for such a period of compounding as the Tribunal considers just and appropriate in the circumstances;
- (d) DECLARE that:
 - i. the Award is net of all applicable Ecuadorian taxes;
 - ii. Ecuador may not tax or attempt to tax the Award; and
 - iii. Burlington has no further taxation obligations to Ecuador;
- (e) ORDER Ecuador to pay all of the costs and expenses of this arbitration, including Burlington’s legal and expert fees and expenses of any experts appointed by the Tribunal, and ICSID’s other costs;
- (f) ORDER Ecuador to pay compound interest on the sum awarded in (e), above, until the date of effective and complete payment, at such a rate and for such a period of compounding as the Tribunal considers just and appropriate in the circumstances; and
- (g) AWARD such further and other relief as the Tribunal considers appropriate”.

39. In its Post-Hearing Brief, Burlington requested the following relief:⁴

“For the foregoing reasons, as well as those presented in its prior pleadings, Burlington respectfully requests that the Tribunal:

- (a) DENY Ecuador’s motion for reconsideration;
- (b) ORDER Ecuador to pay damages to Burlington in the amount of US\$1,318,755,933;
- (c) ORDER Ecuador to pay compound interest on the sum awarded in (b), above, until the date of effective and complete payment, at a rate of 12.5 percent;
- (d) DECLARE that the Award is net of all applicable Ecuadorian taxes;
- (e) ORDER Ecuador to pay all of the costs and expenses of this arbitration, including Burlington’s legal and expert fees;

³ Reply, ¶ 364.

⁴ C-PHB, ¶ 249.

- (f) ORDER Ecuador to pay compound interest on the sum awarded in (e), above, until the date of effective and complete payment, at such a rate and for such a period of compounding as the Tribunal considers just and appropriate in the circumstances; and
- (g) AWARD such further and other relief as the Tribunal considers appropriate”.

B. ECUADOR’S REQUEST FOR RELIEF

40. Ecuador submitted the following Request for Relief in its Counter-Memorial:⁵

“603. For the foregoing reasons, Ecuador respectfully requests that the Arbitral Tribunal issue an award holding that Ecuador did not unlawfully expropriate Burlington’s investment in Blocks 7 and 21 under Article III of the Treaty:

604. Should the Arbitral Tribunal nonetheless be inclined to rule in favor of Burlington on its expropriation claim (contrary to the evidence presented by Ecuador that no breach of the Treaty occurred), Ecuador respectfully requests that no compensation be awarded to Burlington on account of its behavior leading to its loss.

605. Should the Arbitral Tribunal nonetheless be inclined to award compensation to Burlington, Ecuador respectfully requests that it be calculated in accordance with this submission and, in any event, that any such compensation be substantially reduced on account of Burlington’s behavior leading to its loss.

606. Finally, Ecuador respectfully requests that the Arbitral Tribunal:

- (a) Order Burlington to pay all the costs and expenses of this arbitration, including Ecuador’s legal and expert fees and ICSID’s other costs, with interest at an adequate commercial interest rate; and
- (b) Award such other relief as the Arbitral Tribunal considers appropriate”.

41. In its Rejoinder, Ecuador submitted the following Request for Relief:⁶

“964. For the foregoing reasons, Ecuador respectfully requests that the Tribunal issue an award holding that Ecuador did not unlawfully expropriate Burlington’s investment in Blocks 7 and 21 under Article III of the Treaty:

965. Should the Tribunal nonetheless be inclined to rule in favor of Burlington on its expropriation claim (contrary to the evidence presented by Ecuador that no breach of the Treaty occurred), Ecuador respectfully requests that the Tribunal:

- (c) Declare that Burlington’s claims relating to Law 42 and the alleged lost opportunity to negotiate an extension of the Block 7 Participation Contract are outside its jurisdiction;
- (d) Alternatively, declare that Burlington’s claims relating to Law 42 and the alleged lost opportunity to negotiate an extension of the Block 7 Participation Contract are inadmissible; and

⁵ CM, ¶¶ 603-606.

⁶ Rejoinder, ¶¶ 964-968.

- (e) Not entertain Burlington's renewed fair and equitable treatment, arbitrary impairment and full protection and security claims.

966. Should the Tribunal nonetheless be inclined to award compensation to Burlington, Ecuador respectfully requests that any compensation be calculated in accordance with this submission and, in any event, that any compensation be substantially reduced on account of Burlington's behavior leading to its loss.

967. Should the Tribunal decide to award interest on any compensation to Burlington, Ecuador respectfully requests that only simple interest be awarded, at the commercially reasonable interest rate of LIBOR + 2%, or alternatively at another commercially reasonable rate, from 30 August 2009 until payment.

968. Finally, Ecuador respectfully requests that the Tribunal:

- (a) Order Burlington to pay all the costs and expenses in this arbitration, including Ecuador's legal and expert fees and ICSID's other costs, with interest at the commercially reasonable interest rate of LIBOR + 2%, or alternatively at another commercially reasonable rate, from the date of this Award until payment; and
- (b) Award such other relief as the Tribunal considers appropriate".

42. In its Post-Hearing Brief, Ecuador requested the following relief:⁷

"372. For the foregoing reasons, Ecuador respectfully requests that the Tribunal issue an award holding that Ecuador did not unlawfully expropriate Burlington's investment in Blocks 7 and 21 under Article III of the Treaty.

373. Should the Tribunal nonetheless be inclined to rule in favor of Burlington on its expropriation claim (contrary to the evidence presented by Ecuador that no breach of the Treaty occurred), Ecuador respectfully requests that the Tribunal:

- a) declare that Burlington's claims relating to Law 42 and the alleged lost opportunity to negotiate an extension of the Block 7 Participation Contract fall outside its jurisdiction;
- b) alternatively, declare that Burlington's claims relating to Law 42 and the alleged lost opportunity to negotiate an extension of the Block 7 Participation Contract are inadmissible; and
- c) not entertain Burlington's renewed fair and equitable treatment, arbitrary impairment and full protection and security claims.

374. Should the Tribunal nonetheless be inclined to award compensation to Burlington, Ecuador respectfully requests that any compensation be calculated in accordance with Ecuador's submission and, in any event, that any compensation be substantially reduced on account of Burlington's own behaviour leading to its loss.

375. Should the Tribunal decide to award interest on any compensation to Burlington, Ecuador respectfully requests that only simple interest be awarded, at the commercially reasonable interest rate of LIBOR + 2%, or alternatively at another commercially reasonable rate, from 30 August 2009 until payment.

376. Finally, Ecuador respectfully requests that the Tribunal order Burlington to pay all the costs and expenses of this arbitration, including Ecuador's legal and

⁷ R-PHB, ¶¶ 372-376.

expert fees and ICSID's other costs, with interest at the commercially reasonable interest rate of LIBOR + 2%, or alternatively at another commercially reasonable rate, from the date of this Award until payment".

IV. SCOPE OF THIS AWARD

43. This Award deals with and resolves Ecuador's motion to reconsider the Decision on Liability, with the quantum of Burlington's claims further to the Decision on Liability, and with the costs of the entire arbitration, including the proceedings on Burlington's claims (jurisdiction, liability and quantum phases) and Ecuador's counterclaims. As stated above, the Decision on Jurisdiction, the Decision on Liability and the Decision on Counterclaims are also made integral parts of this Award.

V. PRELIMINARY MATTERS

A. LAW APPLICABLE TO THE MERITS

44. The Tribunal refers to paragraphs 177 to 179 of the Decision on Liability. There, the Tribunal reached the conclusion that it would apply (i) first and foremost the BIT and, if need be, (ii) Ecuadorian law and those rules of international law "as may be applicable". In this latter respect, the Tribunal further stated that it was of the view that the second sentence of Article 42(1) of the ICSID Convention does not allocate matters to either law. It is thus for the arbitrators to determine whether an issue is subject to national or international law, it being understood that a party may not rely on its internal law to avoid an obligation under international law.

B. UNDISPUTED MATTERS

45. When applying the law (whether national or international), be it in this Award or in earlier decisions, the Tribunal is of the view that it is not bound by the arguments and sources invoked by the Parties. The principle *iura novit curia* – or better in this instance, *iura novit arbiter* – allows the Tribunal to form its own opinion of the meaning of the law, provided that it does not rely on a legal theory that was not subject to debate or that the Parties could not anticipate or address.⁸

⁸ See, for instance: *Daimler Financial Services A.G. v. Argentine Republic*, ICSID Case No. ARB/05/1 ("*Daimler v. Argentina*"), Decision on Annulment of 7 January 2015, ¶ 295 ("[...] an arbitral tribunal is not limited to referring to: or relying upon only the authorities cited by the parties. It can, *sua sponte*, rely on other publicly available authorities, even if they have not been cited by the parties, provided that the issue has been raised before the tribunal and the parties were provided an opportunity to address it"). See also: *Fisheries Jurisdiction Case* (Federal Republic of Germany v. Iceland) ("*Fisheries Case*"), Merits, Judgment of 25 July

C. RELEVANCE OF DECISIONS OF OTHER INTERNATIONAL COURTS AND TRIBUNALS

46. As stated in the Decisions on Jurisdiction and Liability, the Tribunal considers that it is not bound by previous decisions of international tribunals.⁹ The majority considers, however, that, subject always to the specifics of a given treaty and to the circumstances of the actual case, it has a duty to adopt solutions established in a series of consistent similar cases, if such exist, absent compelling contrary grounds. Arbitrator Stern does not analyze the arbitrator's role in the same manner, as she considers it her duty to decide each case purely on its own merits as argued before her, independently of any apparent jurisprudential trend.

D. LANGUAGE OF DECISIONS AND AWARD

47. In accordance with Clause 7 of the Minutes of First Session, the Tribunal renders this Award, and has rendered its prior decisions, in both English and Spanish. This being so, it notes that English is the language in which this Award and the prior decisions were originally drafted. Hence, in the event of any discrepancy between the two versions, the English version must be deemed to reflect the meaning intended by the Tribunal, and such version shall thus prevail.

VI. ECUADOR'S MOTION FOR RECONSIDERATION

48. In its Motion for Reconsideration (the "Motion"), Ecuador requests that the Tribunal reconsider its Decision on Liability on the ground of two exceptional circumstances.

A. PARTIES' POSITIONS

1. Ecuador's position

49. Ecuador requests that the Decision on Liability be reconsidered because it is "fundamentally and fatally flawed" with respect to the question whether there was an

1974, ¶ 18 ("[i]t being the duty of the Court itself to ascertain and apply the relevant law in the given circumstances of the case, the burden of establishing or proving rules of international law cannot be imposed upon any of the Parties, for the law lies within the judicial knowledge of the Court"); *Albert Jan Oostergetel and Theodora Laurentius v. The Slovak Republic*, UNCITRAL Case ("Oostergetel v. Slovak Republic"), Award of 23 April 2012, ¶ 141; *Metal-Tech Ltd. v. Republic of Uzbekistan*, ICSID Case No. ARB/10/3 ("*Metal-Tech v. Uzbekistan*"), Award of 4 October 2013, ¶ 287; *Vestey Group Ltd. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/06/4 ("*Vestey v. Venezuela*"), Award of 15 April 2016, ¶ 118.

⁹ DoJ, ¶ 100; DoL, ¶ 187.

expropriation.¹⁰ Ecuador raises essentially two “exceptional circumstances”, which, it says, justify reconsideration “even though a finding for Ecuador on either count will suffice to reverse the unlawful expropriation holding”:¹¹

- (i) the Tribunal based its decision on expropriation on a legal argument over Article 74(4) of the Hydrocarbons Law (the “HL”) that neither Party had raised;¹² and/or
- (ii) the Tribunal reached its decision without the full knowledge of the significant, real and immediate risks created by the suspension, Burlington having withheld key evidence in this regard.¹³

50. According to Ecuador, the Decision on Liability is not an award, but a “decision preliminary to an award” which does not carry *res judicata* effects,¹⁴ as was recently confirmed by the tribunal in *Standard Chartered Bank (“SCB”) v. Tanesco*.¹⁵ It is therefore capable of reconsideration in the Tribunal’s discretion. Here, the Tribunal should exercise its discretion to reconsider as a result of the exceptional circumstances just referred to.¹⁶

51. Ecuador further argues that the Motion is admissible and that the Tribunal has the power to reconsider the Decision on Liability.¹⁷ In particular, it notes that Burlington expressly agreed that both Parties could seek reconsideration and thus cannot now object that the Motion is inadmissible.¹⁸ It further explains that “powers of reconsideration” exist in exceptional circumstances, such as those embodied in Articles 49(2), 51, 52 of the ICSID Convention, as well as ICSID Arbitration Rules 25

¹⁰ Letter of 28 January 2013 from Ecuador to the Tribunal, pp. 1-5; CM, ¶ 25; Rejoinder, ¶ 30; R-PHB, ¶ 13.

¹¹ Rejoinder, ¶ 30.

¹² *Id.*, ¶¶ 18-20.

¹³ Rejoinder, ¶¶ 21-25.

¹⁴ *Id.*, ¶ 46. See also: CM, ¶¶ 26-28.

¹⁵ *Standard Chartered Bank (Hong Kong) Limited v. Tanzania Electric Supply Company Limited (Tanesco)*, ICSID Case No. ARB/10/20 (“*SCB v. Tanesco*”), Award of 12 September 2016, ¶ 318; R-Comments on *SCB v. Tanesco*, pp. 2-3.

¹⁶ CM, ¶¶ 51-52.

¹⁷ Rejoinder, ¶¶ 41-42.

¹⁸ R-PHB, ¶¶ 14-15; R-Comments on *SCB v. Tanesco*, p. 1, referring to: Letter of 1 February 2013 from Burlington to the Tribunal (**Exh. E-569**); Letter of 5 February 2013 from Burlington to the Tribunal (**Exh. E-570**).

and 38(2).¹⁹ In any event, Ecuador submits that Article 44 of the ICSID Convention provides the Tribunal with the inherent power to reconsider prior decisions.

52. According to Ecuador, *SCB v. Tanesco* confirms that the Tribunal has the power to reopen and amend the Decision on Liability.²⁰ Ecuador admits that such power is limited to exceptional circumstances,²¹ but it argues that it is not constrained by the requirements of Article 51 or Article 52 applied by analogy or by any other provision of the ICSID Convention.²² If, *par impossible*, the Tribunal were to hold that the Decision on Liability is *res judicata*, it could still reconsider the decision, under the higher standard of Article 51.²³ In contrast to the *Perenco* tribunal, which merely examined whether any of the provisions invoked by Ecuador applied to the motion for reconsideration in that case, the Tribunal should focus on the existence of exceptional circumstances justifying reconsideration.²⁴ According to the Respondent, exceptional circumstances exist if “any of the grounds for reopening a Convention award or decision apply, or if it is otherwise in the interest of justice”.²⁵
53. Turning to the merits of the Motion, Ecuador asserts that its intervention in Blocks 7 and 21 did not constitute an unlawful expropriation.²⁶ For Ecuador, the conditions under which it could intervene in the Blocks were met and the significant risks of damage posed by the suspension justified its immediate intervention. Ecuador also stresses that the tribunal in *SCB v. Tanesco* reconsidered its prior decision in circumstances similar to the present ones.²⁷
54. First, Ecuador submits that the Tribunal should reconsider its decision on expropriation and hold that Ecuador was entitled to intervene in the Blocks “following the Consortium’s suspension”.²⁸ It essentially invokes five reasons in support of this

¹⁹ R-PHB, ¶ 26.

²⁰ R-Comments on *SCB v. Tanesco*, p. 2.

²¹ *Id.*, p. 3.

²² *Id.*, p. 4.

²³ *Ibid.*

²⁴ R-PHB, ¶ 24.

²⁵ *Id.*, ¶ 20.

²⁶ *Id.*, ¶ 38; R-Comments on *SCB v. Tanesco*, p. 3.

²⁷ R-Comments on *SCB v. Tanesco*, pp. 3-4.

²⁸ R-PHB, ¶ 40.

submission:²⁹ (i) the Tribunal, in breach of due process, reached its decision by engaging in an interpretation of Article 74 HL “that neither party had raised in these proceedings”;³⁰ (ii) Article 74(4) HL only relates to *caducidad*, not to suspension or intervention;³¹ (iii) Ecuador was entitled to intervene in the Blocks to ensure the continuity of hydrocarbon production as required under its Constitution, Ecuadorian law, and the PSCs;³² (iv) intervention is not a sanction, but a coercive measure aimed at protecting Ecuador’s strategic assets in a situation of urgency, and Ecuador had inherent powers to substitute itself to a private oilfield contractor in default;³³ and (v) provisions of Ecuadorian law provide for inherent powers of the State to fulfill its duty to minimize “all negative impact on the hydrocarbon production”.³⁴

55. In addition, Ecuador requests that the Tribunal reconsider its decision not to assess arguments based on the *exceptio non adimpleti contractus*. Instead, it should hold that the Consortium could not rely on that defense, since (i) Burlington admitted that “the only reason” why the Tribunal found just cause to suspend operations was that Ecuador had breached its contractual commitments, which is precisely an application of the *exceptio*;³⁵ (ii) the *exceptio* is inapplicable in the circumstances of the present case, as hydrocarbon operations are subject to the principle of continuity;³⁶ (iii) there are no Ecuadorian cases allowing a contractor to raise the *exceptio* against the State;³⁷ and (iv) Burlington should have sought the Tribunal’s authorization to suspend operations.³⁸
56. Second, Ecuador argues that the suspension of the oilfield operations created risks of damage so significant as to justify immediate intervention. According to Ecuador, the technical action plan of 3 June 2009 to suspend operations at Blocks 7 and 21

²⁹ *Id.*, ¶¶ 41-65. See also: Tr. Quantum (Day 5) (ENG), 1483:17-1488:8 (Closing, Mr. Silva Romero).

³⁰ CM, ¶ 57; Rejoinder, ¶ 126; R-PHB, ¶¶ 41-43.

³¹ R-PHB, ¶¶ 44-46.

³² *Id.*, ¶¶ 47-50.

³³ *Id.*, ¶¶ 51-53.

³⁴ *Id.*, ¶¶ 54-58.

³⁵ *Id.*, ¶ 60.

³⁶ *Id.*, ¶¶ 61-62.

³⁷ *Id.*, ¶ 63.

³⁸ Rejoinder, ¶ 180; R-PHB, ¶¶ 64-65. See also: Tr. Quantum (Day 5) (ENG), 1488:9-1489:8 (Closing, Silva Romero).

(in Ecuador’s abbreviation, the “Suspension Plan” or, in Burlington’s terminology, the “Draft Action Plan”) which Burlington disclosed belatedly and the Tribunal thus did not have knowledge of when making the Decision on Liability is “highly relevant evidence”.³⁹ It demonstrates the existence of significant risks of reservoir,⁴⁰ mechanical⁴¹ and environmental damage.⁴² It also shows that the Consortium was aware of these risks. The Decision on Liability was therefore premised on incomplete and misleading evidence.⁴³ Contrary to Burlington’s view, that document is not privileged since it addresses the technical risks of suspension.⁴⁴

57. In response to the Tribunal’s questions on the relevance of Article 51 of the ICSID Convention, Ecuador submits that the Suspension Plan constitutes a fact proving that the suspension entailed “serious risks” of which the Consortium was aware.⁴⁵ While Article 51 only applies to awards, the rule enshrined in that provision should apply to pre-award decisions as well. Accordingly, revision should be available when a fact is discovered which decisively affects a pre-award decision.⁴⁶ Ecuador also argues that, since Burlington produced the Suspension Plan belatedly, the time limits set forth in Article 51 do not apply.
58. In addition, so says the Respondent, the Suspension Plan proves that the Consortium imprudently planned to abandon the Blocks, as it failed to engage in an in-depth risk assessment.⁴⁷ In short, the Suspension Plan identified “real and significant risks” associated with the suspension, in particular reservoir, mechanical

³⁹ CM, ¶ 52.

⁴⁰ Rejoinder, ¶¶ 253-270.

⁴¹ *Id.*, ¶¶ 271-290.

⁴² *Id.*, ¶¶ 291-302.

⁴³ CM, Section 2.2.2.1, ¶¶ 94-123; R-Comments on *SCB v. Tanesco*, pp. 3-4.

⁴⁴ Rejoinder, ¶ 209, referring to: New York law as being the agreed applicable law to Burlington’s disclosure pursuant to PO5, ¶ 25. Further pointing to: *U.S. v. Walker*, 243 Fed. Appx. 621 (2nd Cir. 2007), 18 June 2007, p. (**Exh. EL-367**); *Upjohn Co. v. United States*, 449 U.S. 383, 395, 101 S. Ct. 677, 66 L. Ed. 2d 584 (1981) (**Exh. EL-368**). See also: Tr. Quantum (Day 1) (ENG), 217:5-219:17 (Opening, Dunham); Tr. Quantum (Day 5) (ENG), 1512:20-1514:5 (Closing, Stein); R-PHB, ¶ 95.

⁴⁵ R-PHB, ¶¶ 31, 96.

⁴⁶ *Id.*, ¶ 34.

⁴⁷ Tr. Quantum (Day 5) (ENG), 1515:5-1516:21 (Closing, Stein).

and environmental risks. These risks justified Ecuador's immediate intervention⁴⁸ to avoid significant damage and economic loss.⁴⁹

2. Burlington's position

59. Burlington argues that the Motion is inadmissible as a matter of law, as the ICSID system does not provide for such a review mechanism. In any event, Burlington alleges that the Draft Action Plan does not affect the Tribunal's finding of unlawful expropriation.
60. In the first place, Burlington submits that the ICSID Convention "firmly forecloses" interlocutory reconsiderations such as the one sought by Ecuador. The ICSID Convention provides that review can only occur after a final award and is "extremely circumscribed".⁵⁰ The Tribunal has no power to invent remedies not present in the ICSID framework.⁵¹ In addition, the Tribunal's implied or inherent powers are only "gap-filling powers"; they cannot operate in a manner "contrary to the positive architecture of the ICSID Convention and Rules".⁵² The kind of "open-ended reconsideration" requested by Ecuador would lead to "procedural paralysis", in particular in bifurcated or trifurcated cases.⁵³
61. More specifically, Burlington states that (i) the ICSID system allows no reconsideration of final decisions;⁵⁴ (ii) the Decision on Liability is final according to the principle of *res judicata*;⁵⁵ and (iii) the Tribunal has no inherent powers under Article 44 of the ICSID Convention or otherwise to entertain the Motion.⁵⁶ For Burlington, the Decision on Liability is not a draft. Even though it is not a final award, it is final as to liability "just as the Decision on Jurisdiction was to jurisdiction".⁵⁷ The finality and *res judicata* nature of pre-award decisions was confirmed in

48 R-PHB, ¶¶ 74-87.

49 Rejoinder, ¶ 302.

50 Tr. Quantum (Day 5) (ENG), 1429:15-18 (Closing, Blackaby).

51 Tr. Quantum (Day 5) (ENG), 1429:22-1430:1 (Closing, Blackaby).

52 Tr. Quantum (Day 5) (ENG), 1429:5-8 (Closing, Blackaby).

53 Tr. Quantum (Day 5) (ENG), 1429:10-14, 1433:6-1434:1 (Closing, Blackaby). See also: Burlington's Closing Statement, Slide 74.

54 Reply, ¶ 268.

55 Reply, ¶ 269; C-Comments on *SCB v. Tanesco*, p. 1.

56 Reply, ¶¶ 287-288.

57 C-PHB, ¶ 181.

ConocoPhillips v. Venezuela and *Perenco v. Ecuador*,⁵⁸ as well as in other cases.⁵⁹ In addition, Burlington highlights that Ecuador acknowledged the finality of pre-award decisions disposing of issues in this case when it objected to the purported reintroduction of claims that had been discarded at the jurisdictional stage.⁶⁰

62. For Burlington, *SCB v. Tanesco* cannot be understood as an “endorsement of free-for-all reconsideration”.⁶¹ That decision confirms that ICSID tribunals only assume a power to reconsider final decisions “in circumstances of the most extreme injustice”, such as perpetrating fraud upon the tribunal.⁶² Unlike the present dispute, so says Burlington, *SCB v. Tanesco* presented an “extreme set of facts”, where the tribunal was deliberately misled on a material fact, which required the tribunal to fashion a “correspondingly extreme – and unprecedented – remedy”.⁶³ In doing so, the tribunal stressed that the power to reconsider is not unlimited, since an unconstrained power would lead to considerable uncertainty. It therefore set an “extremely high threshold” for reconsideration, which is not met here.⁶⁴
63. In response to the Tribunal’s questions on the pertinence of Article 51 of the ICSID Convention, Burlington submits that (i) revision is not allowed if the relevant fact was known prior to the issuance of an award;⁶⁵ (ii) Ecuador has not alleged a fact that could support the application of Article 51 by analogy;⁶⁶ and (iii) Ecuador failed to

⁵⁸ C-PHB, ¶¶ 192-183, referring to: *ConocoPhillips Petrozuata et al. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/30 (“*ConocoPhillips v. Venezuela*”), Decision on Respondent’s Request for Reconsideration of 10 March 2014, ¶¶ 23-24 (**Exh. EL-237**); *Perenco Ecuador Limited v. Republic of Ecuador*, ICSID Case No. ARB/08/6 (“*Perenco v. Ecuador*”), Decision on Ecuador’s Reconsideration Motion of 10 April 2013, ¶ 42 (**Exh. EL-390**).

⁵⁹ Reply, ¶ 269, referring to: *Compañía de Aguas del Aconquija and Vivendi Universal S.A. v. Argentine Republic*, ICSID Case No. ARB/97/3 (Resubmitted Case) (“*Vivendi v. Argentina I*”), Decision on Jurisdiction of 14 November 2005, ¶¶ 71-78 (**Exh. CL-340**); *Electrabel S.A. v. Republic of Hungary*, ICSID Case No. ARB/07/19 (“*Electrabel v. Hungary*”), Decision on Jurisdiction, Applicable Law and Liability of 30 November 2012, ¶ 10.1 (**Exh. CL-349**); *Waste Management Inc. v. United Mexican States [II]*, ICSID Case No. ARB(AF)/00/3 (“*Waste Management v. Mexico II*”), Decision on Mexico’s Preliminary Objection concerning the Previous Proceedings of 26 June 2002, ¶ 45 (**Exh. EL-141**); *CMS Gas Transmission Company v. The Argentine Republic*, ICSID Case No. ARB/01/8 (“*CMS v. Argentina*”), Award of 12 May 2005, ¶ 126 (**Exh. CL-99**).

⁶⁰ C-PHB, ¶ 183.

⁶¹ C-Comments on *SCB v. Tanesco*, p. 2.

⁶² *Id.*, p. 1.

⁶³ *Id.*, p. 2.

⁶⁴ *Ibid.*

⁶⁵ C-PHB, ¶¶ 191-194.

⁶⁶ *Id.*, ¶¶ 195-199.

act timely as it was in possession of the Draft Action Plan for 135 days before it filed it.⁶⁷ While Ecuador now argues that that document is “decisive”, it “did not think so at the time”.⁶⁸ Regardless of Ecuador’s motives, Burlington insists that “if a party seeking to reopen a past decision was, or should have been aware before the decision was issued of the facts upon which reconsideration is sought, such a request must be denied”.⁶⁹

64. On the merits, Burlington is of the view that the Motion must fail both on the law and the facts. On the law, and more specifically as regards the complaint that the Tribunal’s interpretation of Article 74 HL breached due process, the Motion is a “direct appeal” of a legal determination, which is “categorically foreclosed” under the ICSID system.⁷⁰ As confirmed in *SCB v. Tanesco*, the power of reconsideration, if it exists, cannot encompass the situation where “an unsuccessful party simply wants to re-argue an issue”.⁷¹ In any event, the Tribunal’s decision was “entirely correct”, since (i) Ecuador’s conduct was “expressly *prohibited*” under Ecuadorian law and therefore breached the principle of legality;⁷² (ii) no inherent power otherwise authorized Ecuador to intervene in the Blocks;⁷³ and (iii) the Tribunal’s inquiry under Article 74 HL obviated the need to assess the applicability of the *exceptio non adimpleti contractus*.⁷⁴
65. On the facts, Burlington argues that the Draft Action Plan is irrelevant to the Decision on Liability.⁷⁵ On the one hand, the plan is privileged and protected by the work product doctrine.⁷⁶ It was thus properly withheld until Perenco produced it on 1 August 2012.⁷⁷ On the other hand, the Draft Action Plan “would not have, and cannot now cause, the Tribunal to alter the findings in the Decision on Liability”.⁷⁸ Thus, unlike in *SCB v. Tanesco*, the Draft Action Plan “was neither ‘material’ nor

⁶⁷ *Id.*, ¶¶ 200-202; C-Comments on *SCB v. Tanesco*, p. 5.

⁶⁸ C-Comments on *SCB v. Tanesco*, p. 5.

⁶⁹ *Ibid.*

⁷⁰ C-PHB, ¶ 205.

⁷¹ C-Comments on *SCB v. Tanesco*, p. 2.

⁷² Emphasis in the original. C-PHB, ¶¶ 206-209.

⁷³ C-PHB, ¶¶ 210-215.

⁷⁴ *Id.*, ¶ 216.

⁷⁵ *Id.*, ¶ 217.

⁷⁶ *Id.*, ¶ 218; C-Comments on *SCB v. Tanesco*, p. 4.

⁷⁷ C-PHB, ¶¶ 219-220.

⁷⁸ *Id.*, ¶ 221.

could it have had ‘an impact’ on the Tribunal’s decision on liability”.⁷⁹ The Plan was only the starting point for discussions within the Consortium and was not intended to reflect Burlington’s or the Consortium’s views on the risks of the planned suspension.⁸⁰ It remained a draft enumerating a number of issues. That draft was superseded by conversations held in Bogotá on 18-19 June 2009;⁸¹ by Ecuador’s suspension plan review of 30 June 2009;⁸² by the decision of the Consortium’s representatives entitled “Consent Action of the Representatives” of 8 July 2009 authorizing suspension;⁸³ and by the organigram of the Consortium’s post-suspension team.⁸⁴ The draft status of the plan is demonstrated by the fact that various proposals which it contains, such as terminating work contracts, were not retained.⁸⁵ As Mr. d’Argentré testified, “we moved on to a new plan”.⁸⁶

66. In the circumstances, Burlington contends that “Ecuador cannot now argue that these claimed risks were unknown to it, or that they emerged only with the production of the Draft Action Plan, when Ecuador in fact claimed (incorrectly) that the risks of suspending operations justified its actions, and submitted extensive briefing and expert evidence on the issue before the Decision on Liability”.⁸⁷ In fact, so Burlington, RPS stated that the Draft Action Plan “confirmed” its “prior conclusions”, thus showing that it “added nothing of substance”.⁸⁸
67. Regarding the risks alleged by Ecuador, Burlington claims that the suspension would not have increased the risk of reservoir, mechanical or environmental damage. It stresses that “controlled suspension of operations is routine and does not create significant risk of harm”.⁸⁹ It further highlights that the Consortium

⁷⁹ C-Comments on *SCB v. Tanesco*, p. 3.

⁸⁰ C-PHB, ¶ 222.

⁸¹ Internal Perenco email regarding *Ecuador – draft minutes meeting in Bogotá*, 18-19 June 2009 (**Exh. E-534**).

⁸² Ecuador Suspension Plan Review, 30 June 2009 (**Exh. C-200**).

⁸³ Consent Action of the Representatives, Operational Committee Block 7 and Block 21 (**Exh. C-206**).

⁸⁴ Block 7 and 21 Consortium, Post Suspension Team in Quito (**Exh. C-452**).

⁸⁵ C-PHB, ¶ 223.

⁸⁶ Tr. Quantum (Day 2) (ENG), 610:1-4 (Cross, D’Argentré).

⁸⁷ C-Comments on *SCB v. Tanesco*, p. 4.

⁸⁸ *Id.*, p. 4, note 17.

⁸⁹ Tr. Quantum (Day 1) (ENG), 169:3-5 (Opening, Blackaby).

suspended operations for a week in all of Block 7 in 2005, as well as in all of Block 21 and parts of Block 7 in 2006, without any material harm to the oilfields.⁹⁰

68. With respect to reservoir damage more specifically, Dr. Strickland testified that the alleged risks of cross-flow and water encroachment were immaterial and would in any event have stabilized within a matter of hours.⁹¹ The shut-ins in 2005 and 2006 showed that no such risks existed.⁹²
69. In connection with environmental damage, Burlington argues that the risks of sabotage and looting during the suspension were already addressed in the Decision of Liability, where the Tribunal recognized the Consortium's intention to keep personnel on the ground to supervise the fields.⁹³ To Ecuador's argument that naturally flowing wells could contaminate the surrounding environment, Burlington responds that the pressure of these wells is 400 psi and that any naturally flowing crude would have been contained by wellheads resisting 5000 psi.⁹⁴ As RPS admits, leaks may occur "whether operations are suspended or not", which discredits the claim that the suspension increases environmental risks of naturally-flowing wells. Various wells had previously been shut-in without environmental damage resulting from naturally flowing wells.⁹⁵
70. Finally, in respect of mechanical damage, Dr. Egan's testimony showed that the suspension would have reduced the strain on electric submersible pumps (ESPs).⁹⁶ Further, the allegation of risk of pipeline rupture has been proven wrong since the Consortium, as an experienced professional field operator, knew perfectly well how to gradually ramp-up production upon restarting the operations without breaking the pipeline.⁹⁷

⁹⁰ C-PHB, ¶ 224.

⁹¹ *Id.*, ¶¶ 228-230. See also, with respect to cross-flow: Tr. Quantum (Day 3) (ENG), 853:8-855:13, 856:1-857:2 (Direct, Dr. Strickland), 896:21-897:22 (Tribunal, Dr. Strickland); and with respect to water encroachment: Tr. Quantum (Day 3) (ENG), 855:14-22 (Direct, Dr. Strickland), 897:11-15 (Tribunal, Dr. Strickland).

⁹² C-PHB, ¶ 230.

⁹³ *Id.*, ¶ 233.

⁹⁴ *Id.*, ¶ 232.

⁹⁵ Reply, ¶ 346.

⁹⁶ C-PHB, ¶ 235; Tr. Quantum (Day 3) (ENG), 905:17-21, 910:6-911:4 (Direct, Dr. Egan).

⁹⁷ *Id.*, ¶¶ 236-237.

71. For these reasons, Burlington requests the Tribunal to declare the Motion inadmissible, or, in the alternative, to dismiss it as unfounded.⁹⁸

B. DISCUSSION

1. Applicable legal framework

72. Ecuador invokes Articles 49(2), 51, 52 of the ICSID Convention, as well as Rules 25 and 38(2) of the ICSID Arbitration Rules in support of the Motion.⁹⁹ Ecuador also relies on Article 44 of the ICSID Convention to argue that the Tribunal has inherent powers to entertain the Motion. For its part, Burlington relies on Article 53 of the Convention to argue that the Motion is inadmissible.

73. Article 44 of the ICSID Convention, which deals with the procedural powers of ICSID tribunals, reads as follows:

“Any arbitration proceeding shall be conducted in accordance with the provisions of this Section and, except as the parties otherwise agree, in accordance with the Arbitration Rules in effect on the date on which the parties consented to arbitration. If any question of procedure arises which is not covered by this Section or the Arbitration Rules or any rules agreed by the parties, the Tribunal shall decide the question”.

74. Article 49(2) of the ICSID Convention concerning the rectification of awards, is worded as follows:

“The Tribunal upon the request of a party made within 45 days after the date on which the award was rendered may after notice to the other party decide any question which it had omitted to decide in the award, and shall rectify any clerical, arithmetical or similar error in the award. [...]”.

75. Article 51 of the ICSID Convention, which is the provision on revision of awards, has the following relevant wording:

“(1) Either party may request revision of the award by an application in writing addressed to the Secretary-General on the ground of discovery of some fact of such a nature as decisively to affect the award, provided that when the award was rendered that fact was unknown to the Tribunal and to the applicant and that the applicant’s ignorance of that fact was not due to negligence.

⁹⁸ *Id.*, ¶ 240.

⁹⁹ Ecuador also invoked various other provisions, such as Articles 14 and 48 of the ICSID Convention, as well as Rule 12 of the ICSID Arbitration Rules, which the Tribunal does not deem necessary to spell out in more detail at this juncture.

(2) The application shall be made within 90 days after the discovery of such fact and in any event within three years after the date on which the award was rendered.

[...].

76. Article 52 of the ICSID Convention about the annulment of awards, reads in relevant part as follows:

“(1) Either party may request annulment of the award by an application in writing addressed to the Secretary-General on one or more of the following grounds:

[...]

(b) that the Tribunal has manifestly exceeded its powers;

[...]

(d) that there has been a serious departure from a fundamental rule of procedure; or

(e) that the award has failed to state the reasons on which it is based

[...]”.

77. Article 53 of the ICSID Convention, which provides for the finality of ICSID awards, is worded as follows:

“(1) The award shall be binding on the parties and shall not be subject to any appeal or to any other remedy except those provided for in this Convention. Each party shall abide by and comply with the terms of the award except to the extent that enforcement shall have been stayed pursuant to the relevant provisions of this Convention.

(2) For the purposes of this Section, “award” shall include any decision interpreting, revising or annulling such award pursuant to Articles 50, 51 or 52”.

78. Arbitration Rule 25 entitled “Correction of Errors”, has the following content:

“An accidental error in any instrument or supporting document may, with the consent of the other party or by leave of the Tribunal, be corrected at any time before the award is rendered”.

79. Finally, Arbitration Rule 38 dealing with the closure of the proceeding, reads as follows:

“(1) When the presentation of the case by the parties is completed, the proceeding shall be declared closed.

(2) Exceptionally, the Tribunal may, before the award has been rendered, reopen the proceeding on the ground that new evidence is forthcoming of such a nature as to constitute a decisive factor, or that there is a vital need for clarification on certain specific points”.

2. Analysis

80. The Tribunal will address its power to reconsider the Decision on Liability (2.1), and then review the two legs of the Motion, namely the contention that the Tribunal erred as a matter of law (2.2) and that it was misled by Burlington and reached its decision on the basis of incomplete facts (2.3).

2.1 Power to reconsider the Decision on Liability

81. At the outset, the Tribunal notes that, contrary to Ecuador’s contention, Burlington has not accepted the admissibility of the Motion. Indeed, Burlington merely accepted that Ecuador raise the Motion in parallel to the quantum proceedings. Specifically, Burlington stated that it had “no objection to either party raising any requests for reconsideration or clarification in the context of its pleadings in the quantum phase”.¹⁰⁰ The lack of objection went to the procedural setting of the request for reconsideration, not to admissibility.
82. Neither the ICSID Convention nor the Arbitration Rules contain provisions dealing with the power of tribunals to reconsider their decisions.¹⁰¹ Unlike most national arbitration laws and the New York Convention, the ICSID legal framework distinguishes between “decisions” and “awards”. The term “award” is reserved for the decision putting an end to the arbitration, which under other regimes is called a final award. So for instance, a decision denying jurisdiction over the entire dispute (Arbitration Rule 41(6)) or a decision on the merits that resolves all or all the remaining claims before the tribunal is an “award” (Article 48(3) ICSID Convention). On the other hand, a preliminary decision affirming jurisdiction or resolving other issues arising “on the road” to the final award, e.g. on applicable law, or liability, or part of the claims, is a (pre-award) “decision” for ICSID purposes. Under other regimes, these decisions would be designated by terms such as interim, preliminary, interlocutory, or partial awards.
83. Pre-award decisions must also be distinguished from procedural orders that organize the proceedings and from provisional measures. Due to their nature, such

¹⁰⁰ Letter of 1 February 2013 from Burlington to the Tribunal, p. 1.

¹⁰¹ Except for Article 39(3) of the Arbitration Rules, which provides that the tribunal “may at any time modify or revoke its recommendations” on provisional measures.

procedural orders and orders for provisional remedies can be reconsidered at any time, if circumstances so require.¹⁰² In effect, Arbitration Rule 39(3) expressly authorizes a tribunal to reopen a decision on provisional measures.¹⁰³ This is the only provision in the ICSID legal framework expressly empowering a tribunal to reconsider a decision which it has rendered.

84. These distinctions being made, one notes that the ICSID framework is silent about the possibility of reopening a pre-award decision.
85. The majority in *ConocoPhillips v. Venezuela* held that decisions preliminary to an award “that resolve points in dispute between the Parties” are vested with *res judicata* and can thus not be reopened.¹⁰⁴ A similar view was adopted in *Perenco v. Ecuador*,¹⁰⁵ although the tribunal envisaged the possibility that “a very specific situation” may call for a tribunal to “revisit its prior findings”.¹⁰⁶ By contrast, the tribunal in *SCB v. Tanesco* recently held that pre-award decisions are not *res judicata*, and that “there may be circumstances where a tribunal should consider reopening a decision that it has made”.¹⁰⁷ This view had previously been expressed in the dissenting opinion of Professor Abi-Saab¹⁰⁸ in the *Conoco* case just referred to.¹⁰⁹
86. The Tribunal agrees with the tribunal in *SCB v. Tanesco* when it states that a pre-award decision does not carry *res judicata* effects, for reasons essentially connected to the structure or architecture of the ICSID Convention. First, apart from orders on

¹⁰² See, for instance in respect of procedural orders: *Churchill Mining Plc and Planet Mining Pty Ltd v. Republic of Indonesia*, ICSID Case No. ARB/12/14 and 12/40 (“*Churchill v. Indonesia*”), Procedural Order No. 13 of 18 November 2014, ¶ 33(1).

¹⁰³ Article 39(3) of the ICSID Arbitration Rules. See: note 101 above.

¹⁰⁴ *ConocoPhillips v. Venezuela*, Decision on Respondent’s Request for Reconsideration of 10 March 2014, ¶ 21 (**Exh. EL-237**). For completeness, it is noted that the *Conoco* tribunal later refused to reconsider that decision (*ConocoPhillips v. Venezuela*, Decision on Respondent’s Request for Reconsideration of the Tribunal’s Decision of 10 March 2014 of 9 February 2016, ¶ 37).

¹⁰⁵ The tribunal stated that “[t]here is ample prior authority in support of the view once the tribunal decides with finality any of the factual or legal questions put to it by the parties [...] such a decision becomes *res judicata*”. *Perenco v. Ecuador*, Decision on Ecuador’s Reconsideration Motion of 10 April 2015, ¶ 43 (**Exh. CL-390**).

¹⁰⁶ *Id.*, ¶ 42.

¹⁰⁷ *SCB v. Tanesco*, Award of 12 September 2016, ¶¶ 318, 320 (**Exh. TL-001**).

¹⁰⁸ *ConocoPhillips v. Venezuela*, Dissenting Opinion of Georges Abi-Saab of 10 March 2014, ¶ 57 (**Exh. EL-237**).

¹⁰⁹ For completeness, it is noted that Prof. Bucher dissented along the same lines on the occasion of the second *Conoco* reconsideration decision (*ConocoPhillips et al. v. Venezuela*, Dissenting Opinion of Andreas Bucher of 9 February 2016).

procedural matters under Article 44 and under other rules dealing with the organization of the proceedings and other than decisions on provisional measures, the ICSID framework contemplates that arbitration proceedings give rise only to (i) one decision on preliminary objections, if such objections are raised and are not joined to the merits (Arbitration Rule 41(4)), and to (ii) one (final) award (Article 48 ICSID Convention and Arbitration Rules 46 ff.).¹¹⁰ It provides further that the award must deal with “every question submitted to the Tribunal” (Article 48(3)) and contain the “decision of the Tribunal on every question submitted to it” (Arbitration Rule 47(1)(i)). To comply with these provisions, the practice is for tribunals to incorporate earlier decisions into their (final) award.

87. Second, remedies, i.e. rectification, requests for supplementary decisions, interpretation, revision, and annulment, are only available from the time when the award is rendered. In other words, a decision affirming jurisdiction, for instance, can only be challenged in annulment proceedings brought once the (final) award in which it is incorporated is issued.
88. Third, following the same logic, the duty of ICSID Contracting States to recognize decisions emanating from the Centre and to enforce pecuniary obligations imposed by such decisions under Article 54(1) of the Convention only applies to awards, not to earlier decisions even though these could include pecuniary obligations, for instance a cost order contained in a decision accepting jurisdiction.
89. In the Tribunal’s view, the requirement for incorporation of earlier decisions into the award, the absence of remedies against these decisions, and the fact that the Contracting States’ obligation to recognize and enforce only attaches to the award, not to earlier decisions, show that *res judicata* attaches to the “award” in the ICSID meaning and not to earlier decisions.
90. This being so, the lack of *res judicata* does not mean that decisions on preliminary objections and what under other rules would be called interim or preliminary awards on issues other than jurisdiction and admissibility can necessarily be reopened. Indeed, ICSID tribunals have had no hesitation finding that preliminary decisions bind the parties and the tribunal in the course of the proceedings. That view is

¹¹⁰ This restrictive position was, for instance, adopted in *Tanesco v. Independent Power Tanzania*: “[T]he ICSID Arbitration Rules contain no provisions which permit or even contemplate ‘Partial’ or ‘Interim’ Awards, indeed, it seemed to the Tribunal that the Rules contemplated only one, Final Award”. *Tanzania Electric Supply Company Ltd. v. Independent Power Tanzania Ltd.*, ICSID Case No. ARB/98/7 (“*Tanesco v. Independent Power Tanzania*”), Final Award of 22 June 2001, ¶ 32 (**Exh. TL-001**).

sometimes put in terms of *res judicata* (*quod non*, as was concluded above).¹¹¹ It is also occasionally expressed as a manifestation of the intentions of the tribunal, as for example in *Electrabel v. Hungary*.

“Although necessarily described as a ‘Decision’ and not an ‘Award’ under the ICSID Convention and ICSID Arbitration Rules, the several decisions and reasons contained in this Decision are intended by the Tribunal to be final and not to be revisited by the Parties or the Tribunal in any later phase of these arbitration proceedings”.¹¹²

91. In the words of the second *Amco Asia* tribunal, the approach is stated as a general principle “that a right, question, or fact distinctly put in issue and distinctly determined cannot be disputed”.¹¹³ Whatever the justification, these tribunals express the opinion that an issue resolved once in the course of an arbitration should in principle not be revisited in the same proceedings. Irrespective of *res judicata*, the rationale for this opinion is obvious: a contrary view would defeat the purpose of efficient dispute settlement, entailing constant re-litigation of issues already resolved, with unavoidable adverse consequences in terms of increased costs and length of proceedings. In addition, the possibility of re-litigating issues would jeopardize legal certainty and ultimately undermine the confidence of the users in the system.
92. Having reached the conclusion that ICSID tribunal decisions (other than orders on procedure and provisional measures) which are not final awards are not *res judicatae*, but are nevertheless binding on the parties and the tribunal within the proceedings in which they were issued, the Tribunal also agrees with the finding in *SCB v. Tanesco* according to which “there may be circumstances where a tribunal should consider reopening a decision that it has made”.¹¹⁴

¹¹¹ *Waste Management v. Mexico II*, Decision on Mexico’s Preliminary Objection concerning the Previous Proceedings of 26 June 2002, ¶ 45 (**Exh. EL-141**) (“[A]t whatever stage of the case it is decided, a decision on a particular point constitutes a *res judicata* as between the parties to that decision if it is a necessary part of the eventual determination and is dealt with as such by the tribunal”).

¹¹² *Electrabel v. Hungary*, Decision on Jurisdiction, Applicable Law and Liability of 30 November 2012, ¶ 10.1 (**Exh. CL-349**).

¹¹³ *Amco Asia Corporation v. Republic of Indonesia*, ICSID Case No. ARB/81/1 (Resubmitted Case) (“*Amco Asia v. Indonesia II*”), Decision on Jurisdiction of 10 May 1988, ¶ 30 (**Exh. CL-330**). See also: *CMS v. Argentina*, Award of 12 May 2005, ¶ 126 (**Exh. CL-99**) (“It must also be noted that in connection with the merits the Respondent has again raised certain jurisdictional issues that were addressed in the jurisdictional phase of the case, such as the *jus standi* of the Claimant. These issues were decided upon at that stage and will not be reopened in this Award”).

¹¹⁴ *SCB v. Tanesco*, Award of 12 September 2016, ¶ 320 (**Exh. TL-001**).

93. The *SCB* tribunal saw practical advantages in accepting such a power of reconsideration, be it based on Article 51(1) or 44 of the ICSID Convention: “It avoids having the Tribunal decide issues on the merits on the basis of a decision which has been seriously called into question, and then have the parties wait until the whole matter has been included in its final award before having its decision reopened or subject to annulment, thus potentially wasting the time and expense that has been incurred since the Tribunal became aware that its decision could be called into question. Efficiency grounds alone suggest that there may be circumstances where a tribunal should consider reopening a decision that it has made”.¹¹⁵ In other words, procedural efficiency, which requires that an interim decision be binding on the tribunal that has issued such a decision, may at the same time call for an exception to the principle of binding force under certain circumstances. The Tribunal agrees with this view.
94. The question thus is to determine what exceptional circumstances may warrant reopening a decision that binds an ICSID tribunal. In answering this question, the Tribunal is in agreement with the *SCB* decision, pursuant to which it “should be guided by, although not bound by, the limitations that apply to awards”, adding that the power to reconsider extends “at least [...] to the grounds for reopening an award in Article 51”.¹¹⁶ The limitations applicable to awards include the prohibition of appeals in Article 53(1), the restrictive bases for revision in Article 51, and possibly the limited grounds for annulment in Article 52 of the ICSID Convention, to which the Tribunal will revert.
95. Ecuador refers to a number of provisions, quoted above, to substantiate its argument that exceptional circumstances may justify reconsidering decisions preliminary to an award. While Ecuador concedes that none of these provisions specifically apply to pre-award decisions, it argues that “exceptional circumstances” warrant reopening a pre-award decision in all cases where it can be shown “that any of the grounds for reopening a Convention award or decision apply”,¹¹⁷ or if it is “otherwise in the interest of justice”.¹¹⁸ Ecuador further submits that the standard of review to reconsider the Decision on Liability “must necessarily be lower under *pre-*

¹¹⁵ *Ibid.*

¹¹⁶ *Id.*, ¶ 322.

¹¹⁷ R-PHB, ¶ 20.

¹¹⁸ *Ibid.*

closing circumstances than the standard of review at the *post-award* annulment stage (or even in *post-closing* circumstances)".¹¹⁹

96. The Tribunal cannot follow Ecuador's far-reaching interpretation of a tribunal's power to reconsider pre-award decisions or the proposed standard of review. The tribunal in *SCB v. Tanesco* rightly held that an unconstrained power of reconsideration would lead to "considerable uncertainty".¹²⁰ In the present case, the Decision on Liability is binding on the Tribunal and the Parties; it is not a draft that can be reopened at will.
97. As was mentioned earlier, guidance must be sought by analogy in the limitations applicable to the reconsideration of awards. In this respect, Article 51(1) allows a party to request the revision of an award "on the ground of discovery of some fact of such a nature as decisively to affect the award", provided that "when the award was rendered that fact was unknown to the Tribunal and the applicant and that the applicant's ignorance of the fact was not due to negligence". Article 51(2) requires that the application be made within 90 days after the discovery of such fact and no more than 3 years after the award was rendered. *Venezuela Holdings* summarized the requirements of knowledge and timing contained in the first paragraph of Article 51 as follows:

"Only a fact that existed when the award was rendered could have been known when the award was rendered. Only ignorance of a fact that existed when the award was rendered could be due to negligence. It follows that only a fact that existed when the award was rendered may form the basis for a request for revision under Article 51(1) of the ICSID Convention".¹²¹

98. The Tribunal is of the view that this provision, although worded as a post-award remedy, may apply by analogy to pre-award decisions. This view relies in particular on Article 51(3), which favors a solution where, to the extent possible, the tribunal that rendered the award is reconstituted to deal with a revision request. Where the arbitration is still pending and the tribunal still constituted, it appears all the more compelling that the tribunal be afforded the opportunity to revise a pre-award decision if a decisive and previously unknown fact comes to light.

¹¹⁹ Rejoinder, ¶ 115.

¹²⁰ *SCB v. Tanesco*, Award of 12 September 2016, ¶ 322 (**Exh. TL-001**).

¹²¹ *Venezuela Holdings, B.V. et al. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/27 ("*Venezuela Holdings v. Venezuela*"), Decision on Revision of 12 June 2015, ¶ 3.1.11.

99. This view is further confirmed when one observes that it is generally accepted in proceedings before both international tribunals and national courts that an adjudicatory body can reopen a judgment or award that it has rendered in revision proceedings.
100. The International Court of Justice ruled that it cannot be excluded that the same tribunal revise a judgment “in special circumstances when new facts of decisive importance have been discovered”, a process which cannot be likened to an appeal and which would “conform with rules generally provided in statutes or laws issued for courts of justice”.¹²² Mixed claims commissions as well as the Iran-US Claims Tribunal, have also accepted the existence of a power to revise their prior decisions or awards under exceptional circumstances, such as the appearance of decisive new evidence, even in the absence of an express power under the applicable rules.¹²³ The Iran-US Claims Tribunal circumscribed exceptional circumstances justifying the revision of an award to situations where the challenged decision was induced by fraud or perjury and to cases of “discovery of some fact of such a nature as to be a decisive factor”,¹²⁴ provided that the ignorance of the new fact was not due to the applicant’s negligence and that it was raised in a timely manner.¹²⁵
101. An additional reason for accepting to apply Article 51 by analogy is the timing that it envisages. Ecuador argues that, unless a remedy analogous to that of Article 51 were available, a party would be deprived of an opportunity to seek revision when the relevant fact became known to the applicant and the Tribunal after the preliminary decision but before the award.¹²⁶
102. At the end of the Hearing, the Tribunal asked the Parties whether the absence of an analogous remedy may not encourage a party that discovers a decisive fact to

¹²² *Effect of Awards of Compensation made by the UN Administrative Tribunal*, Advisory Opinion of 13 July 1954, I.C.J. Reports 1954, p. 55 (**Exh. EL-310**).

¹²³ See, for instance: *Lehigh Valley Railroad Company et al. (United States) v. Germany (Sabotage Cases)*, Decision of 15 December 1933, R.I.A.A., Vol. VIII, p. 188 (**Exh. EL-238**).

¹²⁴ See in particular: *Ram International Industries, Inc., Universal Electronics, Inc., General Aviation Supply, Inc., Galaxy Electronics Corp. v. The Air Force of the Islamic Republic of Iran*, Iran-United States Claims Tribunal, Case No. 148 (“*Ram v. Iran*”), Decision No. Dec 118-148-1 of 28 December 1993, ¶ 20.

¹²⁵ *Ram v. Iran*, Decision No. Dec 118-148-1, 28 December 1993, ¶ 24; *The United States of America v. The Islamic Republic of Iran*, Iran-United States Claims Tribunal, Case No. B36, Decision No. Dec 126-B36-2, 17 March 1997, ¶ 15.

¹²⁶ Rejoinder, ¶ 58.

conceal that discovery until after the award is rendered.¹²⁷ The Parties did not dispute that Article 51 may find application by analogy, although Ecuador argued that the conditions set out in Article 51 should not apply as such to pre-award requests for revision, while Burlington submitted that Ecuador's request did not fulfill the conditions set in that provision.

103. More specifically, in respect of the time limit set in Article 51(2), Ecuador states that it “does not apply”, since it was only stipulated to avoid indefinite revisions after the issuance of an award. As the arbitration here is still pending, the time limit is “devoid of any rationale”, says Ecuador. This position appears to be supported by *SCB v. Tanesco*, where the tribunal decided that the constraints of the requirements of Article 51 need not apply if pre-award decisions are not considered to be *res judicata*.
104. In the Tribunal's view, the discovery of outcome-determinative facts unknown to the Tribunal and the applicant prior to the rendering of a pre-award decision should open the possibility of revising such decision prior to the issuance of the award in application of Article 51 by analogy. This exception to the binding nature of a preliminary decision must, however, be balanced against the interests of legal certainty and procedural efficiency. These interests militate in favor of keeping the requirements set out in Article 51(1), as well as the time limit of 90 days from the discovery of the decisive fact set out in Article 51(2). While the time limits for the revision of an award (90 days after discovery and in any event no later than three years after the award) are meant to avoid that an award vested with *res judicata* may be put into question indefinitely, a consideration that does not apply here, there are nonetheless good reasons to stick to the 90 day time period even when the proceedings are still pending. Indeed, the sooner the discovery is brought to the attention of the tribunal, the lesser the potential consequences on the proceedings, as this case well shows. Moreover, the existence of a time limit encourages “good behavior” and discourages “bad behavior”, such as concealing the fact until such time as a party considers it strategic or tactical to disclose it. Such a limitation cannot be said to unduly restrict the applicant's rights, as parties and counsel seem in a better position to promptly assess and act on the discovery of a new fact while they are still actively involved in pursuing their case than after the end of the proceedings.

¹²⁷ Procedural Order No. 29, ¶ 4(a).

105. In summary, the Tribunal considers that a pre-award decision (other than a procedural order or decision on provisional measures) may be revised under Article 51 applied by analogy, provided (i) a fact is discovered; (ii) of such a nature as decisively to affect the pre-award decision; (iii) which was unknown to the Tribunal and to the applicant when the pre-award decision was rendered; (iv) the applicant's ignorance not being due to negligence; and (v) the request for reconsideration being made within 90 days after the discovery of the fact.
106. Turning now to the other provisions that Ecuador invokes to support the Motion, the Tribunal considers that the Respondent's reliance on Article 49(2) of the Convention and Article 25 of the Rules is to no avail, since Ecuador does not allege that the Tribunal omitted to decide a particular question in the Decision on Liability nor does it request the rectification of a clerical, arithmetical or similar error. Ecuador also accepts that Article 38(2) of the Arbitration Rules does not apply to pre-award decisions and that, in the present case, it cannot apply since the proceedings still have not been closed. At best, Rule 38(2) could have applied by analogy if Ecuador had requested to file new evidence just prior to the issuance of the Decision on Liability, which it did not do.
107. Finally, Article 52 of the ICSID Convention deals with annulment proceedings. Unlike revision proceedings which, as a rule, are conducted by the tribunal which issued the litigious decision, annulment actions are brought before a different body, namely (under the ICSID regime) before an annulment committee. If it were to assume the power to rule on a challenge based on grounds falling within the scope of Article 52, the Tribunal would in effect exercise a competence reserved for another body in disregard of the organization of powers under the ICSID Convention.
108. In conclusion, it is the Tribunal's view that a decision preliminary to an ICSID award (other than a procedural order or decision on provisional measures) is not a *res judicata* until it is incorporated into the award pursuant to Article 48(3) of the Convention, but that it nonetheless binds the parties and the tribunal. Therefore, such decisions can be reconsidered only in exceptional and very limited circumstances. Absent any specific rule in the ICSID framework, the most reasonable approach is to apply by analogy the test for revision provided in Article 51 of the Convention. This is so mainly because, under Article 51, the power of revision is in principle entrusted to the tribunal that issued the litigious decision. By contrast, it does not appear appropriate to resort to Article 52 by analogy, since the

power to annul awards is vested in a body other than the tribunal that issued the decision. An analogy with the grounds of Article 52 would thus disturb the allocation of powers mandated by the ICSID Convention. Furthermore, considerations of efficiency of the dispute settlement process and of manageability of the proceedings call for the application of strict limits so as to avoid opening the floodgates of reconsideration requests.

109. Having reached these conclusions, the Tribunal will now review the two grounds for reconsideration raised by Ecuador.

2.2 The Tribunal erred as a matter of law

110. Ecuador alleges that the Tribunal erred as a matter of law with respect to its “*sua sponte* interpretation” of Article 74 HL and the contradiction concerning the *exceptio non adimpleti contractus*. In this context, Ecuador argues that the Tribunal breached the Parties’ due process rights, since the Parties only discussed Article 74 HL in the context of *caducidad*, whereas the Tribunal’s interpretation of that provision addressed suspension and intervention.
111. To the extent that Ecuador asserts that the Tribunal’s interpretation of Article 74 HL and the decision to dispense with analyzing whether Burlington could also rely on the *exceptio non adimpleti contractus*, are errors of law, the Tribunal agrees with Burlington that these submissions amount to an appeal. As was discussed above, appeals are impermissible under Article 53 of the ICSID Convention.
112. Turning then to due process, Ecuador complains that the Tribunal’s interpretation of Article 74(4) HL “was never debated nor proposed by the Parties in the liability phase”.¹²⁸ For Ecuador, that provision does not address the power to intervene in the Blocks and take over the operations, but relates to *caducidad* only. According to Ecuador, subject to *force majeure*, the law of Ecuador and the PSCs barred the Consortium from suspending its operations, on the grounds of the principle of continuity. On that basis, Ecuador argues that it had inherent or implicit powers to perform the PSCs in lieu of the Consortium in default, and that it could therefore intervene in the Blocks and assume operations when it did.
113. Following the approach outlined above, this complaint falls within the scope of Article 52 and thus within the remit of an *ad hoc* committee. This being so, the Tribunal is mindful of the *SCB* decision which does not appear to entirely rule out

¹²⁸ Tr. Quantum (Day 5) (ENG), 1484:5-7 (Closing, Mr. Silva Romero).

resort to Article 52 by analogy. Indeed, paragraph 320 quoted above refers to the decision being “reopened or subject to annulment”. With this opinion in mind and although it favors limiting the power of reconsideration to cases within the ambit Article 51 for the reasons explained above, the Tribunal will nevertheless briefly address this complaint, for the sake of completeness.

114. The record shows that Article 74(4) HL was debated prior to the issuance of the Decision on Liability in connection with suspension and intervention. The second expert report of Ecuador’s expert, Dr. Aguilar, discusses Article 74(4) HL in the context of the principle of continuity and suspension of operations.¹²⁹ Further, Ecuador cited the text of Article 74(4) HL in its Counter-Memorial and added that “Burlington’s unilateral decision to suspend operations in Blocks 7 and 21, without cause, was illegal both under the Ecuadorian Constitution and under the HCL”.¹³⁰
115. Furthermore, compliance with fundamental principles of procedure and especially the parties’ opportunity to be heard does not mean that a tribunal cannot adopt its own reasoning.¹³¹ The maxim of *iura novit curia* allows the Tribunal to establish and assess the content of the law without being constrained by the Parties’ arguments, as long as it remains within the legal framework established by the Parties.¹³² Since both Parties provided their views on the scope of Article 74(4) HL during the liability phase, the Tribunal’s interpretation of that provision is clearly within the legal framework set by the Parties. The same is true in respect of the arguments on the principle of continuity¹³³ and the provisions dealing with suspension and intervention in the hydrocarbons sector.¹³⁴

¹²⁹ Aguilar ER2, ¶ 89.

¹³⁰ Respondent’s Counter-Memorial on Liability, corrected, ¶ 600. See also: R-PHB on Liability, ¶ 411; Tr. Quantum (Day 5) (ENG), 1484:13-14 (Closing, Mr. Silva Romero). See also: Claimant’s Supplemental Memorial on Liability, note 134.

¹³¹ *Caratube International Oil Company LLP v. Republic of Kazakhstan*, ICSID Case No. ARB/08/12 (“*Caratube v. Kazakhstan*”), Decision on the Annulment Application of Caratube International Oil Company LLP of 21 February 2014, ¶ 94 (**Exh. CL-335**).

¹³² Reply, ¶ 301 and note 583.

¹³³ Under Article 314 of the 2008 Constitution only public services are governed by the principle of continuity, and Ecuador’s expert, Dr. Aguilar, conceded that hydrocarbons exploitation is not a public service (Aguilar ER4, ¶ 30). He also confirmed that the PSCs were distinct from the public services described in Article 249 of the 1998 Constitution, which was later replaced by Article 314 of the 2008 Constitution. See also: Aguilar ER2, ¶¶ 36-37.

¹³⁴ The power to intervene in economic sectors – such as stock exchanges, the electricity sector, the telecommunications sector or the mining sector – is explicitly regulated under Ecuadorian law as convincingly shown by Dr. Pérez Loose (Pérez Loose ER, ¶¶ 13-21), but no express provision existed at the relevant time in respect of oilfield operations and it is

116. In conclusion, this leg of the Motion is denied.

2.3 The Tribunal was misled on the facts

117. Ecuador alternatively argues that Burlington wrongfully withheld key evidence and misled the Tribunal. Ecuador invokes the Suspension Plan as the decisive fact which would affect the outcome of the Tribunal's determination that Burlington was unlawfully expropriated of its assets. This leg of the Motion falls within the scope of Article 51 applied by analogy. The Tribunal must thus review whether Ecuador's arguments fulfill the requirements of Article 51. They do not.

118. Indeed, Ecuador knew of the existence of the Suspension Plan since 2011¹³⁵ when Burlington noted that it was privileged in its privilege log. Ecuador later obtained the Suspension Plan on 1 August 2012 through document disclosure in the parallel *Perenco* case.¹³⁶ Burlington thereafter produced the document in this arbitration on 14 November 2012 to Ecuador¹³⁷ and Ecuador filed it on 14 December 2012,¹³⁸ on the day of issuance of the Decision on Liability. Accordingly, 135 days lapsed between the moment when Ecuador became aware of the content of the Suspension Plan and when it produced that document in this arbitration. From August to December 2012, Ecuador had ample opportunity to advise the Tribunal that it had come into possession of a document that it regarded as decisive to the outcome of the case.

119. On this basis alone, this leg of the Motion fails and the Tribunal could dispense with further analysis. This said, the Tribunal recognizes that there is another view on the adequacy of applying the time limit of Article 51(2) of the Convention to requests for revision of pre-award decisions and, because the Parties have extensively argued this part of the Motion, the Tribunal will nevertheless briefly consider further arguments advanced by the Parties.

telling that Ecuador amended Article 11 HL in 2010 to provide for intervention in the hydrocarbons sector. In other words, in July 2009, the only topical provisions were Article 74(4) HL read in conjunction with Article 75. (Law Reforming the Hydrocarbons Law and the Internal Tax System Law, Official Registry No. 244, 27 July 2010, Article 5(g) (**Exh. Pérez-13**)).

¹³⁵ Letter of 21 February 2011 from Burlington to Ecuador, p. 007, item 99 (**Exh. C-472**).

¹³⁶ Letter of 31 August 2012 from Perenco to Ecuador (**Exh. E-311**).

¹³⁷ Letter of 14 November 2012 from Burlington to Ecuador (**Exh. E-310**).

¹³⁸ *Ibid.*

120. The Tribunal agrees with Burlington that Ecuador cannot now argue that it entered into Blocks 7 and 21 because of alleged risks justifying intervention and, argue at the same time, that it discovered these risks when it obtained a copy of the Suspension Plan.
121. It is true that Ecuador argues that its ability to rely on the Suspension Plan during the liability phase was compromised by Burlington's allegedly wrongful invocation of privilege. However, that argument fails, since the Tribunal considers that the Suspension Plan is indeed privileged under the work product doctrine, as it was generated by in-house and outside counsel for Perenco for the purposes of ongoing arbitral proceedings.¹³⁹ Accordingly, it could only have been produced once Perenco consented to lift the privilege.
122. Moreover, the Tribunal also notes that the Suspension Plan contains no factual information that was previously unknown to the Parties or the Tribunal, nor was it susceptible of decisively influencing the outcome of the Decision on Liability.
123. First, Burlington demonstrated that the Suspension Plan was the starting point of discussions on risks associated with the suspension, which was later superseded by other discussions between the Consortium partners, such as the meeting held in Bogotá on 18-19 June 2009 and the Suspension Plan's review on 30 June 2009.¹⁴⁰ Second, the Consortium offered on two occasions to provide Ecuador with "additional details about the suspension activities", but Ecuador did not follow up on these offers prior to intervening in the Blocks on 16 July 2009.¹⁴¹ Third, for Ecuador's expert RPS, the Suspension Plan showed that the Consortium conducted a risk assessment in or around June 2009.¹⁴² The expert added that that document "expressly recognizes the risks and uncertainties" which RPS had previously identified during the liability phase in relation to reservoir damage, mechanical damage and serious economic loss, as well as risks of sabotage and looting.¹⁴³ RPS

¹³⁹ The document bears an identification number of Debevoise & Plimpton, thus demonstrating that it was generated by lawyers with input from technicians (Suspension Plan) dated 3 June 2009 (**Exh. E-309**). See: Tr. Quantum (Day 5) (ENG), 1438:22-1439:20 (Closing, Mr. Blackaby).

¹⁴⁰ Draft Minutes of Meeting in Bogotá, 18-19 June 2010 (**Exh. E-534**); Ecuador Suspension Plan Review, 30 June 2009 (**Exh. C-200**).

¹⁴¹ Letter of 13 July 2009 from Burlington and Perenco to the Ministry of Mines and Oil, (**Exh. C-208**); Letter of 15 July 2009 from the Consortium to the Ministry of Mines and Oil (**Exh. C-213**).

¹⁴² RPS ER2, ¶ 45; RPS ER3, ¶ 16.

¹⁴³ RPS ER2, ¶ 47; RPS ER3, ¶¶ 15-16.

also insisted that prior to the Decision on Liability, it “lacked the specific data necessary to decisively refute the testimony of Mr. Martinez” that there were no significant risks associated with suspension.¹⁴⁴ Be this as it may, these risks were abundantly debated prior to the Decision on Liability and the Suspension Plan adds nothing new in this respect, let alone does it provide the “specific data” that RPS required to assess the concreteness of the risks it had identified.

124. As a result, the Tribunal comes to the conclusion that this leg of the Motion does not meet the conditions of Article 51 applied by analogy and must consequently be denied.

2.4 Conclusion

125. For these reasons, the Motion is denied.

VII. QUANTUM

126. In its Decision on Liability, the Tribunal found that, by taking over Blocks 7 and 21 (which takeover became permanent on 30 August 2009), Ecuador expropriated Burlington’s investments,¹⁴⁵ and that this expropriation was unlawful.¹⁴⁶ The Tribunal’s task here is to determine what compensation is due to Burlington for Ecuador’s treaty breach.
127. The Tribunal will first provide an overview of the Parties’ positions (Section A) and address the question of the standard of compensation (Section B). It will then determine whether the heads of claim sought by Burlington are compensable (Section C), followed by the valuation of the claims that pass this test (Section D). It will conclude its analysis with an assessment of Ecuador’s defense on contributory negligence (Section E) and Burlington’s request for post-award interest (Section F).

¹⁴⁴ RPS ER2, ¶ 41.

¹⁴⁵ DoL, ¶ 535.

¹⁴⁶ *Id.*, ¶¶ 543-545.

A. OVERVIEW OF THE PARTIES' POSITIONS

1. Overview of Burlington's position

128. Burlington argues that it is entitled to full reparation for the losses resulting from Ecuador's unlawful expropriation of its investment, which (according to Burlington) the Tribunal defined expressly to include Burlington's contractual rights.¹⁴⁷
129. Burlington seeks compensation for the following three categories of losses:
- i. **Past Law 42 dues** paid or seized by Ecuador, i.e., "[t]he accrued amounts owing to Burlington at the time of the expropriation as a result of Ecuador's failure to indemnify Burlington for Law 42 payments and seizures effected previously".¹⁴⁸ Burlington's quantum expert, Dr. Abdala of Compass Lexecon, calls this head of claim "pre-expropriation tax debts" and has calculated them from the day those taxes became effective (20 April 2006) until the date of the expropriation (30 August 2009).¹⁴⁹ Burlington characterizes these losses as "lost contract rights".¹⁵⁰
 - ii. The **lost profits** that Burlington would have received under the PSCs absent (or "but for") Ecuador's unlawful acts. Compass Lexecon refers to this head of damages as the value of Burlington's expropriated operating assets.¹⁵¹ According to Burlington, the valuation of these lost profits must take into account Burlington's contractual right to be indemnified against Law 42. Accordingly Compass Lexecon calculates these lost profits net of the economic effects of Law 42.
 - iii. Burlington's **lost opportunity** to engage in good faith negotiations with regard to an extension of the Block 7 PSC.¹⁵² Compass Lexecon refers to this head of damages as the "Value of Block 7 Extension".¹⁵³

¹⁴⁷ CM, ¶ 72, with reference to: *Id.*, ¶¶ 36-40.

¹⁴⁸ Mem., ¶ 72(b).

¹⁴⁹ Compass Lexecon ER1, ¶ 2(ii).

¹⁵⁰ Mem., title B at page 48.

¹⁵¹ Compass Lexecon ER1, ¶ 2(i).

¹⁵² Mem., ¶ 72(c).

¹⁵³ Compass Lexecon ER1, ¶ 2(iii).

130. In its Second Report, Compass Lexecon quantifies these damages as follows:

Table 1: Summary of Damages to Burlington as of September 15, 2014

		US\$ millions		
		Block 7	Block 21	Total
a	Pre-Expropriation Tax Debts	113.9	124.9	238.7
b	Value of Operating Assets	244.0	567.1	811.1
	<i>Historical Lost Profits (pre-September 2014)</i>	244.0	388.6	632.6
	<i>Fair Market Value as of September 2014</i>	-	178.5	178.5
c	Value of Block 7 Extension	300.5	n.a.	300.5
a+b+c	Total Damages	658.4	692.0	1,350.3

Source: Compass Lexecon Second Valuation Model. (CLEX-49)

131. Burlington claims compound interest on all of these amounts and requests that the award be protected against taxation.

132. In the Updated Model, using a valuation date of 31 August 2016 and all of Compass Lexecon's assumptions, Burlington's damages are quantified damages at **USD 1,515,603,095**, including pre-award interest.

2. Overview of Ecuador's position

133. Ecuador denies that Burlington has a right to be compensated for the pre-expropriation tax debts, or for the lost opportunity to extend the Block 7 PSC. First, it submits that the Tribunal has no jurisdiction over either of these claims, which in its view are contract and not treaty claims. Even if the Tribunal should find that it has jurisdiction, says Ecuador, both claims fail on their merits.

134. By contrast, and of course subject to its motion for reconsideration, Ecuador acknowledges that Burlington has a right to the fair market value (FMV) of its expropriated investment (which Ecuador appears to accept is reflected in the value of its rights under the PSCs for Blocks 7 and 21 on the date of the expropriation). However, it contends that Burlington's valuation of these assets is grossly inflated, mainly because Burlington misapplies the relevant standard of compensation, uses the wrong valuation date, adopts false assumptions (in particular, the failure to account for Law 42 taxes when projecting future profits) and applies an exaggerated interest rate.

135. In his Second Report, Ecuador’s expert, Mr. Mélard de Feuarent of Fair Links, quantifies Burlington’s damages as follows:¹⁵⁴

		Fair Market Value of Burlington's assets as of August 2009 (a)	Post-expropriation interest August 2009 - August 2015 (b)	Total damage value as of August 2015 (c) = (a) + (b)
High case production scenario	MS	28.8	4.3	33.1
Base case production scenario	MS	26.3	3.9	30.2
Low case production scenario	MS	20.6	3.1	23.7

136. Ecuador argues that, in any event, any compensation awarded to Burlington must reflect Burlington’s contribution to its own losses.
137. Finally, Ecuador argues that Burlington’s claim for interest is unreasonable.
138. In the Updated Model, using a valuation date of 30 August 2009 and all of Fair Links’ assumptions, Ecuador’s valuation of the Burlington’s base case scenario is quantified at **USD 27,597,980**, including pre-award interest.

B. STANDARD OF COMPENSATION

1. Burlington’s position

139. Burlington argues that, because the Tribunal found that the expropriation was unlawful, the appropriate standard of compensation is the customary international law standard of full reparation. Relying in particular on the *Chorzów* case,¹⁵⁵ as well as on the ILC Articles on State Responsibility (the “ILC Articles”),¹⁵⁶ Burlington submits that this standard requires that the award fully eliminate the consequences of Ecuador’s unlawful conduct, and reestablish the situation that would have existed in the absence of that unlawful conduct.¹⁵⁷

¹⁵⁴ The Tribunal understands these figures to be in million USD.

¹⁵⁵ Mem., ¶¶ 49, 110, referring to: *Case Concerning The Factory At Chorzów (Claim for Indemnity) (The Merits)*, Permanent Court of International Justice, Series A., No. 17, Decision of 13 September 1928 (“*Chorzów*”), p. 47 (**Exh. CL-102**); as well as: *Vivendi v. Argentina II*, Award of August 20, 2007, ¶ 8.2.7 (**Exh. CL-123**); *Opinion in the Lusitania Cases*, United States-Germany Decisions of Mixed Claims Commission, 1 November 1923, 7 *United Nations Reports of International Arbitral Awards* 32 (1932), p. 39 (**Exh. CL-124**).

¹⁵⁶ International Law Commission Draft Articles on the Responsibility of States for Internationally Wrongful Acts (“ILC Articles”) (**Exh. CL-127**).

¹⁵⁷ Reply, ¶ 2.

140. In the context of an unlawful expropriation, “the tribunal’s task is to require the State to place the investor in the economic position that it would have enjoyed had the wrongful acts never occurred – that is, the situation that would have existed ‘but for’ the unlawful expropriation”.¹⁵⁸ If restitution is impossible or impracticable, as here, the Tribunal should make an award of damages “equal to the current value of the investment taken, plus compensation for any losses that would not have been incurred but for the State’s unlawful actions”.¹⁵⁹
141. According to Burlington, this standard applies to all unlawful expropriations, regardless of the breach that caused that unlawfulness. It argues that Article III(1) of the BIT provides that all expropriations are unlawful (this being the default position agreed by the contracting States), unless four cumulative conditions are met: the taking must be (i) for a public interest, (ii) non-discriminatory, (iii) in accordance with due process of law, and (iv) upon payment of compensation.¹⁶⁰ Stated differently, if any one of these conditions is not met, the expropriation is unlawful. Burlington submits that the Treaty makes no distinction between these conditions, and there is no authority under international law to make one.¹⁶¹ There is thus no basis for Ecuador’s theory that a failure to pay compensation “somehow renders an expropriation ‘less unlawful’”.¹⁶²
142. As the Treaty itself does not provide the standard of compensation for unlawful expropriations, Burlington argues that the Tribunal must turn to the customary international law standard. Any expropriation carried out in violation of Article III(1) thus triggers the full reparation standard set out in *Chorzów*. Restitution is not feasible and so the Tribunal must award compensation sufficient to wipe out all of the consequences of the illegal act.
143. Burlington contends that, as with the other requirements for a lawful expropriation, the compensation requirement would serve no practical purpose if an expropriation that *violated* the requirement attracted the same remedial consequences as an expropriation that *complied with* the requirement, with the result that there would be

¹⁵⁸ Mem., ¶ 52.

¹⁵⁹ *Ibid.*

¹⁶⁰ Reply, ¶¶ 28-29.

¹⁶¹ *Id.*, ¶ 31.

¹⁶² *Ibid.*

no incentive for States to pay prompt, adequate and effective compensation.¹⁶³ Upholding Ecuador's position would incite States to expropriate industries with likely increases in value so as to limit liability to the value at the time of the initial seizure, and impose a "hierarchy of unlawfulness" that does not exist in the BIT or any other investment treaty.¹⁶⁴

144. According to Burlington, far from being an "anomaly" as claimed by Ecuador, tribunals regularly awarded full reparation in cases of expropriation that are unlawful for failure to pay compensation, as demonstrated in *ConocoPhillips* (a case relied upon by Ecuador, except for this specific matter), *Unglaube*, *Siemens* and *Funnekotter*.¹⁶⁵ Furthermore, leading commentators such as Dolzer and Schreuer do not provide any support for "the notion that some unlawful expropriations are remedied differently from others".¹⁶⁶
145. Burlington submits that Ecuador's recited authorities are not persuasive in this regard. For Burlington, the case law of the European Court of Human Rights (ECtHR), which distinguishes between "inherently unlawful dispossession" and expropriation unlawful by failure to pay compensation, provides "limited, if any, guidance on a State's remedial obligations to foreign investors under investment treaties".¹⁶⁷ The ECtHR deals with takings by a State of property of its own nationals, and therefore applies different standards of protection than those applicable in international investment law. The doctrine of the "margin of appreciation", and thus a larger degree of deference to the State, is also inept in the international investment context, as confirmed in *Siemens* and *Quasar*,¹⁶⁸ and indeed by the ECtHR itself in *Lithgow*.¹⁶⁹

¹⁶³ *Id.*, ¶ 32; Tr. Quantum (Day 1) (ENG), 13:3-14:17 (Opening, Paulsson).

¹⁶⁴ Reply, ¶ 56.

¹⁶⁵ *Id.*, ¶¶ 38-41, citing: *ConocoPhillips v. Venezuela*, Decision on Jurisdiction and the Merits of 3 September 2013, ¶¶ 342-43, 401 (**Exh. CL-343**); *Unglaube and Unglaube v. Republic of Costa Rica*, ICSID Case Nos. ARB/08/1 and ARB/09/20 ("*Unglaube v. Costa Rica*"), Award of 16 May 2012, ¶ 305 (**Exh. CL-243**); *Siemens AG v. Argentina*, ICSID Case No. ARB/02/8 ("*Siemens v. Argentina*"), Award of 6 February 2007, ¶ 273 (**Exh. CL-79**); *Bernardus Henricus Funnekotter and Others v. Republic of Zimbabwe*, ICSID Case No. ARB/05/6 ("*Funnekotter v. Zimbabwe*"), Award of 22 April 2009, ¶¶ 98, 107 (**Exh. CL-150**).

¹⁶⁶ Reply, ¶ 43.

¹⁶⁷ *Id.*, ¶ 47.

¹⁶⁸ *Id.*, ¶¶ 48-49, referring to: *Siemens v. Argentina*, ¶ 354 (**Exh. CL-79**); *Quasar de Valores SICAV S.A., Orgor de Valores SICAV S.A., GBI 9000 SICAV S.A., ALOS 34 S.L. v. The Russian Federation*, SCC Arbitration No. 24/2007 ("*Quasar v. Russia*"), Award of 20 July 2012, ¶¶ 21-23 (**Exh. CL-276**); R. Dolzer, C. Schreuer, *Principles of International Investment*

146. Burlington adds that the scholarly authorities relied on by Ecuador are similarly unpersuasive. Audley Sheppard’s advocacy for the abolition of *any* distinction between takings in the context of the ECT, disregards Article 31 VCLT and is unsupported by the text and structure of Article III(1) of the BIT, which makes clear that “the elements of a lawful expropriation are cumulative and of equal importance”.¹⁷⁰ And while Brownlie speaks of the failure to pay compensation as unlawful *sub modo*, he acknowledges that any expropriation in breach of a treaty provision is illegal *per se*.¹⁷¹
147. In any event, argues Burlington, Ecuador’s arguments are ultimately irrelevant, since the expropriation failed to satisfy *any* of the four criteria set out in Article III(1) of the BIT.¹⁷²
- i. First, it served no public purpose. The Tribunal found that Burlington had just cause to suspend operations. It also held that evidence did not support the contention that suspension created significant risks. Since Ecuador violated its own laws, no *legitimate* public purpose was served by the taking.¹⁷³
 - ii. Second, the taking was discriminatory.¹⁷⁴ Ecuador offered compensation to other oil companies, but not to Burlington.
 - iii. Third, Ecuador admits that it did not offer compensation.¹⁷⁵
 - iv. Fourth, no due process of law was followed, there being no reasonable advance notice, no fair hearing, and no unbiased and impartial adjudicator.¹⁷⁶ In fact,

Law (Oxford: Oxford University Press, 2nd ed. 2012) (“Dolzer & Schreuer”), p. 107 (**Exh. CL-348**).

¹⁶⁹ Reply, ¶ 49, referring to: *Case of Lithgow and Others v. The United Kingdom*, ECHR, Judgment of 8 July 1986, ¶ 112 (**Exh. CL-336**).

¹⁷⁰ Reply, ¶ 55, referring to: A. Sheppard, “The distinction between lawful and unlawful expropriation”, in *Investment Arbitration and the Energy Charter Treaty*, JurisNet LLC, 2006, p. 171 (**Exh. EL-259**). Burlington also argues that Sheppard is effectively re-pleading in his article a position that he had advocated on behalf of the Respondent in *ADC* and that was explicitly and forcefully rejected by the Tribunal in that case.

¹⁷¹ Reply, ¶ 55, note 65, referring to: Ian Brownlie, *The Rule Of Law In International Affairs: International Law At The Fiftieth Anniversary Of The United Nations* (The Hague: Martinus Nijhoff Publishers, 1998), p. 143 (**Exh. CL-154**).

¹⁷² Reply, ¶¶ 57-71.

¹⁷³ *Id.*, ¶ 61.

¹⁷⁴ *Id.*, ¶ 62, also referring to: *Fireman’s Fund Insurance Company v. United Mexican States*, ICSID Case No. ARB(AF)/02/1 (“*Fireman’s Fund v. Mexico*”), Award of 17 July 2006, ¶ 203 (**Exh. EL-81**).

¹⁷⁵ Reply, ¶ 63.

Ecuador, through President Correa, admitted that Decree 662 was a “pressuring” measure intended to force investors to abandon their contracts.¹⁷⁷ Ecuador also failed to abide by order on provisional measures set out in PO1 by persisting with the *coactiva* process, thus violating Burlington’s procedural rights.¹⁷⁸ According to Burlington, “[a]n expropriation effected through the violation of an investor’s procedural rights and flouting the orders of an international tribunal cannot be found consistent with due process of law”.¹⁷⁹

- v. Finally, the expropriation also breached the FET standard of Article II(3) of the BIT, which is expressly incorporated into Article III(1) of the BIT.¹⁸⁰ Specifically, Ecuador breached the FET standard by failing to respect due process, as well as through its conduct leading up to the expropriation, which “nullified by sovereign action Burlington’s core rights”,¹⁸¹ as recognized by the Tribunal. By finding that Burlington had “just cause” to suspend operations, the Tribunal “perforce” recognized that the taking “was linked with, and premised upon, State conduct” violating Article II(3) of the BIT.¹⁸² In particular, the refusal to absorb Law 42 and the seizures, “were necessary links in the chain that ultimately led to the formal expropriation”.¹⁸³

148. As a result, Burlington submits that the Tribunal should award compensation equivalent to “full reparation”, that is, compensation that fully eliminates the economic consequences of Ecuador’s unlawful acts. While Burlington agrees that this compensation should reflect the FMV of its lost investment,¹⁸⁴ it emphasizes

¹⁷⁶ *Id.*, ¶¶ 64-68, referring to: *ADC Affiliate Limited and ADC & ADMC Management Limited v. The Republic of Hungary*, ICSID Case No. ARB/03/16 (“*ADC v. Hungary*”), Award of 2 October 2006, ¶ 435 (**Exh. EL-26 and CL-101**).

¹⁷⁷ Reply, ¶ 66, also referring to: *Mohammad Ammar Al-Bahoul v. Republic of Tajikistan*, SCC Arbitration No. V (064/2008) (“*Al-Bahloul, c. Tajikistan*”), Final Award of 8 June 2010, ¶ 221 (**Exh. CL-361**).

¹⁷⁸ Reply, ¶ 67.

¹⁷⁹ *Ibid.*

¹⁸⁰ *Id.*, ¶ 68.

¹⁸¹ *Id.*, ¶ 69.

¹⁸² *Id.*, ¶ 70.

¹⁸³ *Ibid.*

¹⁸⁴ *Id.*, ¶¶ 19-20.

that what matters when compensating an unlawful expropriation is what the investor has lost as a result of the State's unlawful conduct.¹⁸⁵

2. Ecuador's position

149. Ecuador contends that the applicable standard of compensation is not found in customary international law, but in Article III(1) itself, which provides:

“Compensation shall be equivalent to the fair market value of the expropriated investment immediately before the expropriatory action was taken or became known, whichever is earlier; be calculated in a freely usable currency on the basis of the prevailing market rate of exchange at that time; be paid without delay; include interest at a commercially reasonable rate from the date of expropriation; be fully realizable and be freely transferable”.¹⁸⁶

150. As a result, in the Respondent's submission, Burlington is only entitled to the fair market value of its investment, valued on the date of expropriation, plus interest from the date of the taking.

151. Ecuador's primary case is that this standard applies to all expropriations, whether lawful or unlawful, and regardless of the breach giving rise to the unlawfulness.¹⁸⁷ Ecuador argues that Burlington is wrong to contend that the simple failure to pay compensation inexorably leads to a standard of compensation different from the one

¹⁸⁵ Tr. Quantum (Day 1) (ENG), 13:3-14:17 (Opening, Paulsson).

¹⁸⁶ Article III(1) of the Treaty.

¹⁸⁷ Ecuador relies on *Funnekotter v. Zimbabwe*, Award of 22 April 2009, ¶ 110 (**Exh. CL-150**); W. M. Reisman, R. D. Sloane, “Indirect Expropriation and Its Valuation in the BIT Generation”, 74 BYIL (2004), p. 133 (**Exh. CL-177**); A. Sheppard, “The distinction between lawful and unlawful expropriation”, in *Investment Arbitration and the Energy Charter Treaty*, JurisNet LLC, 2006, p. 196 (**Exh. EL-259**); *Wena Hotels Ltd. v. Arab Republic of Egypt*, ICSID Case No. ARB/98/4 (“*Wena v. Egypt*”), Award of 8 December 2000, ¶ 118 (**Exh. EL-200**); *Middle East Cement Shipping and Handling Co. S.A. v. Arab Republic of Egypt*, ICSID Case No. ARB/99/6 (“*Middle East Cement v. Egypt*”), Award of 12 April 2002, ¶ 107 (**Exh. CL-271**); *Técnicas Medioambientales Tecmed S.A. v. The United Mexican States*, ICSID Case No. ARB(AF)/00/2 (“*Tecmed v. Mexico*”), Award of 29 May 2003, ¶¶ 187, 189 (**Exh. EL-23**); *Antoine Goetz and others v. Republic of Burundi*, ICSID Case No. ARB/95/3 (“*Goetz v. Burundi*”), Award of 10 February 1999, ¶ 135 (**Exh. EL-22**); *Rumeli Telekom A.S. and Telsim Mobil Telekomunikasyon Hizmetleri A.S. v. Republic of Kazakhstan*, ICSID Case No. ARB/05/16, (“*Rumeli v. Kazakhstan*”), Decision of the ad hoc Committee of 25 March 2010, ¶¶ 785-793 (**Exh. CL-158**); *CME Czech Republic B.V. v. The Czech Republic*, (UNCITRAL), (“*CME v. Czech Republic*”), Partial Award of 13 September 2001, ¶ 497 (**Exh. CL-174**); *Sistem Mühendislik İnşaat Sanayi ve Ticaret A.Ş. v. Kyrgyz Republic*, ICSID Case No. ARB(AF)/06/1 (“*Sistem v. Kyrgyz Republic*”), Award of 9 September 2009, ¶ 156 (**Exh. EL-393**); *Metalclad Corporation v. The United Mexican States*, ICSID Case No. ARB (AF)/97/1 (“*Metalclad v. Mexico*”), Award of 30 August 2000, ¶ 118 (**Exh. CL-110**); *S.D. Myers, Inc. v. Canada*, UNCITRAL (NAFTA) (“*S.D. Myers v. Canada*”), Partial Award of 13 November 2000, ¶ 308 (**Exh. EL-127**); *Phillips Petroleum Company Iran v. The Islamic Republic of Iran and NIOC* (“*Phillips Petroleum v. Iran*”), Award No. 425-39-2 of 29 June 1989, ¶ 109 (**Exh. CL-157**).

in the BIT. Burlington’s cited authorities do not support that proposition, nor does the text of the Treaty lead to such a result. As *Funnekotter* makes clear, case law “is not perfectly clear” as to whether the treaty standard of compensation does or does not apply in cases of unlawful expropriation, “particularly in case of lack of compensation”.¹⁸⁸ The Iran-US Claims Tribunal, and in particular the views expressed by Judge Brower, show that the treaty standard, not customary international law, was applied in cases of expropriation that was lawful save for the lack of compensation.¹⁸⁹ Audley Sheppard has opined that “in the absence of clear language to the contrary”, the treaty standard is applicable in all cases of expropriation, whether lawful or not.¹⁹⁰ This position has been adopted in a “long line of cases”, such as *Wena*, *Middle East Cement*, *Tecmed*, *Goetz*, *Rumeli*, *CME*, *Sistem* in a BIT context (where there was no material difference between the BIT language in those cases and here), and *Metalclad* or *SD Myers* in the NAFTA context.¹⁹¹

152. Quoting Judge Brower’s Dissenting Opinion in *Amoco*, Ecuador argues that to resort to customary international law would be “to ignore the fact that the State Parties to the Treaty [...] have carefully negotiated an express commitment in that Treaty precisely in order to avoid to the maximum extent possible any future reference to customary international law”.¹⁹² Relying on *Phillips Petroleum*, Ecuador submits that “where the Contracting Parties have stipulated a standard of compensation in their Treaty, something more is required to be found in the text of the Treaty itself in order to ignore the application of that carefully stipulated and negotiated commitment between the State Parties”.¹⁹³ In this case, “[t]he text of the Treaty reveals no test by

¹⁸⁸ Rejoinder, ¶ 463, referring to: *Funnekotter v. Zimbabwe*, Award of 22 April 2009, ¶ 110 (**Exh. CL-150**); W. M. Reisman, R. D. Sloane, “Indirect Expropriation and Its Valuation in the BIT Generation”, 74 *BYIL* (2004), p. 133 (**Exh. CL-177**).

¹⁸⁹ Rejoinder, ¶¶ 466-479.

¹⁹⁰ *Id.*, ¶ 474, referring to: A. Sheppard, “The distinction between lawful and unlawful expropriation”, in *Investment Arbitration and the Energy Charter Treaty*, JurisNet LLC, 2006, p. 196 (**Exh. EL-259**).

¹⁹¹ Rejoinder, ¶¶ 475-578, referring to: *Wena v. Egypt*, Award of 8 December 2000, ¶ 118 (**Exh. EL-200**); *Middle East Cement v. Egypt*, Award of 12 April 2002, ¶ 107 (**Exh. CL-271**); *Tecmed v. Mexico*, Award of 29 May 2003, ¶¶ 187, 189 (**Exh. EL-23**); *Goetz v. Burundi*, Award of 10 February 1999 ¶ 135 (**Exh. EL-22**); *Rumeli v. Kazakhstan*, Award of 29 July 2008, ¶¶ 785-793 (**Exh. CL-158**); *CME v. Czech Republic*, Award of 14 March 2003 ¶ 497 (**Exh. CL-174**); *Sistem v. Kyrgyz Republic*, Award of 8 September 2009, ¶ 156 (**Exh. EL-393**); *Metalclad v. Mexico*, Award of 30 August 2000, ¶ 118 (**Exh. CL-110**); *S.D. Myers v. Canada*, Partial Award of 13 November 2000, ¶ 308 (**Exh. EL-127**).

¹⁹² Tr. Quantum (Day 1) (ENG), 249:2-8 (Opening, Silva Romero).

¹⁹³ Tr. Quantum (Day 1) (ENG), 249:19-250:2 (Opening, Silva Romero).

which to limit the application of the Article III(1) standard of compensation to some but not all unlawful expropriations”.¹⁹⁴ Burlington is asking the Tribunal to rewrite the BIT.¹⁹⁵

153. Ecuador contends that, “at a minimum, Article III(1) standard applies to expropriations which, having complied with the conduct requirements of the Treaty, were unaccompanied by compensation”, as is the case here.¹⁹⁶ This is evident from the requirement in Article III(1) that interest be paid from the date of the expropriation: if the treaty standard did not apply to expropriations lacking compensation, then there would have been no need to stipulate that compensation should include interest from the date of the expropriation. “It follows that, even if, *quod non*, Burlington succeeds in convincing the Tribunal to revisit its findings on liability and hold that the purported taking of Burlington’s investment was unlawful for reasons other than because it was unaccompanied by prompt, adequate and effective compensation, the Treaty standard of compensation would still apply to the exclusion of customary international law”.¹⁹⁷
154. Alternatively, Ecuador submits that customary international law leads to the same result. Relying on *Chorzów*, Ecuador contends that “[t]he remedial response to an unlawful taking differs under customary international law depending on whether the taking would have been lawful ‘but for’ the payment of compensation”.¹⁹⁸ Where (as here) an expropriation would have been lawful if compensation had been paid, the State’s obligation is “limited to the value of the undertaking at the moment of the dispossession, plus interest to the day of payment”.¹⁹⁹
155. Ecuador denies that the expropriation can be characterized as unlawful for other violations of Article III(1), as Burlington alleges. First, the Tribunal has found that it has no *ratione materiae* jurisdiction to address Burlington’s claim based on fair and equitable treatment, arbitrary impairment and full protection and security, which are premised on the legal notions of “public purpose”, “discrimination”, “due process of

¹⁹⁴ Rejoinder, ¶ 488.

¹⁹⁵ *Id.*, ¶¶ 484-485.

¹⁹⁶ *Id.*, ¶ 487.

¹⁹⁷ *Id.*, ¶ 491.

¹⁹⁸ CM, ¶ 353.

¹⁹⁹ *Id.*, ¶ 357; Tr. Quantum (Day 1) (ENG), 253:3-6 (Opening, Silva Romero); Rejoinder, ¶ 498, citing: *Chorzów*, p. 46 (**Exh. CL-102**).

law”, “fairness” and “equity”. Burlington cannot now reintroduce these claims through the back door.²⁰⁰

156. Second, the Tribunal has already dismissed Burlington’s allegations. In the Decision on Liability, the Tribunal considered the same allegations that Burlington now seeks to repeat, but declared that Ecuador’s purported expropriation was unlawful solely on the basis of lack of compensation. This means that the Tribunal did not accept Burlington’s allegations that the expropriation had breached other conditions of Article III(1). No other conclusion can be drawn from the Tribunal’s silence. The dispositive section of the Decision on Liability confirms that Burlington’s other allegations regarding the unlawfulness of the expropriation were dismissed.²⁰¹
157. Third, Burlington has not filed a motion for reconsideration on these counts.
158. Lastly, if, *par impossible*, the Tribunal should decide to enter into the merits of Burlington’s alternative case, it should dismiss it for the following reasons:
- i. Ecuador has demonstrated through its Motion for Reconsideration that under Ecuadorian law it was entitled to take over Blocks 7 and 21, given the risks identified in the Consortium’s Suspension Plan (among other documents).²⁰²
 - ii. There is no evidence on record to support the allegation that the expropriation was discriminatory. The other companies referred to by Burlington as having received compensation from Ecuador were not in the same circumstances as Burlington, in particular because they accepted to renegotiate their oil contracts, migrate them to service contracts and pay Law 42 taxes, whereas Burlington did not.²⁰³
 - iii. While it is undisputed that Burlington has not received compensation for Ecuador’s purported expropriation, it is also undisputed that, had Burlington not torpedoed the Consortium’s negotiations with Ecuador, the Consortium would have entered into transitory agreements with the State and eventually either continued to operate the Blocks under service contracts, or discussed with the State the liquidation of the PSCs, which under Ecuador’s new hydrocarbon legal framework would have led to compensation. That being said, Ecuador

²⁰⁰ Rejoinder, ¶¶ 386-387.

²⁰¹ *Id.*, ¶¶ 388-391, citing: DoL, ¶¶ 541-545 and 546 (C) 1 and 2.

²⁰² Rejoinder, ¶ 394, referring to: CM, ¶¶ 88-167.

²⁰³ Rejoinder, ¶¶ 395-396.

emphasizes that Burlington is owed no compensation in accordance with Article 75 of the Hydrocarbons Law and the Caducidad Decrees.²⁰⁴

- iv. Finally, there is no evidence on record showing that Ecuador's purported expropriation was carried out in violation of due process or any of the elements in Article II(3). It is untenable for Burlington to have abandoned the oilfields and then allege that the State, which had no choice but to intervene in the Blocks, did not follow a "process of law". In any event Ecuador followed the procedure for emergency situations.²⁰⁵ According to Ecuador, Burlington also ignores five relevant facts:²⁰⁶
- a. The Consortium (as recognized by the *Perenco* tribunal) failed to provide the State with the economic study required for the tax renegotiation clauses to be triggered. It was thus the Consortium's own fault if the Parties did not follow the contractual procedure foreseen in Clauses 11.12 and 15.2 of the PSC for Block 7 or Clauses 11.7 and 15.2 of the PSC for Block 21.²⁰⁷
 - b. Ecuador considered, in accordance with the ICSID Convention, that the provisional measures adopted in PO1 were "mere recommendations and, hence, not binding upon the State".²⁰⁸ According to Ecuador, "[n]o breach of due process of law may occur for not following some recommendations. If, however, those provisional measures were to be considered binding upon Ecuador (*quod non*), their breach does not entail a violation of any of the elements (right of defense, equality of the parties, etc.) forming the due process of law principle".²⁰⁹
 - c. Ecuador invited the Consortium several times to resume operations in the Blocks, without success. Burlington's reaction was disproportionate in the circumstances.²¹⁰

204 *Id.*, ¶ 397.

205 *Id.*, ¶ 398.

206 *Ibid.*

207 *Ibid.*

208 *Ibid.*

209 *Ibid.*

210 *Ibid.*

- d. The internal rate of return offered by Ecuador for the service contracts was the same as the one implied in the economy of the PSCs,²¹¹ and
- e. If due process of law was violated by Ecuador's purported expropriation, Burlington was entitled to request remedies from Ecuadorian administrative courts, which it chose not to do.²¹²

159. For these reasons, Ecuador argues that "Burlington's renewed attempt to circumvent the Tribunal's jurisdiction and findings on liability should be given short shrift".²¹³

3. Analysis

160. In the Tribunal's view, the appropriate standard of compensation in this case is the customary international law standard of full reparation. Article III(1) only describes the conditions under which an expropriation is considered lawful; it does not set out the standard of compensation for expropriations resulting from breaches of the Treaty. This conclusion has been reaffirmed in a number of cases where the treaty in question had similar language.²¹⁴ The authorities cited by Ecuador in this regard are unpersuasive: it is clear in this case that the Treaty provides the primary rules of international law, i.e., the State's substantive obligations, and not the secondary rules, i.e., those that determine the State's responsibility for breach of those

²¹¹ *Ibid.*

²¹² *Ibid.*

²¹³ *Id.*, ¶ 399.

²¹⁴ See, for instance: *Siemens v. Argentina*, Award of 6 February 2007, ¶ 349 (**Exh. C-79**) ("The law applicable to the determination of compensation for a breach of such treaty obligations is customary international law. The Treaty itself only provides for compensation for expropriation in accordance with the terms of the Treaty"). See also: *ADC v. Hungary*, Award of 2 October 2006, ¶ 483 (**Exh. CL-101**) ("Since the BIT does not contain any *lex specialis* rules that govern the issue of the standard for assessing damages in the case of an unlawful expropriation, the Tribunal is required to apply the default standard contained in customary international law in the present case"); *Waguih Elie George Siag and Clorinda Vecchi v. Arab Republic of Egypt*, ICSID Case No. ARB/05/15 ("*Siag v. Egypt*"), Award of 1 June 2009, ¶ 540 (**Exh. CL-163**); *Saipem S.p.A. v. People's Republic of Bangladesh*, ICSID Case No. ARB/05/7 ("*Saipem v. Bangladesh*"), Award of 30 June 2009, ¶ 201 (**Exh. CL-159**); *Unglaube v. Costa Rica*, Award of 16 May 2012, ¶ 306 (**Exh. CL-243**); *Azurix Corporation v. The Argentine Republic*, ICSID Case No. ARB/01/12 ("*Azurix v. Argentina*"), Annulment Decision of 1 September 2009, ¶ 324 and note 254 (**Exh. CL-244**); *Vivendi v. Argentina II*, Award of 20 August 2007, ¶¶ 8.2.3–8.2.7 (**Exh. CL-123**); *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile*, ICSID Case No. ARB/01/7 ("*MTD v. Chile*"), Award of 25 May 2004, ¶ 238 (**Exh. CL-92**); *Quiborax S.A. and Non Metallic Minerals S.A. v. Plurinational State of Bolivia*, ICSID Case No. ARB/06/2 ("*Quiborax v. Bolivia*"), Award of 16 September 2015, ¶ 326.

obligations. In the absence of such a secondary rule in the Treaty, the Tribunal must turn to customary international law.

161. However, during the quantum phase, Ecuador has argued that the standard of compensation under customary international law is different for expropriations that are unlawful solely as a result of the failure to pay compensation as opposed to expropriations that are unlawful on other grounds.²¹⁵ This is a question that was not pleaded during the liability phase and that the Decision on Liability did not address. As the conditions set out in Article III(1) of the Treaty are cumulative, in the Decision on Liability the Tribunal concluded its analysis of the lawfulness of the expropriation after having found that Ecuador had breached one of those conditions (specifically, the requirement to pay or offer compensation). This was done in the interest of procedural efficiency, not because Ecuador's failure to pay compensation was necessarily the only breach of Article III(1). At that stage, the Parties' submissions did not require the Tribunal to proceed any further with its legality analysis. This being said, given Ecuador's argument during this phase according to which the nature of the unlawfulness of an expropriation impacts the quantum of damages, the Tribunal has re-examined the Parties' arguments and evidence and concludes that Ecuador failed to comply with other conditions set by Article III(1) for a lawful expropriation.
162. Doing so, contrary to Ecuador's suggestion, the Tribunal is not contradicting or reconsidering the Decision on Liability. In that Decision, the Tribunal declared that "Ecuador breached Article III of the Treaty by unlawfully expropriating Burlington's investment in Blocks 7 and 21 as of 30 August 2009";²¹⁶ it did not declare that Ecuador's expropriation was unlawful solely on the basis of lack of compensation. Likewise, the Tribunal declared that "all different or contrary requests for relief in connection with Ecuador's liability are dismissed";²¹⁷ it did not dismiss Burlington's allegations that the expropriation was unlawful also due to other reasons. The Tribunal's finding that the expropriation was unlawful because it did not meet one of the conditions of Article III(1) of the Treaty was sufficient for its Decision on Liability. Whether or not Ecuador breached the remaining conditions of Article III(1) is now raised by Ecuador as a factor allegedly relevant to establish the standard of

²¹⁵ The Tribunal understands that this is Ecuador's alternative argument (its primary case being that the treaty standard should apply).

²¹⁶ DoL, ¶ 546(C)(1).

²¹⁷ *Id.*, ¶ 546(C)(2).

compensation, which is a question for the quantum phase of the proceedings, as is shown by the fact that the Parties have submitted extensive arguments on this subject in this phase. The Tribunal now turns to that question.

163. Article III(1) of the Treaty provides in relevant part as follows:

“Investments shall not be expropriated or nationalized either directly or indirectly through measures tantamount to expropriation or nationalization (“expropriation”) except: for a public purpose; in a nondiscriminatory manner; upon payment of prompt, adequate and effective compensation; and in accordance with due process of law and the general principles of treatment provided for in Article II(3)”.

164. As this language shows, Article III(1) expressly incorporates the requirement that, to be lawful, an expropriation must be carried out in accordance with the general principles of treatment provided in Article II(3) of the Treaty, which reads as follows:

- “(a) Investment shall at all times be accorded fair and equitable treatment, shall enjoy full protection and security and shall in no case be accorded treatment less than that required by international law.
- (b) Neither Party shall in any way impair by arbitrary or discriminatory measures the management, operation, maintenance, use, enjoyment, acquisition, expansion, or disposal of investments. For purposes of dispute resolution under Articles VI and VII, a measure may be arbitrary or discriminatory notwithstanding the fact that a party has had or has exercised the opportunity to review such measure in the courts or administrative tribunals of a Party.
- (c) Each Party shall observe any obligation it may have entered into with regard to investments”.

165. In the Tribunal’s view, the combination of these two provisions means that, to be lawful, an expropriation must be carried out (i) for a public purpose; (ii) in a non-discriminatory manner; (iii) upon payment of prompt, adequate and effective compensation, (iv) in accordance with due process of law; (v) in accordance with the principle of fair and equitable treatment, including in particular the requirement that the expropriation not be arbitrary²¹⁸ and that it be conducted in accordance with the minimum standard of treatment; (vi) in accordance with the principle of full protection and security, and (viii) without breaching obligations it may have entered with regard to investments.

²¹⁸ In the Tribunal’s view, the prohibition of arbitrary conduct is already included in the fair and equitable treatment standard.

166. The Tribunal rejects Ecuador’s argument that it has no jurisdiction to determine whether an expropriation was carried out in accordance with the general principles provided for in Article II(3). It is true that, in its Decision on Jurisdiction, the Tribunal held that it had no jurisdiction over Burlington’s separate fair and equitable treatment claim, arbitrary impairment claim, and full protection and security claim.²¹⁹ However, it has upheld jurisdiction over Burlington’s expropriation claim, and the Treaty standard expressly provides that, to be lawful, an expropriation must be carried out, *inter alia*, in accordance with the general principles contained in Article II(3). To ignore this would contradict the plain language of Article III(1) and render the phrase “in accordance with [...] the general principles of treatment provided for in Article II(3)” without *effet utile*. This does not mean that Burlington may revive FET claims through the back door. The Tribunal’s analysis is limited to determining whether the expropriation (which the Tribunal has found occurred when the physical takeover of the Blocks became permanent)²²⁰ was carried out in accordance with these general principles.
167. It arises from the record underlying the Decision on Liability and this Award that the expropriation was not carried out in accordance with the general principles of treatment provided in Article II(3). Indeed, the Tribunal finds that the expropriation was not carried out in accordance with the principle of fair and equitable treatment, which is a condition of a lawful expropriation under Article III(1) referring to Article II(3), even under a stringent interpretation of that standard.
168. The tribunal in *Waste Management II* defined the minimum standard of treatment under customary international law (which provides the floor for the fair and equitable treatment standard) as follows:
- “[T]he minimum standard of treatment of fair and equitable treatment is infringed by conduct attributable to the State and harmful to the claimant if the conduct is arbitrary, grossly unfair, unjust or idiosyncratic, is discriminatory and exposes the claimant to sectional or racial prejudice, or involves a lack of due process leading to an outcome which offends judicial propriety—as might be the case with a manifest failure of natural justice in judicial proceedings or a complete lack of transparency and candour in an administrative process”.²²¹

²¹⁹ DoJ, ¶ 342(D).

²²⁰ DoL, ¶¶ 530-537.

²²¹ *Waste Management v. Mexico II*, Award of 30 April 2004, ¶ 98 (**Exh. CL-179**).

169. Having said that, *Mondev* clarified that “[t]o the modern eye, what is unfair or inequitable need not equate with the outrageous or the egregious” and that “a state may treat foreign investment unfairly and inequitably without necessarily acting in bad faith”.²²² It also observed that “[a] judgment of what is fair and equitable cannot be reached in the abstract; it must depend on the facts of the particular case”.²²³ The Tribunal concurs.
170. Burlington argues that “[u]nder any reading of [the FET] standard, a state’s use of its sovereign power to expropriate an investment in retribution for an investor’s refusal to surrender its rights in specific legal instruments designed for, and afforded to, the investor by the state is certainly a violation thereof”.²²⁴ The Tribunal agrees. Indeed, after reviewing the totality of the circumstances that surrounded the takeover of the Blocks, the Tribunal comes to the conclusion that Ecuador’s permanent takeover of the Blocks, which it has found to have been without justification in the law and in the facts,²²⁵ was the final step in a chain of harassment measures directed to forcing Burlington to migrate the PSCs into service contracts or abandon them altogether.
171. As recognized in *Al-Bahloul v. Tajikistan*, the obligation to provide fair and equitable treatment includes “[t]he obligation not to exercise unreasonable pressure on an investor to reach certain goals”.²²⁶ While that tribunal considered that such conduct constituted a violation of due process (which is one aspect of the fair and equitable treatment standard), other tribunals have considered that such harassment violated the fair and equitable treatment or minimum standards of treatment more generally. For instance, the *Tecmed* tribunal found that the state agency’s denial of a license extension was “a means to pressure [the investor] and force it to assume a similar operation in another site, bearing the costs and risks of a new business”, and that “[u]nder such circumstances, such pressure involve[d] forms of coercion that may be considered inconsistent with the fair and equitable treatment” standard.²²⁷

²²² *Mondev International Ltd v. United States of America*, ICSID Case No. ARB(AF)/99/2 (“*Mondev v. United States*”), Award of 11 October 2002, ¶ 116 (**Exh. CL-387**).

²²³ *Id.*, ¶ 118.

²²⁴ Supp. Mem. on Liability, ¶ 108.

²²⁵ See: DoL, ¶ 529.

²²⁶ *Al-Bahloul v. Tajikistan*, Partial Award on Jurisdiction and Liability of 2 September 2009, ¶ 221 (**Exh. CL-361**). The Tribunal notes that this tribunal considered this to be a form of violation of due process.

²²⁷ *Tecmed v. Mexico*, Award of 29 May 2003, ¶ 163 (**Exh. EL-23**).

172. Here, the record shows that Ecuador’s takeover of the Blocks was the final step in a series of acts of harassment directed against Burlington in order to force it to renegotiate the PSCs. As reported in the Ecuadorian press, President Correa stated that Decree 662, which increased the Law 42 dues to 99%, “was only a ‘pressuring measure’ for the parties to sit down to negotiate”.²²⁸ Ecuador has not disputed this. Indeed, in the context of its analysis of whether Law 42 was expropriatory, the Tribunal noted that “Ecuador argue[d] that Law 42 was intended to prompt oil companies to negotiate with the State”.²²⁹ It reasoned that “[w]hile this goal may have been related to Ecuador’s view that the allocation of oil revenues under the PSCs was unfair, it provides no ground to disregard Burlington’s rights under the PSCs”,²³⁰ adding that “Ecuador appear[ed] to have passed Law 42 without intending to apply the correction factor required by the tax absorption clauses of the PSCs”, which “len[t] credence to Burlington’s allegation that Law 42 was intended to force Burlington to abdicate its rights under the PSCs”.²³¹
173. In this context, it bears repeating that the Tribunal has found that “by enacting Law 42 and then refusing to absorb its effect pursuant to the tax absorption clauses, Ecuador has in effect nullified Burlington’s right to a correction factor by preventing the exercise of this right. Moreover, this nullification was made possible through the use of Ecuador’s sovereign powers. While both parties to the PSCs may invoke the tax absorption clauses, only Ecuador, as a sovereign State, may increase taxes and disregard this clause”.²³² While this conduct may not have had an expropriatory effect, it undoubtedly had an impact on Burlington’s business. Seen together with President Correa’s statements quoted above, it confirms that Ecuador was using its sovereign powers to pressure Burlington into negotiating.
174. While the Tribunal has dismissed the argument of a creeping expropriation, it did so because the physical takeover of the Blocks constituted an expropriation in and of itself.²³³ That does not preclude the Tribunal from assessing whether the expropriation was carried out in accordance with fair and equitable treatment. This assessment cannot take place in a vacuum; it involves reviewing the totality of the

²²⁸ **Exh. C-182.**

²²⁹ DoL, ¶ 455.

²³⁰ *Ibid.*

²³¹ *Ibid.*

²³² DoL, ¶ 418.

²³³ *Id.*, ¶ 538.

facts and circumstances surrounding the expropriation. Having done so, the Tribunal holds that Ecuador's takeover of the Blocks was carried out in breach of the principle of fair and equitable treatment.

175. The Tribunal further notes that none of Ecuador's additional arguments justifies the conduct in breach of FET in the course of the expropriation:
- i. Ecuador first argues that (as recognized by the *Perenco* tribunal), the Consortium failed to provide the State with the economic study required for the tax renegotiation clauses to be triggered and, as a result, it was the Consortium's own fault if the Parties did not follow the contractual procedure foreseen in the PSCs. The findings of the *Perenco* tribunal are not binding on the present Tribunal, but even if they were, the fact that the contractual procedure for the application of the correction factor was not triggered would not justify the adoption of pressuring measures to force an investor to renegotiate or give up its investment.
 - ii. Ecuador's arguments with respect to its failure to comply with the Tribunal's provisional measures are irrelevant in this context, as indeed are Burlington's. While Ecuador's failure to comply with the Tribunal's provisional measures could have breached Burlington's procedural rights, it does not in itself involve a violation of due process with respect to the expropriation.
 - iii. As to Ecuador's allegation that the Consortium refused to resume operations despite Ecuador's invitation to do so, in its Decision on Liability, the Tribunal found that Minister Pinto's letter of 19 August 2009, in which Ecuador urged the Consortium to resume operations within a maximum period of 10 days, was "inconsistent with Burlington's right to suspend operations with 'just cause' on account of Ecuador's breaches of the PSCs and of [the] provisional measures order" and, as a result, "Burlington had no obligation to accept Ecuador's demand".²³⁴ In any event, Ecuador's account is incorrect: as recorded in the Decision on Liability, on 28 August 2009, the Consortium answered that it "would be prepared to resume" operations provided that Ecuador brought itself into compliance with its legal and contractual obligations, and there is no

²³⁴ DoL, ¶ 533, referring to: **Exh. C-223**. More specifically, the Tribunal found that "[a]s Ecuador had by that time neither cured those breaches nor expressed an intent to do so, Burlington still had 'just cause' to suspend operations. In other words, the *status quo* at the time of this demand was no different from that which had given rise to Burlington's right to suspend operations with 'just cause' to begin with". DoL, ¶ 533.

evidence that Ecuador responded to this letter or further communicated with the Consortium in this regard.²³⁵

iv. Whether the internal rate of return offered by Ecuador for the service contracts was the same as that implied in the economy of the PSCs is irrelevant as regards fair and equitable treatment or due process.

176. The Tribunal thus reaches the conclusion that the expropriation was unlawful not only for failure to pay compensation. As a result, it can dispense with determining whether the standard of compensation under customary international law is different for expropriations that are unlawful solely as a result of the failure to pay compensation as opposed to expropriations that are unlawful on other grounds.

177. The appropriate standard of compensation is thus the customary international law standard of full reparation set out in Article 31 of the ILC Articles, applied by analogy. While Part Two of the ILC Articles, which sets out the legal consequences of internationally wrongful acts and to which Article 31 belongs, is not applicable to the international responsibility of States vis-à-vis non-States,²³⁶ it is generally accepted that the ILC Articles can be transposed to the context of investor-State disputes.²³⁷ ILC Article 31 provides that “[t]he responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act”. Pursuant to this principle, first articulated in the landmark *Chorzów* case, “reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed”.²³⁸

²³⁵ DoL, ¶ 534, referring to: **Exh. C-224**.

²³⁶ See: ILC Article 33(2), and commentary (3) to Article 28.

²³⁷ See, for instance: *Ioan Micula, Viorel Micula, S.C. European Food S.A, S.C. Starmill S.R.L. and S.C. Multipack S.R.L. v. Romania*, ICSID Case No. ARB/05/20 (“*Micula v. Romania*”), Final Award of 11 December 2013, note 172 (**Exh. EL-248**); *Vestey v. Venezuela*, Award of 15 April 2016, ¶ 326.

²³⁸ *Chorzów*, p. 47 (**Exh. CL-102**). The PCIJ added that “Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of it – such are the principles which should serve to determine the amount of compensation due for an act contrary to international law”. *Chorzów*, p. 47. The PCIJ also noted that “[t]he calculation of a lump sum referred to above [the value of the undertaking] concerns only the *Chorzów* undertaking, and does not exclude the possibility of taking into account other damage which the Companies may have sustained owing to dispossession, but which is outside the undertaking itself”. *Chorzów*, p. 49. See also: *Amoco International Finance Corp. v. The Republic of Iran*, Case No. 56 (“*Amoco v. Iran*”), Partial Award No. ITL 310-56-3 of 14 July 1987, 15 IRAN U.S. C.T.R 189,

C. CATEGORIES OF COMPENSABLE LOSSES

178. Applying the relevant standard of compensation, Burlington is entitled to full reparation for the losses resulting from Ecuador's unlawful expropriation of its investment.
179. As anticipated in Section A above, Burlington claims three categories of losses: (i) past Law 42 dues paid or seized (what the Claimant's expert Compass Lexecon calls "pre-expropriation tax debts"); (ii) its lost profits under the PSCs (what Compass Lexecon calls the "value of the operating assets"), and (iii) the lost opportunity to extend the Block 7 PSC (what Compass Lexecon calls the "value of Block 7 extension").
180. The Tribunal will first determine whether Burlington is entitled to each of the heads of damages it seeks (this Section B), starting with the past Law 42 dues (Section 1 below), followed by the value of Burlington's operating assets (Section 2 below), and ending with Burlington's claim for the lost opportunity to extend the Block 7 PSC (Section 3 below). If it determines that any of these categories of claims constitutes a compensable loss, it will discuss its valuation in Section C below.

1. Past Law 42 dues

1.1 Burlington's position

181. Burlington claims that it is entitled "to recover damages equal to all Law 42 amounts paid under protest or extracted in kind through the *coactiva* seizures",²³⁹ which Burlington characterizes as "lost contract rights" and Compass Lexecon refers to as "pre-expropriation tax debts". In the Updated Model, using Compass Lexecon's assumptions this claim is quantified at **USD 298,639,960**, including pre-award interest. Burlington puts forth five main arguments in this respect.

Concurring Opinion of Judge Brower at ¶ 18 (**Exh. CL-173**) ("In my view *Chorzów Factory* presents a simple scheme: If an expropriation is lawful, the deprived party is to be awarded damages equal to the 'value of the undertaking' which it has lost, including any potential future profits, as of the date of the taking; in the case of an unlawful taking, however, either the injured party is to be actually restored to enjoyment of his property, or, should this be impossible or impractical, he is to be awarded damages equal to the greater of (i) the value of the undertaking at the date of loss (again including lost profits), judged on the basis of information available as of that date, and (ii) its value (likewise including lost profits) as shown by its probable performance subsequent to the date of loss and prior to the date of the award, based on actual post taking experience, plus (in either alternative) any consequential damage").

²³⁹ Reply, ¶ 108.

182. First, Burlington contends that these lost contract rights were assets that were expropriated and, as such, for which it must be compensated. According to Burlington, when Ecuador expropriated its investment, it “took everything of value relating to Burlington’s investments in Blocks 7 and 21, including Burlington’s contractual rights”.²⁴⁰ In particular, says Burlington, Ecuador took its right under the PSCs to have a correction factor applied to absorb the effects of Law 42, a right that the Tribunal found to be “part and parcel” of Burlington’s investment.²⁴¹ For Burlington, this right was a protection against both past and future taxes. As a result, “by unlawfully expropriating the PSCs, Ecuador not only deprived Burlington of its future rights under those contracts, *it also deprived Burlington of its acquired rights – the right to be indemnified by Ecuador for the sums paid and seized under Law 42*”.²⁴² Burlington adds that “Ecuador cannot be permitted to wipe out its own debts by unlawfully expropriating the contracts pursuant to which those debts are owed”.²⁴³
183. According to Burlington, the Decision on Liability confirms that past Law 42 dues were expropriated. The Decision on Liability found that the investment had to be viewed “as a whole” and not as discrete parts. It also found that the entire investment had been expropriated, as it did not specify that there were parts of the investment that were not taken. As a result, the Tribunal must now value that investment “as a whole”.²⁴⁴
184. The Decision on Liability also confirms, says Burlington, that the Claimant lost everything that constituted its investment, including all of its rights related to the investment. The Tribunal expressly found that “[w]hile Burlington still had its subsidiary’s rights in the PSCs as well as the subsidiary’s shares, these rights and shares had no value without possession of the oilfields and access to the oil”, and that “[e]ven though these contract rights were still nominally in force after the takeover [...], they were bereft of any real value from the moment Burlington permanently lost effective use and control of its investment”, which according to the

²⁴⁰ Mem., ¶ 93.

²⁴¹ *Id.*, ¶ 93, citing: DoL, ¶ 405.

²⁴² Mem., ¶ 94 (emphasis in original).

²⁴³ *Id.*, ¶ 94.

²⁴⁴ Tr. Quantum (Day 5) (ENG), 1386:11-1388:18 (Closing, Coriell), referring to: DoL, ¶ 257.

Tribunal occurred when Ecuador entered the oilfields and physically occupied the Blocks, a situation that became permanent on 30 August 2009.²⁴⁵

185. In addition, Burlington continues, the Decision on Liability confirms that what was expropriated was “not a simple accrued debt”, but “a contractual adjustment that requires a contractual mechanism”.²⁴⁶ Specifically, when discussing the content of the tax absorption clause and the impact of Law 42 on the PSCs, the Tribunal considered that the parties jointly were required to calculate the readjustment and that “Law 42 trigger[ed] the contractual mechanism applicable in the event of a modification to the tax system”, that is, an administrative procedure providing for “the mandatory application of a correction factor”, which Burlington argues is a contractual mechanism that arose from and depended on the existence of the PSC.²⁴⁷ Ecuador was required to apply this contractual mechanism but failed to do so, and so breached the PSC. On the date of the expropriation, Ecuador was still under an obligation to apply this mechanism. However, when the PSCs were expropriated, the means by which Burlington could enforce that mechanism was also expropriated. For Burlington, “the expropriation and the failure to apply the correction factor and the contractual mechanism to get it were inextricably linked”.²⁴⁸ The right to a mechanism to obtain that correction factor was “wrapped up” in the investment in and the operation of the Blocks, which were lost with the seizure of the oilfields on 30 August 2009. As found by the Tribunal, the right remained only “nominally” in existence (given that *caducidad* would not be declared until almost one year later), “bereft of any real value”, as the means to obtain the “mandatory” correction was gone. Although Burlington may not have needed access to the oil to obtain its past Law 42 payments, it certainly needed the PSCs themselves.²⁴⁹
186. As a result, the Claimant submits that its claim for indemnification for past Law 42 dues forms part of the expropriated investment. This was the approach taken by the tribunal in *Tidewater v. Venezuela*, which held that, because Venezuela had expropriated the claimant’s enterprise “as a whole, by assuming control in fact of its

²⁴⁵ Tr. Quantum (Day 5) (ENG), 1388:19-1395:14 (Closing, Coriell), referring to: DoL, ¶¶ 530-531, 536.

²⁴⁶ Tr. Quantum (Day 5) (ENG), 1392:17-19 (Closing, Coriell).

²⁴⁷ Tr. Quantum (Day 5) (ENG), 1392:1-1393:5 (Closing, Coriell), referring to: DoL, ¶¶ 412, 415.

²⁴⁸ Tr. Quantum (Day 5) (ENG), 1393:6-1394:12 (Closing, Coriell).

²⁴⁹ Tr. Quantum (Day 5) (ENG), 1394:22-1396:16 (Closing, Coriell).

business and all of its assets”, “the investment that was lost must include outstanding unpaid accounts receivable”.²⁵⁰

187. In any event, the Claimant contends that “international law likewise requires that the value of Burlington’s ‘investment’ includes the value of any accrued payments that Ecuador owed to Burlington as of the date of expropriation, the right to which was seized along with the Blocks”.²⁵¹ Relying on *Tidewater, Siemens, and Tippets*, among other decisions, Burlington argues that international tribunals routinely compensate expropriated parties for unpaid services or accrued debts. The contrary would in fact create perverse incentives as States would be permitted to wipe out accrued contractual liabilities through expropriation.²⁵² Likewise, relying on *Phillips Petroleum, American International Group and Azurix*, Burlington argues that tribunals exclude from the calculation of compensation any diminution of value resulting from prior wrongful acts by the State related to the expropriation or to the enterprise at issue.²⁵³
188. Burlington’s second argument in favor of compensation for past Law 42 dues is that since its contractual rights were nullified by sovereign action, the effects of Ecuador’s conduct must be wiped out. Burlington recalls that in the Decision on Jurisdiction the Tribunal held that a breach of the fair and equitable treatment standard could only occur if Ecuador had acted in its sovereign capacity.²⁵⁴ Then, in its Decision on Liability, the Tribunal held that Ecuador’s failure to honor the tax absorption clause was a measure taken in the exercise of its sovereign powers.²⁵⁵ Accordingly, the failure to absorb the effects of Law 42 was “an internationally wrongful act involving Ecuador’s sovereign power”.²⁵⁶

²⁵⁰ C-PHB, ¶ 91, citing: *Tidewater Investment SRL and Tidewater Caribe, C.A. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/10/5 (“*Tidewater v. Venezuela*”), Award of March 13, 2015, ¶ 175 (**Exh. EL-422**).

²⁵¹ C-PHB, ¶ 98.

²⁵² Mem., ¶¶ 96-100; C-PHB, ¶¶ 100-103.

²⁵³ C-PHB, ¶¶ 104-108; Tr. Quantum (Day 1) (ENG), 89:9-92:17 (Opening, Coriell).

²⁵⁴ Mem., ¶ 101, citing: DoJ, ¶ 204.

²⁵⁵ Mem., ¶ 102, citing: DoL, ¶¶ 418-419 (“this nullification was made possible through the use of Ecuador’s sovereign powers” and “only Ecuador, as a sovereign State, may increase taxes and disregard this clause”).

²⁵⁶ Mem., ¶ 105.

189. This is relevant, says Burlington, because Article III(1) of the Treaty incorporates a requirement that expropriations be carried out in a fair and equitable manner.²⁵⁷ The Tribunal's findings confirm that the expropriation did not meet that requirement, as it was preceded by sovereign acts nullifying Burlington's "core rights".²⁵⁸ Burlington notes that Ecuador itself acknowledged that Law 42 was part of a "plan to induce foreign investors to abandon their rights".²⁵⁹ Burlington also points to *Occidental II*, where the tribunal held that Law 42 breached the PSC and the investor's legitimate expectations, thus violating the fair and equitable treatment standard under the BIT.²⁶⁰
190. Third, Burlington pleads that its position is consistent with the fact that the Tribunal's jurisdiction only covers Treaty breaches. It explains that "[t]he conduct for which Burlington claims relief is not a breach of contract but the destruction of contract rights by sovereign action, [...] the nullification of such rights", which "must be by its essence a treaty claim because only a sovereign can destroy contractual rights by its action".²⁶¹ Burlington claims no more than the value of the PSCs that were unlawfully expropriated, and a significant part of that value is the accrued right to reimbursement for Law 42 payments and seizures that occurred prior to the expropriation.²⁶² This does not mean that this is a contract claim; it is a matter of determining the value of the expropriated investment.²⁶³
191. Ecuador fails to realize, argues Burlington, that arbitral tribunals routinely include the value of lost contract rights when valuing expropriated assets even when those tribunals were not presented with the contract claims themselves or lacked jurisdiction over contract claims.²⁶⁴ For instance, in *Tippetts*, the tribunal had no

²⁵⁷ *Id.*, ¶ 106.

²⁵⁸ *Id.*, ¶ 107.

²⁵⁹ *Id.*, ¶ 109, referring to: Burlington's Memorial on Liability, ¶¶ 221-256.

²⁶⁰ Mem., ¶ 104, citing: *Occidental Petroleum Corporation and Occidental Exploration and Production Company v. The Republic of Ecuador*, ICSID Case No. ARB/06/11 ("Occidental v. Ecuador II"), Award of 5 October 2012, ¶¶ 522-527 (**Exh. CL-240**).

²⁶¹ Tr. Quantum (Day 1) (ENG), 64:15-21 (Opening, Blackaby).

²⁶² Mem., ¶ 98.

²⁶³ Tr. Quantum (Day 1) (ENG), 63:10-14 (Opening, Blackaby).

²⁶⁴ Reply, ¶¶ 98-104, referring to: *Tippetts, Abbott, McCarthy, Stratton (TAMS) v. TAMS-AFFA Consulting Engineers of Iran, et al.*, Case No. 7 ("Tippetts v. Iran"), Award No. 141-7-2 of 22 June 1984, 6 Iran-U.S. C.T.R. 219, p. 227 (including contractual receivables although the tribunal had no jurisdiction over contract claims) (**Exh. CL-264**); *Siemens v. Argentina*, ¶ 329 (including unpaid invoiced services) (**Exh. CL-79**); *Enron Corporation and Ponderosa Assets, L.P. v. The Argentine Republic*, ICSID Case No. ARB/01/3 ("Enron v. Argentina"),

jurisdiction over the contract which was the source of the right to claimed debts, but nonetheless included unpaid invoices in its valuation.²⁶⁵ The same occurred in *SPP v. Egypt* as well as in arbitrations arising from the Argentine debt crisis.²⁶⁶ “This did not mean [...] that the Tribunals in those cases were entertaining contract claims [...]. Rather, they simply recognized that most investments are comprised of a bundle of contractual rights and that international breaches by States are frequently aimed at the destruction of those rights or the impact on the value of those rights”.²⁶⁷

192. As a fourth element, Burlington opposes Ecuador’s contention that this claim is barred as a consequence of Burlington’s so-called waiver of contract rights in this arbitration. Burlington primarily advances the following arguments in support:

- i. Ecuador confuses contract and treaty claims. Burlington seeks compensation for these sums “as part of the value of its investment on the date of expropriation”, not to pursue contractual indemnification.²⁶⁸
- ii. Further, although it withdrew its right to pursue a claim under the PSCs, Burlington did not waive the underlying right to be compensated for Law 42 payments. The Tribunal has already found that Burlington only waived the possibility of re-filing its claims under the PSCs, but did not waive its underlying rights, and can thus rely on them to pursue its treaty claims.²⁶⁹ This is confirmed by Ecuadorian law: in his expert report, Dr. Pérez Loose explains that Ecuadorian law distinguishes between substantive legal rights and “procedural vehicles that convey those rights”, differentiating between (a) an underlying substantive right, (b) a right of action, (c) a claim, and (d) a legal action.²⁷⁰ The withdrawal of a legal action or claim in no way destroys the substantive right.²⁷¹ Furthermore, Ecuador’s position squares poorly with case law holding that an investor cannot – even explicitly – waive its substantive treaty rights; it can only

Decision on Jurisdiction of 14 January 2004, ¶ 445 (including scheduled but frozen tariff increases) (**Exh. CL-81**); *Sempra Energy International v. Argentine Republic*, ICSID Case No. ARB/02/16 (“*Sempra v. Argentina*”), Award of 28 September 2007, ¶¶ 188, 467 (including deferred tariff increases and unreimbursed subsidies) (**Exh. CL-80**).

²⁶⁵ Mem., ¶¶ 99-100, citing: *Tippetts v. Iran*, p. 227 (**Exh. CL-264**).

²⁶⁶ Tr. Quantum (Day 1) (ENG), 63:15-64:14 (Opening, Blackaby).

²⁶⁷ Tr. Quantum (Day 1) (ENG), 64:6-14 (Opening, Blackaby).

²⁶⁸ Reply, ¶ 110.

²⁶⁹ Tr. Quantum (Day 1) (ENG), 18:4-9 (Opening, Paulsson), referring to: DoL, ¶ 199.

²⁷⁰ Reply, ¶ 115, referring to: Pérez Loose ER, ¶¶ 219-223.

²⁷¹ Reply, ¶ 115.

waive its procedural rights.²⁷² Finally, it is undisputed that on 30 August 2009, “the dispositive date for identifying the expropriated assets”, Burlington possessed the contractual right to tax absorption.²⁷³

- iii. Moreover, Burlington argues that the contract claims of the Burlington Subsidiaries²⁷⁴ were withdrawn *as a result of* the expropriation, since they had become “superfluous”.²⁷⁵ From then on, Burlington sought to recover the value of its tax absorption rights forming part of its investment as part of its expropriation case, rather than as a stand-alone claim for damages. The withdrawal of Burlington’s contract claims is irrelevant for purposes of valuing the expropriated investment because, “but for” the expropriation, Burlington would not have waived its right to file the contract claim.²⁷⁶ Tribunals have shown themselves to be reluctant to question strategic litigation decisions, and properly so. Be this as it may, what matters here is that Burlington clarified in written statements to the Tribunal and Ecuador that the withdrawal of its contract claims was predicated on Ecuador’s conduct.²⁷⁷ Burlington emphasizes that, “[h]aving agreed that the conclusion that led to Burlington’s withdrawal of the claim was correct, namely that Burlington was faced with an unlawful expropriation, the Tribunal cannot be asked to penalize Burlington through its damages valuation for something that would not have occurred but for Ecuador’s unlawful conduct”.²⁷⁸
- iv. Finally, Burlington argues that it is in any event entitled to indemnity against the effects of Law 42 arising *after* the withdrawal of its contract claims, since the withdrawal could only apply to existing claims arising from Ecuador’s pre-withdrawal conduct, not to potential future claims arising from its post-withdrawal conduct. That is, even if the Tribunal considered that the withdrawal

²⁷² *Id.*, ¶ 116, referring to: *Archer Daniels Midland Company and Tate & Lyle Ingredients Americas, Inc. v. United Mexican States*, ICSID Case No. ARB(AF)/04/5 (“*ADM v. Mexico*”), Award of 21 November 2007, ¶¶ 173-174 (**Exh. EL-257**); *SGS Société Générale de Surveillance S.A. v. Republic of the Philippines*, ICSID Case No. ARB/02/6 (“*SGS v. Philippines*”), Decision on Jurisdiction of 29 January 2004, ¶ 154 (**Exh. EL-73**).

²⁷³ Reply, ¶ 120.

²⁷⁴ *Id.*, note 173, where Burlington specifies that the contract claims were withdrawn by the Contract Claimants, not the treaty claimant.

²⁷⁵ *Id.*, ¶ 112.

²⁷⁶ *Id.*, ¶ 121.

²⁷⁷ *Id.*, ¶ 122, referring to: Claimant’s letter dated 18 September 2009 (**Exh. E-544**); Claimant’s letter dated 10 October 2009 (**Exh. C-190**).

²⁷⁸ Reply, ¶ 112.

gave rise to some form of waiver of Burlington's substantive rights (*quod non*), it would still have to ignore the effects of Law 42 after the date of the withdrawal. This is because a breach of Burlington's contractual rights occurring after that date would justify new claims by Burlington or any purchaser of the investment. Burlington contends that it would make no sense to allow Ecuador to profit "from future unlawful acts by erasing the future value of the tax absorption clauses based on (at the very most) a waiver of claims for past breaches".²⁷⁹ For a prospective buyer, the tax absorption clauses of the PSCs would include "tremendous future value" irrespective of a withdrawal of any *pre-existing* contract claims.²⁸⁰ As noted above, Dr. Pérez Loose explains that Ecuadorian law provides that a withdrawal of a legal action entails the loss of the right to refile that same legal action, not future legal actions, and in any case does not affect the underlying substantive rights, which continue to form part of the assets.²⁸¹

- v. Fifth and last, Burlington denies that the contract rights that give rise to its claim for past Law 42 dues are disputed, as Ecuador alleges. In its Decision on Liability, the Tribunal determined the meaning of the tax absorption clauses and that determination is binding: "So, the dispute, to the extent there was one, has been resolved, and it's been resolved in Burlington's favor".²⁸²

1.2 Ecuador's position

- 193. Ecuador opposes Burlington's claim for past Law 42 dues. Its primary submission is that these are contract claims which Burlington now seeks to reintroduce through the back door and over which the Tribunal lacks jurisdiction. Alternatively, Ecuador argues that this claim is inadmissible because it pertains to the vindication of contract rights that are disputed by the Parties. In the further alternative, it submits that this claim fails on the merits because (i) these are credits that do not form part of the expropriated assets and are still held by the Contract Claimants,²⁸³ and (ii) in any event, the Contract Claimants have waived their entitlement to enforce their contractual right for indemnification against Law 42 payments.

²⁷⁹ *Id.*, ¶ 127.

²⁸⁰ *Id.*, ¶¶ 127-128.

²⁸¹ *Id.*, ¶ 128, referring to: Pérez Loose ER, ¶¶ 247-249.

²⁸² Tr. Quantum (Day 5) (ENG), 1385:10-12 (Closing, Coriell).

²⁸³ As that term is defined in Freshfields' letter of 18 September 2009, namely, Burlington Resources Inc., Burlington Resources Oriente Limited, Burlington Resources Andean Limited and Burlington Resources Ecuador Limited.

194. It is Ecuador's primary case that Burlington's claims related to Law 42 (including Burlington's claim for its accrued right to receive reimbursement for payments made under Law 42 or *coactiva* seizures) are contract claims and not treaty claims. As a result, the Tribunal lacks jurisdiction over these claims.²⁸⁴
195. As a general matter, Ecuador argues that all of Burlington's claims related to Law 42 payments (whether past or future) are contractual in nature. Burlington attempts to circumvent the Tribunal's lack of jurisdiction by disguising these claims as treaty claims, when in fact they rest entirely on the PSCs.²⁸⁵ For Ecuador, contract and treaty claims have "different legal bases and give rise to separate legal analysis, with distinct tests and applicable rules", as recognized in case law and doctrine.²⁸⁶ As confirmed in *Patechniki*, the key to the distinction is the "normative source" from which the different types of claims derive and the assessment whether a claim "truly does have an autonomous existence outside the contract".²⁸⁷ Awards and scholarly writings have confirmed that an objective test must be adopted, meaning that tribunals are not bound by the parties' characterization of the legal foundation of

²⁸⁴ Ecuador also raises the arguments summarized later in this section, in response to Burlington's submissions related to the future impact of Law 42 on its lost profits claim.

²⁸⁵ Rejoinder, ¶ 320.

²⁸⁶ *Id.*, ¶¶ 321-323, referring to: *Compañía de Aguas del Aconquija S.A. and Vivendi Universal*, ICSID Case No. ARB/97/3 ("*Vivendi v. Argentina I*"), Decision on Annulment of 3 July 2002, ¶ 96 (**Exh. EL-61**); *Bayindir Insaat Turizm Ticaret Ve Sanayi A.S. v. Islamic Republic of Pakistan*, ICSID Case No. ARB/03/29 ("*Bayindir v. Pakistan*"), Decision on Jurisdiction of 14 November 2005, ¶ 137 (**Exh. CL-149**); *Impregilo S.p.A. v. Islamic Republic of Pakistan*, ICSID Case No. ARB/03/3 ("*Impregilo v. Pakistan*"), Decision on Jurisdiction of 22 April 2005, ¶ 258 (**Exh. EL-60**); *Duke Energy Electroquil Partners & Electroquil S.A. v. Republic of Ecuador*, ICSID Case No. ARB/04/19 ("*Duke v. Ecuador*"), Award of 18 August 2008, ¶ 342 (**Exh. EL-46**); *Patechniki S.A. Contractors & Engineers (Greece) v. The Republic of Albania*, ICSID Case No. ARB/07/21 ("*Patechniki v. Albania*"), Award of 30 July 2009, ¶¶ 61-62 (**Exh. EL-58**); C. H. Schreuer et al., *The ICSID Convention: A Commentary* (Cambridge: Cambridge University Press, 2nd edition, 2009), p. 373 (**Exh. EL-370**).

²⁸⁷ Rejoinder, ¶ 322, citing: *Patechniki v. Albania*, Award of 30 July 2009, ¶¶ 61-62 (**Exh. EL-58**).

their claims.²⁸⁸ Here, the legal foundation of Burlington's Law 42 claims reveals that they are contractual in nature.²⁸⁹

196. For Ecuador, Burlington is wrong to contend that its Law 42 claims are part of the value of the investment at the time of the expropriation. These claims are identical to its previous contract claims to enforce the tax renegotiation clauses in the PSCs, as the Tribunal already found in its Decision on Jurisdiction (“this claim revolves around a contract matter, not a ‘matter of taxation’”).²⁹⁰ They have the “same factual predicates, the same legal basis, and seek the same relief” as the contract claims put forward by Burlington's Subsidiaries and as Burlington's umbrella clause claim.²⁹¹ Whereas the Subsidiaries withdrew their contract claims and the Tribunal dismissed the umbrella clause claim, Burlington now seeks to reintroduce these same claims through the back door. If the Tribunal puts Burlington in the pecuniary position in which it would have been if the tax renegotiation had been performed, it will in effect uphold a contract claim.²⁹²
197. As the Contract Claimants are no longer parties to the arbitration, the Tribunal has no jurisdiction over Burlington's contract claims.²⁹³ For Ecuador, these claims must be dismissed because (i) contract claims cannot be entertained by the Tribunal if the Parties to the proceedings are not also parties to the contract, (ii) the Tribunal already held that Burlington may not rely on the umbrella clause to enforce its Subsidiaries' contract claims, and (ii) while the Tribunal considered disputed contract rights as facts, it cannot take into consideration the value of those disputed

²⁸⁸ Rejoinder, ¶ 323, referring to: *Oil Platforms (Islamic Republic of Iran v. United States of America)* (“*Oil Platforms*”), ICJ, Preliminary Objection, Judgment of 12 December 1996, p. 810; *Case Concerning Legality of Use of Force (Yugoslavia v. Italy)*, Order on Provisional Measures of 2 June 1999, ¶ 25 (**Exh. EL-373**); *Fisheries Jurisdiction Case (Spain v. Canada)*, Jurisdiction of the Court, Judgment of 4 December 1998, p. 449 (**Exh. EL-374**); *SGS v. Philippines*, Decision on Jurisdiction of 29 January 2004, ¶ 157 (**Exh. EL-73**); *Pan American Energy LLC and BP Argentina Exploration Company v. The Argentine Republic*, ICSID Case No. ARB/03/13 (“*Pan American Energy v. Argentina*”), Decision on Preliminary Objections of 27 July 2006, ¶ 50 (**Exh. CL-362**); Z. Douglas, *The International Law of Investment Claims* (Cambridge: Cambridge University Press, 2009), ¶ 503 (**Exh. EL-241**).

²⁸⁹ Rejoinder, ¶ 324.

²⁹⁰ Rejoinder, ¶ 326, citing: DoJ, ¶ 181.

²⁹¹ Rejoinder, ¶¶ 327-329.

²⁹² *Id.*, ¶ 338.

²⁹³ *Id.*, ¶¶ 346-362.

rights to determine the amount of damages, since this would effectively mean granting Burlington's contract claims.²⁹⁴

198. Burlington's alleged fairness considerations cannot override the Tribunal's lack of jurisdiction.²⁹⁵ As Professor Stern acknowledged in her dissent in *Occidental*, there is nothing unjust if Burlington is not entitled to compensation for contract claims due to the limited jurisdiction of the Tribunal.²⁹⁶ If anything, granting Burlington's contract claims would be "unfair and unjust", since these claims were withdrawn with prejudice at a time when Burlington was expected to file its response to Ecuador's objections to jurisdiction (including jurisdiction over the contract claims).²⁹⁷
199. Alternatively, Ecuador submits that, even if the Tribunal deems the basis for Burlington's claim to be a treaty obligation, this claim is inadmissible because (i) it "pertain[s] to the vindication of contract rights and (ii) there is a genuine dispute as to the existence and scope of said rights".²⁹⁸ With respect to (i), Ecuador submits that "a claim pertains to the vindication of contract rights when the claimant relies upon contractual rights in the formulation of its investment treaty claim",²⁹⁹ which is the case here. With respect to (ii), according to Ecuador, "there is undeniably a genuine dispute between the Parties as to the existence and scope of Burlington's alleged contract rights purportedly affected by Law 42",³⁰⁰ as recognized in the Decision on Liability.³⁰¹
200. Ecuador asserts that where, as in the present case, "treaty claims pertain to the vindication of genuinely disputed contractual rights, a tribunal constituted pursuant to a treaty cannot examine such claims unless it has jurisdiction to rule on the disputed contractual rights".³⁰² This is a well-established principle, "especially in cases where the relevant contract contains a choice of forum clause", which "applies

²⁹⁴ *Ibid.*

²⁹⁵ *Id.*, ¶¶ 363-369.

²⁹⁶ *Id.*, ¶ 368, referring to: *Occidental v. Ecuador II*, Dissenting Opinion of Prof. Stern, ¶¶ 167-168 (**Exh. CL-240**).

²⁹⁷ Rejoinder, ¶ 369.

²⁹⁸ *Id.*, ¶ 370. Ecuador advances this argument for all claims related to Law 42, as well as for the claim for lost opportunity to extend Block 7.

²⁹⁹ *Id.*, ¶ 371, citing: Z. Douglas, *The International Law of Investment Claims*, (Cambridge: Cambridge University Press, 2009), ¶¶ 698-699 (**Exh. EL-379**).

³⁰⁰ Rejoinder, ¶ 375.

³⁰¹ *Ibid.*, referring to: DoL, ¶ 21.

³⁰² Rejoinder, ¶ 377.

a fortiori where, as here, the parties to the contractual obligations in dispute are no longer part of the proceedings. In both instances, the treaty tribunal lacks jurisdiction to resolve the contractual dispute, which must be resolved by a different tribunal”.³⁰³ While in most cases, the treaty tribunal can generally stay the proceedings and await the determination by another tribunal mandated to determine the parties’ contract claims, this is not an option here because the contract claims are not pending before any tribunal, nor can they ever be, since the possibility of refiling these claims was waived with prejudice.³⁰⁴

201. Faced with Burlington’s argument that the Tribunal has already resolved the dispute between the Parties regarding these contract rights, Ecuador acknowledges that “the Tribunal made some dicta in their [sic] Decision on Liability regarding the effect of the renegotiation clauses, but we all know this very distinguished tribunal doesn’t have jurisdiction over Contract Claims”. Ecuador contends that, as a result, “[t]here cannot be any Decision, any adjudication whatsoever, in the Decision on Liability or elsewhere on the Contract claims”, as a result of which these rights are still disputed.³⁰⁵
202. In a further alternative, in the event that the Tribunal were to hold that it has jurisdiction over Burlington’s claim for Law 42 payments and that this claim is admissible, Ecuador is of the view that the claim fails on its merits for two main reasons.
203. First, the rights for which Burlington seeks compensation were never expropriated.³⁰⁶ Ecuador notes that, because the Tribunal dismissed its fair and equitable treatment and umbrella clause claims and found that Law 42 was not an expropriation, the Claimant effectively has no choice but to argue that Burlington Oriente’s acquired right to tax absorption is part of the expropriated investment. This argument fails because, as a matter of fact, Ecuador did not take these past contract rights when it expropriated Burlington’s investment. The Tribunal deemed the expropriation to have occurred on 30 August 2009 when Ecuador’s physical takeover of the Blocks became permanent. As a consequence, from that day forward the PSCs could not be a source of profit for Burlington. In other words,

³⁰³ *Ibid.*

³⁰⁴ *Id.*, ¶ 378.

³⁰⁵ Tr. Quantum (Day 5) (ENG), 1479:22-1480:10 (Closing, Silva Romero).

³⁰⁶ Tr. Quantum (Day 1) (ENG), 232:16-245:4 (Opening, Mayer).

“[w]hat Ecuador took was the right to, in the future, explore and exploit the oilfields, keep a share of the oil and sell it for its profit. It did not take any other asset of Burlington Oriente”.³⁰⁷ According to Ecuador, paragraphs 530³⁰⁸ and 536³⁰⁹ of the Decision on Liability confirm that “the rights which had crystallized before Burlington lost control of the Blocks [were] not affected by the takeover”.³¹⁰

204. Ecuador emphasizes that it did not expropriate Burlington Oriente as a company with all its assets; it only expropriated the PSCs. Burlington Oriente retained its other assets, and in particular its credits.³¹¹ This is confirmed by the fact that Burlington has repeatedly stated in this arbitration that it still holds its contract rights.³¹²
205. Burlington’s argument that what was expropriated in this regard was a contractual mechanism, as opposed to a simple debt, also fails. Burlington ignores that “when a contract terminates, termination is not retroactive, and a court or an arbitral tribunal can still apply its clauses to obligations that had appeared before termination”.³¹³ At the time of the expropriation, Burlington had a right to specific performance of these pre-existing contractual obligations and, as Ecuador refused to perform, it had a right to damages to replace that specific performance. In Ecuador’s submission, this right to damages stems from the non-performance of a contractual obligation that predates the expropriation; “[e]xpropriation has nothing to do with it”.³¹⁴

³⁰⁷ Tr. Quantum (Day 1) (ENG), 235:9-12 (Opening, Mayer).

³⁰⁸ DoL, ¶ 530 (“As a purely factual matter, Ecuador’s entry into and occupation of Blocks 7 and 21 dispossessed Burlington of the oil fields. Such dispossession deprived Burlington not only of its oil production share – and thus of its revenues – but also of the means of production that made those revenues possible. In a nutshell, the occupation of the Blocks deprived Burlington of all the tangible property embodying its investment in Ecuador. While Burlington still had its subsidiary’s rights in the PSCs as well as the subsidiary’s shares, these rights and shares had no value without possession of the oil fields and access to the oil”).

³⁰⁹ DoL, ¶ 536 (“Even though these contract rights were still nominally in force after the takeover – as *caducidad* would not be declared until almost a year later, in July 2010 –, they were bereft of any real value from the moment Burlington permanently lost effective use and control of its investment”).

³¹⁰ Tr. Quantum (Day 1) (ENG), 236:3-5 (Opening, Mayer).

³¹¹ Tr. Quantum (Day 1) (ENG), 237:15-19 (Opening, Mayer).

³¹² Tr. Quantum (Day 1) (ENG), 232:18-234:15 (Opening, Mayer).

³¹³ Tr. Quantum (Day 5) (ENG), 1507:10-13 (Closing, Mayer).

³¹⁴ Tr. Quantum (Day 5) (ENG), 1507:14-1508:10 (Closing, Mayer).

206. As a result, because Burlington’s right to be reimbursed for past Law 42 dues was not expropriated, Burlington does not have a treaty claim for these rights; only a contract claim over which the Tribunal has no jurisdiction.³¹⁵
207. The second reason why this claim must fail on the merits in Ecuador’s opinion is that it is a contract claim which Burlington has withdrawn and can thus no longer raise. On 10 October 2009, the Burlington Subsidiaries withdrew “with prejudice” their claims to recover Law 42 payments. The consequences of this withdrawal were recorded in PO2, which noted that Burlington Oriente, Burlington Andean and Burlington Ecuador ceased to be parties to this arbitration as of 6 November 2009 and that, consequently, the arbitration would deal solely with Burlington’s treaty claims.³¹⁶
208. Burlington is wrong to argue, says Ecuador, that it did not waive its underlying right to be compensated. As the Tribunal determined, the Burlington Subsidiaries “waived the possibility of ever re-filing their claims under the PSCs in any form”.³¹⁷ Accordingly, the underlying rights are unenforceable and thus valueless. Ecuadorian law confirms that a withdrawal of a claim with prejudice entails a waiver of the underlying rights; Dr. Pérez Loose fails to cite a single decision to the contrary.³¹⁸
209. Ecuador also opposes Burlington’s alternative argument that it is entitled to post-withdrawal indemnity.³¹⁹ To the extent that this argument relates to pre-expropriation tax debts, it is nonsensical. The Law 42 payments accrued *before* the withdrawal of the claims and *before* the expropriation date determined by the Tribunal. The legal foundation of these claims is still the alleged breach of the tax renegotiation clauses, and therefore these claims are not new.³²⁰
210. Ecuador further observes that the reasons why Burlington withdrew its contract claims are irrelevant. It does not matter whether it did so as a result of the expropriation, because the past dues were in any event not part of the expropriated investment. Regardless of the reasons, “[t]he consequences of the withdrawal are

³¹⁵ Tr. Quantum (Day 1) (ENG), 234:13-17 (Opening, Mayer).

³¹⁶ Tr. Quantum (Day 1) (ENG), 245:5-21 (Opening, Mayer).

³¹⁷ Rejoinder, ¶¶ 411-412, citing: DoL, ¶ 199.

³¹⁸ Rejoinder, ¶ 423, citing: *Corte Suprema de Justicia*, Quito, 20 December 1935, Gaceta Judicial, Año XXXV, Serie V, No. 131, p. 3129 (**Exh. EL-382**).

³¹⁹ Rejoinder, ¶¶ 446-449.

³²⁰ *Id.*, ¶ 449.

there. Burlington Oriente is not a party. Contract Claims have been withdrawn for whatever good or bad reason, and the Tribunal cannot revive what is dead”.³²¹

211. Ecuador appears to recognize that other tribunals have awarded the value of accrued account receivables as compensation for expropriation. However, it argues that “[n]one of the cases on which Burlington relies for the proposition that compensation is due for expropriated contractual rights addresses the situation where those contractual rights were waived by the claimant party.”³²² It adds that, unlike in the present case, in those cases the debts were in any event not disputed.³²³

1.3 Analysis

212. At the outset, it is necessary to recall that the Tribunal has declined jurisdiction over Burlington’s umbrella clause and FET claims,³²⁴ that no contract claims are before it,³²⁵ and that it held that Law 42 and Ecuador’s failure to absorb its effects did not amount to an expropriation.³²⁶ The only unlawful act identified in the Decision on Liability was the expropriation of Burlington’s investment through Ecuador’s permanent physical takeover of the Blocks. As a result, the Tribunal’s task is circumscribed to awarding damages “arising from and ascribable to”³²⁷ that takeover.
213. In carrying out this task, the Tribunal must proceed to the valuation of Burlington’s expropriated investment, even if the valuation involves considering contract rights which allegedly form part of the expropriated investment.³²⁸ Considering contract rights in this context, the Tribunal does not exercise jurisdiction over the PSCs; it

³²¹ Tr. Quantum (Day 1) (ENG), 247:3-7 (Opening, Mayer).

³²² CM, ¶ 189, note 182.

³²³ Rejoinder, ¶ 565.

³²⁴ DoJ, ¶¶ 208, 342(D)(1); DoL, ¶¶ 220, 234, 546(B)(1).

³²⁵ DoL, ¶¶ 220, 234, 546(B)(1).

³²⁶ *Id.*, ¶¶ 419, 430, 433, 456-457.

³²⁷ Commentary 9 to Article 31 of the ILC Articles specifies that “it is only ‘[i]njury ... caused by the internationally wrongful act of State’ for which full reparation must be made. This phrase is used to make clear that the subject matter of reparation is, globally, the injury resulting from and ascribable to the wrongful act, rather than any and all consequences flowing from an internationally wrongful act”.

³²⁸ See, for instance: *Tippetts v. Iran*, p. 227 (**Exh. CL-264**), *Southern Pacific Properties (Middle East) Limited v. Arab Republic of Egypt*, ICSID Case No. ARB/84/3 (“*SPP v. Egypt*”), Award on the Merits of 20 May 1992 (**Exh. CL-162 and CL-376**).

values an expropriation claim over which there is no question that it has jurisdiction. The Tribunal thus dismisses Ecuador's jurisdictional objection.

214. The Tribunal likewise dismisses Ecuador's admissibility objection. In resolving Burlington's treaty claim, and in determining Ecuador's liability under the Treaty, the Tribunal made certain determinations regarding the content and scope of the rights arising under the PSCs' tax absorption clauses.³²⁹ The content and scope of these contract rights are thus no longer in dispute for purposes of this phase of the proceedings and the Tribunal relies on its assessment in the Decision on Liability to the extent necessary in the present context.
215. That being said, the Tribunal agrees with Ecuador that Burlington's claim fails on its merits. The Tribunal can only award compensation for the damages caused by the internationally wrongful act. Here, the internationally wrongful act was the permanent physical takeover of the Blocks, which the Tribunal has held to constitute an unlawful expropriation of Burlington's investment. The consequence of that physical takeover was that Burlington through its Subsidiaries lost the capacity to operate the Blocks and thus to earn revenues under the PSCs. As stated in the Decision on Liability:

"As a purely factual matter, Ecuador's entry into and occupation of Blocks 7 and 21 dispossessed Burlington of the oil fields. Such dispossession deprived Burlington not only of its oil production share – and thus of its revenues – but also of the means of production that made those revenues possible. In a nutshell, the occupation of the Blocks deprived Burlington of all the tangible property embodying its investment in Ecuador. While Burlington still had its subsidiary's rights in the PSCs as well as the subsidiary's shares, these rights and shares had no value without possession of the oil fields and access to the oil".³³⁰

216. This can only mean that Ecuador's physical takeover of the Blocks destroyed the value of Burlington's rights under the PSCs going forward, i.e., its possibility of producing oil and obtaining revenues from oil sales in the future. The Decision on Liability makes this clear when it states that "[a]s of this date [30 August 2009], Ecuador deprived Burlington of the effective use and control of Blocks 7 and 21 on a permanent basis, and thus expropriated its investment".³³¹

³²⁹ See, for instance: DoL, ¶¶ 334-335 (among others).

³³⁰ *Id.*, ¶ 530.

³³¹ *Id.*, ¶ 535 (emphasis added).

217. By contrast, the physical takeover of the Blocks could not *per se* destroy the value of Burlington's credits for the reimbursement of Law 42 dues that had accrued *before* the date of expropriation. The Burlington Subsidiaries retained their right to demand payment of these accrued credits. Had Ecuador expropriated the Burlington Subsidiaries' shares, the situation may have been different. And while the Tribunal held that, as a result of the expropriation, the Burlington Subsidiaries' rights in the PSCs "had no value without possession of the oil fields and access to the oil",³³² this statement only applies as of 30 August 2009.
218. The fact that the Tribunal stated that Burlington's right to tax absorption under the PSCs was "part and parcel" of the value of its investment³³³ and constituted "the most valuable portion"³³⁴ of that investment does not assist Burlington's case. The expropriation caused Burlington to lose this right from 30 August 2009 onwards; it would not have prevented the Burlington Subsidiaries from exercising it with respect to debts accrued before this date, if they had not waived their right to claim.
219. At the Hearing, Burlington raised a new argument, according to which its right to past Law 42 dues is "not a simple accrued debt", but a right to the application of a "contractual adjustment that requires a contractual mechanism" that was taken together with the PSCs.³³⁵ Since it has lost the PSCs, so Burlington argues, it can no longer request Ecuador to apply that contractual mechanism. The Tribunal cannot agree. As Ecuador points out,³³⁶ the Burlington Subsidiaries' right to specific performance of that contractual mechanism became a right to claim compensation for Ecuador's failure to perform, which survived the contract (otherwise no contract claimant could ever claim damages on the basis of a terminated contract).
220. Burlington's additional arguments similarly fail. Although the Tribunal did state that "by enacting Law 42 and then refusing to absorb its effect pursuant to the tax absorption clauses, Ecuador has in effect nullified Burlington's right to a correction factor by preventing the exercise of this right", and that "this nullification was made possible through the use of Ecuador's sovereign powers",³³⁷ it ultimately held that Ecuador's failure to absorb the effects of Law 42, be it at 50% or at 99%, did not

³³² *Id.*, ¶ 530.

³³³ *Id.*, ¶ 405.

³³⁴ *Id.*, ¶ 260.

³³⁵ Tr. Quantum (Day 5) (ENG), 1392:17-1396:16 (Closing, Coriell).

³³⁶ Tr. Quantum (Day 5) (ENG), 1507:10-1508:10 (Closing, Mayer).

³³⁷ DoL, ¶ 418.

substantially deprive Burlington of its investment.³³⁸ It thus rejected Burlington's indirect expropriation claim based on Law 42 and Ecuador's contractual breaches.³³⁹

221. Moreover, the Tribunal expressly rejected Burlington's claim that Ecuador's measures taken together constituted a creeping expropriation.³⁴⁰ Indeed, the Tribunal found that "Burlington was not operating under conditions of substantial deprivation before Ecuador physically occupied the Blocks", "[n]or is it possible to conclude that before that point Burlington had lost its ability to 'make rational decisions'".³⁴¹
222. Finally, in the circumstances described here, if the Tribunal were to grant compensation for past Law 42 dues, it would give relief for Ecuador's failure to comply with the PSC tax absorption clauses, when it has held that such non-compliance was not an expropriation and it had no jurisdiction over other treaty breaches and contract violations. In other words, it would grant relief for an act for which it has ruled out liability or over which it lacks jurisdiction.
223. For these reasons, the Tribunal finds that Burlington's claim for its accrued rights against Ecuador for the reimbursement of past Law 42 payments or *coactiva* seizures is not a compensable loss under Burlington's treaty claim.
224. That does not mean that Burlington (or rather, the Burlington Subsidiaries) may not have a contract claim against Ecuador. However, as a result of the withdrawal of the claims of the Burlington Subsidiaries, these companies are no longer parties to this

³³⁸ *Id.*, ¶ 419 (finding that Ecuador's breach of the tax absorption clauses of the PSCs was a "relevant, although by no means decisive, consideration for purposes of the expropriation analysis, which entails a broader inquiry into the investment's overall capacity to generate commercial returns for the benefit of the investor", and noting that "[t]he Tribunal must next determine whether Law 42, first at 50% and then at 99%, amounted to an expropriation of Burlington's investment"); ¶ 430 (holding that "the effects of Law 42 at 50 % do not amount to a substantial deprivation of the value of Burlington's investment"); and ¶ 456 (holding that "the Tribunal is not persuaded that Law 42 at 99% substantially deprived Burlington of the value of its investment").

³³⁹ *Id.*, ¶ 456 (holding that "there can be no expropriation in the absence of substantial deprivation"); ¶ 433 (finding that "Law 42 at 50% did not substantially deprive Burlington of the value of its investment, and was therefore not a measure tantamount to expropriation"); and ¶ 457 (finding that "the effects of Law 42 at 99% were not tantamount to expropriation and, accordingly, that Law 42 at 99% did not expropriate Burlington's investment").

³⁴⁰ *Id.*, ¶¶ 538-540.

³⁴¹ *Id.*, ¶ 540.

arbitration and the Tribunal cannot rule on their claims. This arbitration deals solely with Burlington's treaty claims against Ecuador.³⁴²

2. Value of the operating assets (lost profits under the PSCs)

2.1 Burlington's position

225. Burlington asserts that Ecuador must compensate it for profits lost "from the production foregone", which Burlington would have obtained under the PSCs absent the expropriation, as valued on the date of the award. Burlington's financial expert, Compass Lexecon, calls this head of damages "value of operating assets", the assets in question being the PSCs for Blocks 7 and 21.
226. Burlington submits that "[i]nternational law requires that the State pay an amount of damages representing the fair market value of the affected investment", adding that "[w]here (as here) the investment was a 'going concern' prior to the unlawful expropriation, an assessment of fair market value must take future profitability into consideration in order to provide full compensation".³⁴³
227. Because Burlington values this head of damages on the date of the award, its lost production can be broken down into two elements: (i) profits already lost, i.e., losses to the date of the award, with interest applied to actualize the cash flows to present value, and (ii) future lost profits, i.e., losses from the date of the award until the expiry of the PSCs, discounted to present value.³⁴⁴
228. Using the discounted cash flow (DCF) method and Compass Lexecon's assumptions, in the Updated Model these lost profits are quantified at **USD 840.9 million** as of 31 August 2016 (the date used as a proxy for the date of the award), including pre-award interest. Relying on the full reparation principle, Compass Lexecon has ignored the economic effects of Law 42 when making this quantification.

2.2 Ecuador's position

229. Ecuador acknowledges that "in accordance with international law, compensation should correspond to the fair market value ("FMV") of Burlington's purportedly expropriated investment" and that, "[i]n the context of going concerns, the tribunal

³⁴² PO2, ¶ III.1.

³⁴³ Mem., ¶¶ 53, 55.

³⁴⁴ *Id.*, ¶ 74. See: paragraph 287 below.

will look to the investment's "earning capacity during the remainder of its life for assessing its 'market value'".³⁴⁵

230. More specifically, Ecuador accepts that the expropriated assets in this case consist of Burlington's rights to operate Blocks 7 and 21 under the PSCs, and that Burlington is entitled to the FMV of these rights as reflected in the profits that Burlington would have earned under those contracts.³⁴⁶ Ecuador does not contest that the value of Burlington's expropriated investment should be quantified by reference to the contract rights indirectly held by Burlington through its Subsidiaries. As discussed in more detail below, Ecuador also agrees that a DCF analysis is the appropriate valuation method.³⁴⁷
231. By contrast, Ecuador submits that Burlington's valuation of these lost profits is grossly inflated, mainly because Burlington misapplies the relevant standards of compensation, uses the wrong valuation date, bases its calculation on incorrect assumptions (in particular, it fails to account for Law 42 taxes when projecting future profits), and applies an exaggerated interest rate. According to Ecuador's expert, Fair Links, the FMV of the PSCs, valued on the date of the expropriation, is USD 26.3 million. Because Ecuador values the investment on the date of the expropriation, the Tribunal notes that its valuation is composed solely of projected future profits discounted back to the date of the expropriation.

2.3 Analysis

232. There is common ground that the value of Burlington's investment should be quantified by reference to the profit-making capacity of the PSCs (which Burlington indirectly held through its Subsidiaries)³⁴⁸ as of the date of expropriation and for the remainder of their term. As stated in the Decision on Liability,³⁴⁹ Ecuador's physical takeover of Blocks 7 and 21 deprived Burlington of the possibility to earn future

³⁴⁵ CM, ¶¶ 8, 327, citing: *Middle East Cement v. Egypt*, ¶ 127 (**Exh. CL-271**).

³⁴⁶ See, for instance: CM ¶¶ 8, 324-327; Rejoinder, ¶ 454. Ecuador clarifies that it does not agree that the FMV is "simply a proxy for the lost future cash flows", since under certain circumstances, "lost future cash flows operate as a proxy for FMV", and Dr. Abdala now admitted to have calculated the value of future cash flows, not the FMV of Burlington's investment. Rejoinder, ¶ 455.

³⁴⁷ See: Section VII.D.2.2 below.

³⁴⁸ The Tribunal recalls that Article I(1)(a) of the Treaty provides that "investment" means "every kind of investment in the territory of one Party owned or controlled **directly or indirectly** by nationals or companies of the other Party", and includes "any right conferred by law or contract, and any licenses and permits pursuant to law" (Emphasis added).

³⁴⁹ DoL, ¶ 530.

revenues under the PSCs. The Tribunal further held that Ecuador's physical takeover of Blocks 7 and 21 became permanent on 30 August 2009.³⁵⁰ As a result, "[a]s of this date, Ecuador deprived Burlington of the effective use and control of Blocks 7 and 21 on a permanent basis, and thus expropriated its investment".³⁵¹ In other words, the physical takeover of the Blocks deprived Burlington of the possibility of obtaining future revenues from the PSCs from 30 August 2009 onwards. On this basis, the Tribunal considers that Burlington's lost profits claim from 30 August 2009 onwards is a compensable loss.

233. It is undisputed that Burlington seeks to recover the value of its own investment, represented by its share in the Consortium's revenues, and not the entire value of the Consortium's investment. Compass Lexecon makes this clear when it states that it "[i]n order to compute the damages incurred by Burlington, I apply its equity participation in each of the Blocks: 42.5% in Block 7 and 46.25% in Block 21 (since October 2006)".³⁵² Ecuador acknowledges this.³⁵³ As a result, no risk of double recovery by Burlington and Perenco (who has initiated its own claim) would arise from an award from this Tribunal on this head of claim.
234. The Tribunal will address Ecuador's objections to the valuation of this claim in Section C below.

3. Lost opportunity to extend the Block 7 PSC

3.1 Burlington's position

235. Burlington argues that Ecuador's "unlawful conduct" deprived Burlington of the opportunity to negotiate in good faith an extension of the Block 7 PSC, and Ecuador must compensate for that loss of opportunity.³⁵⁴ According to the *Chorzów* standard of full reparation, damages include all the profits that Burlington would have obtained absent the unlawful activity, which destroyed the opportunity to negotiate a

³⁵⁰ *Id.*, ¶ 535.

³⁵¹ *Ibid.*

³⁵² Compass Lexecon ER1, ¶ 9.

³⁵³ Ecuador notes in particular that "[i]t is not in dispute that Burlington's free cash flows, assuming no Law 42, result from deducting from the Consortium's gross revenues (i) the State's participation (i.e., share of production), (ii) the operating costs (OPEX) and capital expenditures (CAPEX), (iii) Perenco's share of the Blocks' revenues (53.75% of Block 21 and 57.5% of Block 7), and (iv) Burlington's income tax and labor participation" (R-PHB, ¶ 345).

³⁵⁴ Mem., ¶ 112.

contract extension.³⁵⁵ Burlington submits that the Tribunal has jurisdiction over this claim (Section 3.1.1), that in the “but for” world, Burlington would have enjoyed a right to negotiate the extension of the Block 7 PSC (Section 3.1.2), and that Burlington would “in all probability” have obtained an eight-year extension under revised contractual terms (Section 3.1.3).

3.1.1 The Tribunal has jurisdiction over this claim

236. Contrary to Ecuador’s contention, Burlington submits that the Tribunal has jurisdiction to compensate the lost opportunity to extend the Block 7 PSC.³⁵⁶ In the Decision on Liability, the Tribunal found that the investment must be assessed “as a whole” and the value of the lost opportunity to negotiate the extension is part of the value of the PSC that was taken. The claim for the value of the Block 7 extension is thus a treaty, not a contract claim. Burlington’s submission is not that Ecuador “breached an agreement for a contract extension”, but that Burlington was deprived “of the valuable opportunity *to seek an extension*”.³⁵⁷ In other words, Burlington does not claim the breach of a contractually agreed extension, but for the economic value of the right to negotiate such an extension, which, it argues, *would probably have been agreed* but for Ecuador’s unlawful conduct. Ecuador’s argument that Burlington may not raise this claim because it was not a party to the PSC and because its Subsidiaries have withdrawn their contract claims fails for the same reasons.³⁵⁸
237. According to Burlington, the argument that it brings a new treaty claim for lost opportunity without having given Ecuador notice under Article VI of the BIT is equally ill-founded. The term “investment” is defined broadly under the BIT. It includes “any right conferred by law or contract”, which encompasses Clause 6.2 of the PSC providing the right to an extension.³⁵⁹ Therefore, Burlington’s existing treaty claim covers Burlington’s lost opportunity to negotiate an extension of the Block 7 PSC.

³⁵⁵ *Id.*, ¶ 114.

³⁵⁶ Reply, ¶¶ 200-208.

³⁵⁷ *Id.*, ¶ 206 (emphasis in original).

³⁵⁸ *Id.*, ¶ 207.

³⁵⁹ *Id.*, ¶ 208.

238. Burlington also submits that, in the “but for” world, it would have enjoyed a right to negotiate the extension of the Block 7 PSC (Section 3.1.2),³⁶⁰ and would “in all probability” have obtained an eight-year extension under revised contractual terms (Section 3.1.3).³⁶¹ Burlington further argues that tribunals have recognized the importance of lost opportunities in the valuation of an investment (Section 3.1.4).³⁶²
239. In support of its claim, Burlington relies on Mr. Moyes’ expert report, which explains the terms on which Burlington would “in all probability” have obtained a contract extension in a context of good faith negotiations as mandated under the PSCs and Ecuadorian law.³⁶³

3.1.2 In the “but for” world, Burlington would have enjoyed a right to negotiate the extension of the Block 7 PSC

240. According to Burlington, Article 6.2 of the Block 7 PSC sets out the conditions for a “mandatory negotiation concerning an extension”. Under that provision, the contract term may be extended in four situations: (a) if and when it is in the State’s best interests, (b) if the production area is located far from existing hydrocarbon infrastructures, (c) if the contractor proposes significant new investments during the last five years of the contract, or (d) if new deposits are discovered as an exclusive result of new exploration.
241. In addition, Article 1562 of the Ecuadorian Civil Code establishes the general duty to perform all contracts in good faith.³⁶⁴ Hence, once the Consortium satisfied any of the conditions set forth in Article 6.2, Ecuador was under a duty to negotiate an extension in good faith.³⁶⁵
242. Burlington alleges that the Consortium would have met at least three of the four alternative conditions.³⁶⁶ First, as Mr. Moyes explains, it would undoubtedly have been in Ecuador’s best interests to extend the Block 7 PSC.³⁶⁷ Ecuador is wrong to

³⁶⁰ Mem., ¶¶ 116-124.

³⁶¹ *Id.*, ¶¶ 131-133.

³⁶² *Id.*, ¶¶ 125-130.

³⁶³ *Id.*, ¶¶ 115, 187; Reply, ¶ 200, referring to: Moyes ER2, ¶ 12.

³⁶⁴ Mem., ¶ 123, citing: Código Civil, Article 1562 (**Exh. CL-59**); Estatuto del Régimen Jurídico Administrativo de la Función Ejecutiva, Article 101(1) (**Exh. CL-266**).

³⁶⁵ Mem., ¶ 124.

³⁶⁶ *Id.*, ¶ 117; Reply, ¶¶ 209-226.

³⁶⁷ Mem., ¶¶ 118, 124, 133, referring to: Moyes ER1, ¶¶ 6, 44-46, 58-60.

argue that it has the discretionary power under Clause 6.2 to grant an extension or not. Dr. Pérez Loose clarified that Ecuador's public administration was under a duty to protect Burlington's "legitimate expectation" and Ecuadorian law recognizes compensation for lost opportunities.³⁶⁸ Fair Links' suggestion that Petroamazonas had the capacity to operate the Blocks directly misses the point, says Burlington. The fact that Ecuador entered into contracts with seven private consortia between 2010 and 2012 demonstrates that Ecuador itself considered that its interests were best served by having its oilfields operated by third parties.³⁶⁹

243. Second, Burlington and its Consortium partner unquestionably proposed and made significant investments during the last five years of production (at least until October 2007 when Decree 662 was imposed). Burlington invested **USD 213 million** between 2005 and 2007 "yielding substantial increases in production".³⁷⁰
244. Mr. Crick confirms that, absent Law 42, the Consortium would have made larger investments well beyond 2007, which would have supported the Consortium's extension rights.³⁷¹ On this topic, Mr. Martinez explains that the abandonment of the Consortium's investment program not only decreased the value of the investment but also prejudiced the exercise of the Consortium's extension right.³⁷² He further testified as follows:

"The extension right could be triggered by Burlington Oriente making new investments to increase production, which, before the introduction of Ecuador's measures, Burlington Oriente fully expected to do".³⁷³

245. Burlington explains that its decision to stop investing in Block 7 in December 2007 "says nothing about what [it] would have done in the *absence*" of Law 42.³⁷⁴ Furthermore, as Mr. Martinez stated, even if Burlington "may have been interested in selling, or attempted to sell" the Blocks in 2006 and 2007 this does not preclude

³⁶⁸ Reply, ¶ 212, referring to: Pérez Loose ER, ¶¶ 181-183, 192.

³⁶⁹ Reply, ¶ 213, referring to: Moyes ER2, ¶ 12.

³⁷⁰ Mem., ¶ 119, referring to: Burlington Oriente Financial Statements FY 2002-2003, 2003-2004, 2004-2005 (**Exhs. C-258 to C-260**); Burlington Oriente Consolidated Financial Statements, December 2009 (**Exh. C-273**); Consortium Financial Statements 2005-2007 (**Exh. C-418 to C-420**).

³⁷¹ Mem., ¶ 120, referring to: Crick WS1, ¶¶ 5-10, 102-107, 274-282.

³⁷² Mem., ¶ 120, citing: Martinez WS1 Supp., ¶ 21.

³⁷³ Martinez WS1 Supp., ¶ 21.

³⁷⁴ Reply, ¶ 216 (emphasis in original).

that it had “an even greater incentive to maintain the value of the Blocks”.³⁷⁵ As an example, Mr. Moyes highlighted that the negotiation of an extension of Murphy Oil’s contract for Block 16 “increased Block 16’s value even though the terms of the new service contract were speculative and had yet to be negotiated”.³⁷⁶

246. Moreover, contrary to Ecuador’s contentions, “internal ConocoPhillips documents prove that Burlington was indeed interested in seeking an extension”.³⁷⁷ The 2007 Sales Memorandum expressly stated that “an extension is possible, especially with a commitment to enhance the productivity of the field beyond the continuation of a standard drilling program”, and noted that “[i]t is thought that any new field discovered will receive an automatic term extension to 2017”.³⁷⁸ In turn, the 2007 Budget Presentation noted that “10 years of extension seems to be a reasonable target”.³⁷⁹
247. Finally, Burlington contends that its refusal to accept the transitory agreement negotiated between Ecuador and Perenco³⁸⁰ was legitimate, as (i) this agreement did not protect Burlington’s rights under the existing PSCs, and (ii) the terms of the *Ley de Equidad Tributaria* were not the only possible outcome. Mr. Moyes’ evidence shows that, beyond a short transitory period, not a single extension signed by Ecuador was subject to its terms.³⁸¹
248. Third, according to Burlington, the Consortium’s operations likewise led to the discovery of extensive new deposits.³⁸² In support, Burlington relies on Mr. Crick, who explains that this was particularly so regarding the Oso reservoir, where the Consortium’s drilling program revealed significantly larger reserves than initially thought, for instance when discovering that the reservoir formed part of the Frontino field.³⁸³ For Burlington, these “extensive discoveries in Block 7 were the exclusive result of the Consortium’s operations” since no other entity operated in the Block.

³⁷⁵ *Ibid.*, referring to: Tr. Liability (Day 2) (ENG), 385:13-386:3 (Direct, Martinez).

³⁷⁶ Reply, ¶ 218, referring to: Moyes ER2, ¶ 39.

³⁷⁷ Reply, ¶ 220.

³⁷⁸ Confidential Memorandum, ConocoPhillips: Proposed Sale of its Interests in Ecuador, Harrison Lovegrove & Co., August 2007, at 33 (**Exh. E-214**).

³⁷⁹ Budget Committee Meeting Presentation, 26-27 September 2007 (**Exh. C-470**).

³⁸⁰ Acta de Acuerdo Parcial (**Exh. E-133**).

³⁸¹ Reply, ¶ 223, referring to: Moyes ER2, ¶ 31.

³⁸² Mem., ¶ 121; Reply, ¶¶ 210-211.

³⁸³ Mem., ¶ 121, referring to: Crick WS1, ¶ 150.

The estimated reserves grew from an initial 33.5 million barrels in 2004 to 70 million barrels in 2006, namely an increase of over 100%.³⁸⁴

249. Burlington adds that, contrary to Ecuador's assertions, the Consortium did carry out the required exploratory activities in Oso.³⁸⁵ The 2006 Oso Development Plan "resulted exclusively from the Consortium's new exploration activities" leading to the discovery and development of the north Oso field, which was sufficient to "trigger" the extension under Article 6.2, as Mr. Moyes confirms.³⁸⁶

3.1.3 Burlington would "in all probability" have obtained an eight-year extension under revised contractual terms

250. Burlington is of the view that it would "in all probability" have obtained an eight-year extension of the Block 7 PSC, although it acknowledges that it would have had to accept revised contract terms.³⁸⁷ According to Mr. Moyes, assuming good faith on both sides, contractual negotiations for an extension would most likely have resulted in a revised contract with the following characteristics: (a) a service contract with a fixed fee per barrel, (b) and a service fee of USD 35 per barrel, adjusted for inflation, for existing wells, and a fee yielding 25% return on investment for new or incremental production, (c) for a duration of eight years.³⁸⁸
251. It is Burlington's submission that, had Ecuador complied with its contractual obligation to absorb the tax and acted as a reasonable contract partner, the Consortium would have accepted such revised terms, as Mr. Martinez confirmed.³⁸⁹ In Mr. Moyes' expert opinion, these terms would also have been acceptable to Ecuador, since they compare to those achieved in Blocks 10 (Agip) and 16 (Repsol).³⁹⁰ They would also have been in line with President Correa's new "single model" contract form.³⁹¹

³⁸⁴ Mem., ¶ 121, referring to: Crick WS1, ¶ 152.

³⁸⁵ Reply, ¶ 210.

³⁸⁶ *Id.*, ¶ 211, referring to: Moyes ER2, ¶¶ 26, 47.

³⁸⁷ Mem., ¶¶ 131-133.

³⁸⁸ *Id.*, ¶¶ 131, 187, referring to: Moyes ER1, ¶¶ 58-60.

³⁸⁹ Mem., ¶ 132, referring to: Martinez WS4 Supp., ¶ 12.

³⁹⁰ Mem., ¶ 133, referring to: Moyes ER1, ¶¶ 51-57.

³⁹¹ Mem., ¶ 133, referring to: *Correa Proposes 'Single Model' for Contracts with Foreign Oil Companies*, El Diario, 14 April 2008 (**Exh. C-184**); DoL, ¶ 42; PO12, Annex B, Respondent's Observations to Claimant's Reply to Request 1, at 6.

3.1.4 Tribunals have recognized the importance of lost opportunities in the valuation of an investment

252. According to Burlington, tribunals recognize that the lost opportunity to earn future profits is a recoverable loss and that “the prospect for renewal of an authorization to do business is an asset with a value of its own” and thus an important element of a going concern.³⁹² Examples include *Sapphire Petroleum, SPP v. Egypt*, and *CME v. Czech Republic*. For Burlington, these cases show that “an investment’s future prospects, whether dependent on a contract or license, are central to its value”.³⁹³ In *Sapphire Petroleum*, the arbitrator awarded compensation for lost opportunity to generate profit from the concession although operations were in an early stage and no oil had yet been discovered.³⁹⁴ The arbitrator found it clear that the plaintiff had lost an opportunity to discover oil, which he regarded to be “very favourable”.³⁹⁵ He further held that, where damage cannot be proven, it is enough “to be able to admit with sufficient probability the existence and extent of the damage”.³⁹⁶ In *SPP*, the tribunal considered the lost opportunity of making a commercial success of the project.³⁹⁷ In *CME*, the tribunal applied the “but for” scenario assuming that the broadcast license would have been renewed “in all likelihood”, and considered the “reasonable probability of license renewal” when valuing the investment.³⁹⁸ In the present circumstances, the situation is much simpler, says Burlington, since Block 7 was already “highly productive” at the time of expropriation “and remains so to this day”.³⁹⁹ By contrast, *Gemplus*, upon which Ecuador relies, must be distinguished

³⁹² Mem., ¶ 125.

³⁹³ *Id.*, ¶ 130.

³⁹⁴ *Id.*, ¶ 126, citing: *Sapphire International Petroleums Ltd. v. National Iranian Oil Company* (“*Sapphire v. NIOC*”), Award of 15 March 1963 (1967), ¶¶ 187-188 (**Exh. CL-125**). See also: Reply, ¶ 201.

³⁹⁵ Mem., ¶ 126, citing: *Sapphire v. NIOC*, Award of 15 March 1963 (1967), ¶¶ 187-188 (**Exh. CL-125**).

³⁹⁶ *Ibid.*

³⁹⁷ Mem., ¶ 126, note 170, referring to: *SPP v. Egypt*, Award on the Merits of 20 May 1992, ¶¶ 214-216 (**Exh. CL-162 and CL-376**).

³⁹⁸ Mem., ¶ 129; Reply, ¶ 201, citing: *CME v. Czech Republic*, Final Award of 14 March 2003, ¶¶ 605-606 (**Exh. CL-174**).

³⁹⁹ Reply, ¶ 202.

from the present case given that Burlington produced “extensive evidence” proving the “strong likelihood” of receiving a contract extension.⁴⁰⁰

253. Finally, Burlington opposes Ecuador’s contention that lost opportunity damages are speculative.⁴⁰¹ According to Burlington, customary international law, as *SPP* shows, does not require Burlington to prove its lost opportunity damages “with complete certainty”, but with “sufficient probability”.⁴⁰² This is especially so where the uncertainty derives from Ecuador’s unlawful conduct. This latter test is “more than satisfied”, since, absent Law 42, an extension was “reasonably certain”.
254. Accordingly, Burlington submits that the Tribunal “can and should fairly value” the lost opportunity at **USD 300.5 million** in the extension scenario.⁴⁰³ In the Updated Model, assuming a valuation on 31 August 2016, the value of this claim was updated to **USD 376 million**, including pre-award interest.

3.2 Ecuador’s position

255. Ecuador opposes Burlington’s lost opportunity claim with respect to the extension of the Block 7 PSC. First, Ecuador argues that this is a contract claim over which the Tribunal has no jurisdiction (Section 3.2.1). Alternatively, Ecuador submits that the claim is inadmissible or fails on the merits (Section 3.2.2).

3.2.1 Burlington’s lost opportunity claim is a contract claim over which the Tribunal lacks jurisdiction

256. It is Ecuador’s primary submission that Burlington’s lost opportunity claim is contractual in nature, as a result of which the Tribunal lacks jurisdiction.⁴⁰⁴ Ecuador’s arguments regarding contract claims set out in Section VII.C.1.2 above apply *mutatis mutandis* to the present claim.
257. More specifically, Ecuador argues that Burlington’s self-serving argument that the negotiation of a contract extension is part of the value of its investment is “insufficient” to support the existence of a treaty claim. By resorting to the broad

⁴⁰⁰ *Id.*, ¶ 203, referring to: Moyes ER2, ¶ 46. See also: *Gemplus, S.A., SLP, S.A. and Gemplus Industrial, S.A. de C.V. v. United Mexican States*, ICSID Case No. ARB(AF)/04/3 & ARB(AF)/04/4 (“*Gemplus v. Mexico*”), Award of 16 June 2010, ¶ 12-49 (**Exh. EL-243**).

⁴⁰¹ Reply, ¶¶ 225-226.

⁴⁰² *Id.*, ¶ 225, referring to: *SPP v. Egypt*, Award on the Merits of 20 May 1992, ¶ 218 (**Exh. CL-162 and CL-376**).

⁴⁰³ Reply, ¶ 226.

⁴⁰⁴ Rejoinder, ¶ 324.

definition of the term investment, Burlington attempts to introduce a contract claim through the back door. If the Tribunal applies an objective test, it will recognize that the claim is based on the PSCs. This is clear if one considers that the claim is based on the alleged breach of the tax renegotiation clauses.⁴⁰⁵

3.2.2 In the alternative, Burlington's claim is inadmissible or fails on the merits

258. Alternatively, if the Tribunal were to hold that Burlington's claim is based on a treaty obligation, this claim would be inadmissible, because "(i) Burlington's claims pertain to the vindication of contract rights and (ii) there is a genuine dispute as to the existence and scope of said rights".⁴⁰⁶ Ecuador's specific arguments in this respect are set out in Section VII.C.1.2 above.
259. If the Tribunal does not reject the claim for lack of jurisdiction or inadmissibility, Ecuador submits that it must dismiss it on the merits. According to Ecuador, this claim is nothing more than an attempt by Burlington to create damages "where none exist".⁴⁰⁷ Mr. Moyes is not an expert on the Ecuadorian oil sector, as a consequence of which his opinion is irrelevant. This is especially true of his speculations with respect to the buy-out of Murphy Oil's interest in Block 16 and his misrepresentations regarding the context of the negotiations of the contracts to which he refers.⁴⁰⁸ Nor is Dr. Pérez Loose's opinion of any support for Burlington's imaginary claim, which artificially inflates its damages claim by "a staggering USD 300.5 million (of which USD 135.6 million is interest)".⁴⁰⁹
260. For Ecuador, this claim must be dismissed for three reasons: (i) Ecuador had full discretion to grant an extension or not, (ii) Burlington is solely responsible for having foregone the opportunity to continue operations, and (iii) no willing buyer would have attributed any value to the remote and uncertain alleged opportunity.
261. First, Ecuador asserts that it holds discretionary power under Article 6.2 of the Block 7 PSC to decide "if and when" it is in its best interests to grant an extension.⁴¹⁰

⁴⁰⁵ *Id.*, ¶ 343.

⁴⁰⁶ *Id.*, ¶ 370. Ecuador advances this argument for all claims related to Law 42, as well as for the claim for lost opportunity to extend Block 7.

⁴⁰⁷ *Id.*, ¶ 751.

⁴⁰⁸ *Id.*, ¶¶ 752-753, referring to: Moyes ER2, ¶ 42.

⁴⁰⁹ Rejoinder, ¶¶ 754-755.

⁴¹⁰ *Id.*, ¶¶ 757, 780.

Burlington had no vested right, not even a legitimate expectation to a contract extension.⁴¹¹ To wit, Article 6.2 provides that the contract term “*podrá ser prorrogable, siempre y cuando convenga a los intereses del Estado*”.⁴¹² This language unequivocally shows the State’s discretionary power. It does not create an “entitlement” to an extension, as Burlington argues.⁴¹³ Prof. Aguilar, Ecuador’s legal expert, opined that the use of the words “*podrá ser*” indicates that Ecuador was under no obligation to grant an extension, and that it had the authority to determine if and when a contract extension was in the State’s best interest.⁴¹⁴ Even if there is an obligation to negotiate (in French, an *obligation de moyens*), there is no obligation to achieve a specific result (in French, an *obligation de résultat*).⁴¹⁵

262. In any event, Ecuador asserts that Burlington failed to meet the technical requirements under Article 6.2 to qualify for a potential extension. But even if it had, it would still be irrelevant in light of the discretionary power of the State. Beyond economic considerations, Ecuador would have considered the following aspects before accepting an extension: the imposition of the single service contract model, Burlington’s sabotage of the negotiations with Perenco, the fact that Burlington had stopped investing in Ecuador since December 2007, and Burlington’s intention to sell its Ecuadorian assets.⁴¹⁶ These facts would have led Ecuador to conclude that an extension was not in its best interest.⁴¹⁷

263. In its Rejoinder, Ecuador notes that Burlington has abandoned its prior argument that it qualified for an extension based on significant investments. Instead, it now limits itself to arguing that it allegedly discovered new oil deposits.⁴¹⁸ However, notes Ecuador, Burlington failed to rebut its argument that every new oil discovery gives rise to the application of a specific economic regime under Article 8.1.1 of the Block 7 PSC for purposes of allocation of produced oil. Yet, the alleged Oso field

⁴¹¹ *Id.*, ¶¶ 767-768, 780.

⁴¹² Dr. Pérez Loose translates this as “this term may be extended, if and when it is in the best interests of the State [...]”. (Pérez Loose ER (English translation), ¶ 159). Ecuador provides a virtually identical translation of this language (“this term may be extended, if and when it is in the State’s best interest [...]”. CM, ¶ 230, note 213).

⁴¹³ Rejoinder, ¶ 759, referring to: Aguilar ER3, ¶¶ 57-63.

⁴¹⁴ Rejoinder, ¶ 763, referring to: Aguilar ER4, ¶¶ 77-81; ER3, ¶¶ 60-63.

⁴¹⁵ Rejoinder, ¶ 765.

⁴¹⁶ *Id.*, ¶ 761.

⁴¹⁷ *Id.*, ¶ 762.

⁴¹⁸ *Id.*, ¶¶ 773-774, referring to: Reply, ¶¶ 210-211.

discoveries “remained subject to the same economic regime” as the rest of Block 7, indicating that Burlington itself did not truly believe to have made a new discovery.⁴¹⁹

264. As a second substantive reason for the Tribunal to refuse to award damages concerning the potential extension of the Block 7 PSC, Ecuador submits that Burlington’s claim fails for lack of causation, since Burlington’s alleged loss was not and could not have been caused by Ecuador. It was Burlington’s strategic decision to leave Ecuador and to torpedo the negotiation process that led to its alleged losses. Indeed, Burlington admitted that it preferred to proceed with its “asset divestment strategy”.⁴²⁰ Ecuador engaged in negotiations with Perenco, which remained open, but Burlington prevented Perenco from agreeing to “fairer contractual terms”.⁴²¹ In fact, Burlington was never interested in reaching an agreement and even threatened legal action against Perenco. Accordingly, for Ecuador, Burlington is solely responsible for having foregone the opportunity to negotiate an extension of its operations.
265. According to Ecuador, this failure to prove causation is fatal to Burlington’s claim, as only damages caused by an internationally wrongful act are subject to compensation in international law. Burlington’s “abusive mention of purported unlawful actionss, in the plural” must not be entertained, in light of the Tribunal’s finding that the only internationally wrongful act in this case was Ecuador’s failure to pay compensation.⁴²²
266. Ecuador’s third argument is that no willing buyer would have attributed a value to the alleged lost opportunity in light of its uncertainty and remoteness.⁴²³ Burlington’s own test of “reasonable certainty” and “sufficient probability” leads to the conclusion that its claim must fail. Burlington cannot even show that it sought the negotiation of an extension, and the ConocoPhillips sale documents show that the intent was to sell the group’s interests in Ecuador in any event. Moreover, the true reason for Burlington’s decision to stop investing in the Blocks was the poor quality of the reservoirs and the “imminent expiry” of the Block 7 PSC, not Law 42.⁴²⁴ For

⁴¹⁹ Rejoinder, ¶¶ 775-778.

⁴²⁰ *Id.*, ¶ 782, referring to: Letter from Burlington Resources to PetroEcuador, 7 October 2008 (**Exh. E-140**).

⁴²¹ Rejoinder, ¶ 783.

⁴²² *Id.*, ¶ 792 (emphasis in original).

⁴²³ *Id.*, ¶¶ 794-821.

⁴²⁴ *Id.*, ¶¶ 799-800.

Ecuador, it cannot have been Law 42, since contemporaneous documentation shows that the Oso field was still profitable in October 2007 and the Consortium considered drilling new wells even under Law 42 at 99%.⁴²⁵

267. Unlike the present case, damages were granted for lost opportunity in *CME* because there was a “high degree of certainty, supported by the practice in the television broadcasting industry” that the investor’s license would be extended.⁴²⁶ In addition, Mr. Moyes’ opinion that the Consortium would have obtained an extension in light of seven other extensions granted by Ecuador is misconceived; no participation contract was extended. All the examples cited by Mr. Moyes relate to renegotiated and amended contracts which were to migrate to the service contract model. Furthermore, the service contracts agreed with Eni/Agip and Repsol cannot be used as reference here as the contracts are not comparable. Repsol reached an agreement during the transitory period in 2008, when Burlington insisted on blocking a similar agreement.
268. Finally, Mr. Moyes’ analysis of the “likely terms” of a renegotiated contract is based on his personal considerations, and he failed to show that Ecuador’s position on the relevance of such “likely terms” is wrong.⁴²⁷

3.3 Analysis

269. Through its lost opportunity claim, Burlington is in effect asking the Tribunal to find that its profit stream under the Block 7 PSC would have continued for an additional eight years after the expiry of the then-existing contract term, albeit on different terms.⁴²⁸ It can thus be understood as expanding the production profile under which Burlington values the Block 7 PSC, with some modifications. In this context,

⁴²⁵ *Id.*, ¶ 801, referring to: Internal ConocoPhillips email titled ‘*Drilling Plan Proposal from Perenco*’, 9 October 2007 (**Exh. E-523**); Yuralpa Mapping Update, January 2007 (**Exh. E-555**); ConocoPhillips: Latin America Reserves Review, Ecuador, 7 May 2007, p. 13 (**Exh. E-553**); Confidential Memorandum, ConocoPhillips: Proposed Sale of its Interests in Ecuador, prepared by Harrison Lovegrove & Co. (**Exh. E-214**); Consortium Budget Committee Meeting Presentation, 26-27 September 2007 (**Exh. C-470**).

⁴²⁶ Rejoinder, ¶ 802, referring to: Reply, ¶ 302; *CME v. Czech Republic*, ¶ 605 (**Exh. CL-174**).

⁴²⁷ CM, ¶¶ 280-290; Rejoinder, ¶ 808.

⁴²⁸ Relying on Mr. Moyes’ testimony, Compass Lexecon projects the Block 7 PSC’s profit stream from 16 August 2010 to 16 August 2018 based on a service contract where the Consortium receives (i) “[a] service fee of US\$ 35 per gross barrel produced from all wells that Claimant would have drilled absent the extension, partially adjusted for inflation”; and (ii) “[a] service fee for incremental investments (i.e., new wells and associated facilities that are only to be drilled under the extension scenario) which would allow the Consortium to achieve a 25% return on such incremental investments”. Compass Lexecon ER1, ¶ 56.

although this claim (like all the other claims of Burlington) is linked to the PSCs, the Tribunal considers that it is in essence a claim for damages caused by the expropriation, that is, a treaty claim over which the Tribunal indeed has jurisdiction.

270. Ecuador nonetheless invokes the inadmissibility of this claim. The Tribunal has already examined this objection with respect to Burlington's claim for past Law 42 dues (see paragraph 214 above), to which discussion it refers. As a result, it holds that this claim is admissible.

271. In the further alternative, Ecuador is of the view that this claim fails on its merits. The Tribunal agrees. Under the clear and unambiguous terms of Article 6.2 of the Block 7 PSC, Burlington did not have an entitlement to a contract extension that could have been taken or destroyed as a result of Ecuador's expropriation. All that it had, and all that it lost, was a right to negotiate such an extension. Its claim for profits allegedly lost as a result of this loss of its right to negotiate a contract extension fails for the reasons explained below.

272. It is evident from the wording of Article 6.2 that Ecuador had full discretion to allow an extension of the Block 7 PSC or not, even under a new service contract model. Article 6.2 reads as follows:

“El Período de Explotación durará en el presente caso, hasta el dieciséis de agosto de dos mil diez; este plazo podrá ser prorrogable, siempre y cuando convenga a los intereses del Estado por las siguientes causas: Cuando el área de explotación se encuentre alejada de la infraestructura hidrocarburífera petrolera existente, previa aprobación del Ministerio del Ramo y por un período de hasta cinco (5) años. Cuando la Contratista proponga nuevas inversiones significativas en los últimos cinco (5) años del Período de Explotación, previa aceptación del Ministerio del Ramo y aprobación del CEL, siempre y cuando requieran plazos adecuados de amortización para dichas inversiones. Para el caso de eventuales descubrimientos de nuevos Yacimientos de Hidrocarburos Comercialmente Explotables provenientes exclusivamente de trabajos de nueva exploración que realizare la Contratista, el plazo de Período de Explotación se prorrogará previa aceptación del Ministerio del Ramo y aprobación del CEL”.⁴²⁹

⁴²⁹

Exh. C-1. Burlington provides the following [unofficial] translation (Mem., ¶ 116): “In this case, the Production Period will last until August sixteenth (16), two thousand ten (2010); this term may be extended, if and when it is in the State's best interest, **or** for the following reasons:

- When the Production area is located far from existing hydrocarbon production infrastructure, with the prior approval of the Ministry of Energy and Mines and for a period of up to five (5) years;

273. As Prof. Aguilar opines, this clause contains three rules that must be analyzed separately: (i) first, the contractual term may be extended; (ii) second, the extension will only be granted if it is in the State's interests, and, additionally, (iii) at least one of three requirements must be met.⁴³⁰
274. With respect to (i), it appears from the use of the verb "*podrá*" ("may") that this provision grants the State discretion to grant the extension or not. If the extension had been mandatory, the provision would have used the verb "*deberá*" ("shall") or the future imperative tense "*se prorrogará*" ("shall or will be extended"). The Tribunal further notes that the provision states that the contract "*podrá ser prorrogable*", which strictly speaking should be translated as "may be subject to an extension", or "may be extendable", instead of "*podrá ser prorrogado*", meaning "may be extended". The use of two terms that indicate possibility rather than certainty ("*podrá*" and "*prorrogable*") confirms the opinion of the Tribunal that this was a discretionary power.⁴³¹ This does not mean that the State had unfettered discretion. The State's discretion must be exercised reasonably and the PSCs imposed further limits, as described below.
275. Second, the extension may be granted "*siempre y cuando*" (if and when) it is in the State's interests. The determination of what are the State's best interests can only rest with the State itself, which strengthens the discretionary nature of this

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- When the Contractor proposes significant new investments during the last five (5) years of the Production Period, with the agreement of the Ministry of Energy and Mines and the approval of the [Special Bid Committee], if and when adequate amortization periods are required for those investments;
 - If new Commercial Hydrocarbon Deposits are discovered as an exclusive result of new exploration work performed by the Contractor, the Production Period will be extended with the prior agreement of the Ministry of Energy and Mines and the approval of the [Special Bid Committee]" (emphasis added by the Tribunal).

In turn, Ecuador provides the following unofficial translation (CM, ¶ 230, note 213): "In this case, the Production Period will last until August sixteenth (16), two thousand ten (2010); this term may be extended, if and when it is in the State's best interest for the following reasons: When the Production area is located far from existing hydrocarbon production infrastructure, with the prior approval of the Ministry of Energy and Mines and for a period of up to five (5) years; When the Contractor proposes significant new investments during the last five (5) years of the Production Period, with the agreement of the Ministry of Energy and Mines and the approval of the CEL, if and when adequate amortization periods are required for those investments; If new Commercial Hydrocarbon Deposits are discovered as an exclusive result of new exploration work performed by the Contractor, the Production Period will be extended with the prior agreement of the Ministry of Energy and Mines and the approval of the CEL").

The Tribunal prefers Ecuador's translation, which does not contain the emphasized "or" in first sentence, and which does not exist in the Spanish original.

⁴³⁰ Aguilar ER3, ¶ 59.

⁴³¹ *Id.*, ¶¶ 60-63.

extension. As Prof. Aguilar explains, the interests of the State are not merely economic; they are also social and political.⁴³² Even if Burlington could prove that the Block 7 extension would have been economically rational for Ecuador (a question of fact that the Tribunal need not address), it cannot be presumed that the extension would necessarily have been in the State's interests.

276. Finally, under Article 6.2 of the Block 7 PSC, the extension may only be granted in one or more of the following three scenarios:

- i. "When the Production area is located far from existing hydrocarbon production infrastructure, with the prior approval of the Ministry of Energy and Mines and for a period of up to five (5) years";
- ii. "When the Contractor proposes significant new investments during the last five (5) years of the Production Period, with the agreement of the Ministry of Energy and Mines and the approval of the CEL, if and when adequate amortization periods are required for those investments";
- iii. "If new Commercial Hydrocarbon Deposits are discovered as an exclusive result of new exploration work performed by the Contractor, the Production Period will be extended with the prior agreement of the Ministry of Energy and Mines and the approval of the CEL".⁴³³

277. In each of these three scenarios, the consent of the State is required. None gives rise to an "automatic" extension. In addition to the discretion of the State just referred to, the extension is subject to the "prior approval of the Ministry" and in the last two scenarios also to the "approval of the CEL". It is true that the third scenario uses more imperative language ("*se prorrogará*", or "shall be extended"), but that is only if the prior approval of the State is obtained. While Mr. Moyes might possibly be right that in the ordinary course of business an extension would likely have been agreed on service contract terms acceptable to Ecuador and Burlington (that

⁴³² *Id.*, ¶ 73 ("[W]hen we are dealing with the public interest, which is the one assessed the moment a discretionary power is exercised, judgments do not respond solely and necessarily to economic rationality, which is doubtless very important in Private Law. Public interest consults not only this rationality, but also social rationality and political rationality, which the administrative authority is required to consider to satisfy collective interests and the common good") (translation by the Tribunal).

⁴³³ Article 6.2 of the Block 7 PSC (**Exh. C-1**) (unofficial translation provided by Ecuador at CM, ¶ 230, note 213).

Burlington refused it in the actual circumstances is not determinative), it nonetheless remains that any extension was subject to the consent of the State.

278. The Tribunal thus finds that, even if Burlington had met any of the three conditions listed above (a factual inquiry in which, for reasons of procedural efficiency, the Tribunal does not engage), Burlington would not have been entitled to an extension of the Block 7 PSC. In other words, as noted above, Burlington did not have a right to a contractual extension that could have been either taken or destroyed as a result of Ecuador's expropriation. At most, Burlington had a right to negotiate a contract extension – in its words, a right to a “mandatory negotiation concerning an extension” (see paragraph 240 above). In the Tribunal's view, Burlington has not proven, with the reasonable certainty that international law requires for a lost profits claim, that an extension capable of being “taken” would in fact have materialized from its right to negotiate.⁴³⁴ As noted in *Merrill Ring*, “the state cannot guarantee a profit which is no more than an expectation on the drawing board and which may or may not be realized”.⁴³⁵ Thus, as in *Gemplus*,⁴³⁶ when valuing Burlington's lost profits under the Block 7 PSC, the Tribunal will project lost profits until the expiry of the term Block 7 PSC on 31 August 2010 and not beyond.

⁴³⁴ Article 36 of the ILC Articles provides that “compensation shall cover any financially assessable damage including loss of profits insofar as it is established”. Tribunals have consistently found that lost profits may only be awarded if there is sufficient or reasonable certainty that they would have materialized. See, for instance: *Asian Agricultural Products Ltd v Republic of Sri Lanka* (ICSID Case No ARB/87/3) (“*AAPL v. Sri Lanka*”), Award of 27 June 1990, ¶ 104 (**Exh. CL-113**), *Micula v. Romania*, Award of 11 December 2013, ¶¶ 1006-1010 (**Exh. EL-248**). See also: M. M. Whiteman, *Damages in International Law*, vol. II (Washington, D.C.: U.S. Government Printing Office, 1937), p. 1837 (noting that the assessment of prospective profits requires proof that “they were reasonably anticipated; and that the profits anticipated were probable and not merely possible”), and J. Y. Gotanda, “Recovering Lost Profits in International Disputes”, 36 *Georgetown Journal of International Law* 61 (2004), p. 111.

⁴³⁵ *Merrill & Ring Forestry L.P. v. Government of Canada* (UNCITRAL) (“*Merrill & Ring v. Canada*”), Award of 31 March 2010, ¶ 149 (**Exh. CL-155**).

⁴³⁶ See: *Gemplus v. Mexico*, Award of 16 June 2010, ¶ 12.49 (**Exh. EL-243**) (“The period of the Concession Agreement was ten years, commencing on 15 September 1999 and expiring on 14 September 2009 [...]. There was a possible extension thereafter of not more than ten more years, subject (inter alia) to the discretion of the Secretariat. Whilst the exercise of that discretion was not unfettered under Mexican law, the Tribunal considers that the Claimants' claim for this second period of ten years is far too contingent, uncertain and unproven, lacking any sufficient factual basis for the assessment of compensation under the two BITs. At the relevant date, the Concessionaire had no legal right to any extension of the Concession's original ten-year term; and as the Concessionaire's minority shareholders, the Claimants' rights as investors under the BITs were still more nebulous and speculative. Accordingly, the Tribunal proceeds on the basis that the Concession Agreement would not have continued beyond 14 September 2009, i.e. 8.25 years after the Requisition of 25 June 2001; and the Tribunal rejects the Claimants' claims based upon any period thereafter”).

279. The Tribunal appreciates that, even if Burlington did not have a *right* to a contract extension, it may have had an *opportunity* to extend the contract that could potentially have value. Tribunals have recognized that the loss of a business opportunity (or “loss of a chance”) may give rise to compensation.⁴³⁷ That is not equivalent to the lost profits that the opportunity, had it materialized, would have been generated. Indeed, there is a possibility that the chance may not have materialized. That element of uncertainty must be built into the claim.⁴³⁸ As counsel for Burlington put it in a legal publication:

“A loss of opportunity (or chance) is a sub-category of lost profits where not only the magnitude but even the existence of monetary prejudice is doubtful. Ordinarily, this would be viewed as a matter of speculation and therefore not lead to recovery at all. What distinguishes this category of damages and rescues the claimant’s prospects for recovery is that the possibility of profits itself has a value. The paradigm case is *Sapphire*, which involved the cancellation of rights to explore and exploit any hydrocarbon resources found in a specific area. At the time of the breach, there was no way of knowing whether there would be any discovery of commercial value. Yet the chance itself had a value; a third party would have paid something for the licensee’s rights”.⁴³⁹

280. Here, while Burlington and its legal expert appear to accept that this claim is for the loss of an opportunity,⁴⁴⁰ Burlington has not quantified the value of that

⁴³⁷ See, for instance: *Sapphire v. NIOC*, Award of 15 March 1963, p. 187-188; *SPP v. Egypt*, Award of 20 May 1990, ¶¶ 214-216; and *Gemplus v. Mexico*, Award of 16 June 2010, ¶ 13.98 (“In the Tribunal’s view, there was therefore as at 24 June 2001 no certainty or realistic expectation of this project’s profitability as originally envisaged, but there was nonetheless a reasonable opportunity. That opportunity, however small, has a monetary value for the purpose of Article 36 of the ILA Articles and the indemnities for compensation provided by the two BITs”).

⁴³⁸ This is reflected for instance in Article 7.4.3(2) of the UNIDROIT Principles, according to which “[c]ompensation may be due for the loss of a chance in proportion to the probability of its occurrence”. See also: *Gemplus v. Mexico*, Award of 16 June 2010, ¶¶ 13.96-13.100.

⁴³⁹ J. Paulsson, “The Expectation Model”, in Y. Derains, R.H. Kreindler (eds), *Evaluation of Damages in International Arbitration*, Dossier IV from the ICC Institute of World Business Law, ICC Publication No 668 (2006), p. 66.

⁴⁴⁰ See, for instance: Mem., Title IV C (“Lost Opportunities: Ecuador Is Obligated To Compensate Burlington For The Lost Opportunity To Negotiate An Extension Of The Block 7 PSC”); Tr. Quantum (Day 3) (ENG), 822:4-22 (Cross of Dr. Aguilar, Blackaby) (“Mr. Aguilar, I’m not saying that there is a right. I understood that we agree that there is an opportunity. It could be a lost opportunity. And if that opportunity did not exist—let’s say I buy a ticket for a lottery. That gives me the opportunity to win or lose”); Tr. Quantum (Day 3) (ENG), 721:10-21 (Cross, Dr. Pérez Loose) (“The right of the Consortium is to see its Contract renewed or extended should one of the three conditions described in the Contract are met, and the State itself says that if one of those conditions is met, the interests of the State would be wholly satisfied. In such a case, the Contract would be extended. That is the right. At least a legitimate expectation that if one of the conditions stipulated in the Contract is, indeed, met,

opportunity.⁴⁴¹ It claims, rather, the full value of the lost profits which it would allegedly have obtained had the contract been extended (under the terms envisaged by Mr. Moyes).⁴⁴²

281. While the Tribunal could possibly attempt to assess the lost opportunity in monetary terms, it finds that it would be too speculative for it to do so in the circumstances and on the basis of the evidence before it. Indeed, as noted above, the State had discretion to decide whether the contract would have been extended, within the limits set out in the PSCs themselves, and this discretion involved the delicate assessment of the best interests of the State. Hence, even if the Tribunal were to find that the economic terms proposed by Mr. Moyes were reasonable, there is no way for the Tribunal on its own to assess the probability that the contract would have been extended, or on what terms. The Tribunal notes in this regard that it is not prepared to rely on other contracts that were extended by Ecuador. In particular, the Tribunal considers that the Repsol-Murphy contract and the AGIP contract are not comparable because they were already service contracts (AGIP) or presupposed acceptance of Law 42 payments (Repsol-Murphy).⁴⁴³
282. Nor can the Tribunal fail to observe that, at the relevant time, Burlington itself appears to have assigned zero value to the chance of a contract extension. Indeed, while the 2007 Sales Memorandum recognized the possibility of a contract extension,⁴⁴⁴ it did not project any production beyond the original term of the Block 7 PSC, i.e., August 2010.⁴⁴⁵

then the Minister or Petroecuador or whoever the official public authority is would extend the Contract. That is my position”).

⁴⁴¹ Although at the Hearing Mr. Moyes suggested that the Tribunal could adjust the value to 87.5% (because he had testified that 7 out of 8 contracts had been extended), and Burlington’s counsel further suggested that the Tribunal could in its discretion decide to award 60 or 70% of the amount claimed, Burlington’s claim is for the total amount of the profits to be generated by the extension. See: Compass Lexecon ER1, ¶¶ 55-63.

⁴⁴² See, for instance: Compass Lexecon ER1, ¶¶ 55-63.

⁴⁴³ R-PHB, ¶¶ 180-186, citing: Tr. Quantum (Day 3) (ENG), 974:19-975:1 (Cross, Moyes) and (Day 5) (ENG), 1494:15-21 (Closing, Silva Romero).

⁴⁴⁴ The 2007 Sales Memorandum stated that “[a]n extension is possible, especially with a commitment to enhance the productivity of the field beyond the continuation of a standard drilling program. An offer to conduct pressure maintenance via water injection may be attractive to Petroecuador and could be an enticement for a contract extension. It is thought that any new field discovered will receive an automatic term extension to 2017” (**Exh. E-214**).

⁴⁴⁵ See: 2007 Sales Memorandum, Appendix 8, p. 67 (**Exh. E-214**).

283. For these reasons, the Tribunal dismisses Burlington's damages claim for the lost opportunity to extend the Block 7 PSC.

D. VALUATION

284. The Tribunal now turns to the valuation of the expropriated assets, i.e., the value of the PSCs going forward, as identified in the previous sections. As noted above, Ecuador agrees that this is a compensable loss, but argues that Burlington's claim is grossly inflated.

285. The Tribunal will first provide an overview of the Parties' positions and their experts' opinions (Section 1). It will then address the valuation method (Section 2), the date of valuation (Section 3), and whether the economic effects of Law 42 should be accounted for (Section 4). It will then proceed to the computation of cash flows, assessing the different variables needed to determine revenues and costs, as well as the applicable actualization and discount rates (Section 5). Finally, the Tribunal will review Burlington's claim that the award must be protected against taxation (Section 6).

1. Overview of the Parties' valuations

1.1 Overview of Burlington's valuation

286. Burlington submits that the value of the PSCs is equivalent to the lost profits "from the production foregone" that it would have received under the PSCs absent the expropriation.

287. Relying on the full reparation standard, Burlington values these lost profits at the date of the award. As a result, its lost production can be broken down in two elements:⁴⁴⁶

- i. Past lost profits, i.e., lost profits that would have accrued from December 2007 until the date of the award, with an interest factor applied to actualize the cash flows to present value. Compass Lexecon refers to these as "historical lost profits". The Tribunal will refer to them as "past lost profits".
- ii. Future lost profits, i.e., lost profits that would have accrued from the date of the award until the expiry of the PSCs, discounted to present value. Compass

⁴⁴⁶ Mem., ¶ 74.

Lexecon refers to these as the “fair market value” at the date of the valuation. To simplify, the Tribunal will refer to them as “future lost profits”.

288. Applying accepted principles of corporate finance, Compass Lexecon undertook a discounted cash flow (“DCF”) analysis, simulating in its view the analysis that would have been undertaken by willing buyers and sellers “with a long-term investment perspective”, on the basis of the following elements:
- i. Future cash flows were discounted to the valuation date at a rate equivalent to the weighted average cost of capital (WACC) of the project, which “represents the opportunity cost of funding the operations of the PSCs”. Using the Capital Asset Pricing Model (CAPM), Compass Lexecon calculates the WACC of the project at 12.1% in its First Report (with a valuation date in May 2013) and 12.5% in its Second Report (with a valuation date in September 2014).
 - ii. Historical lost cash flows were “actualized” to the valuation date through the application of interest at the same rate;
 - iii. All lost profits were calculated net of the economic effects of Law 42, i.e., based on the assumption that Ecuador would have complied with its obligations under the PSCs;
 - iv. Production was calculated “as it would have been, but for the crushing effects of Ecuador’s breaches”. Accordingly, the lost profits analysis starts in December 2007, when the Consortium ceased all investment in the Blocks as a result of the 99% tax following Decree 662. Burlington explains that Compass Lexecon correctly assumes that, in such a “but for” scenario the Consortium would have continued investing rather than decreasing and eventually ceasing its investment in the Blocks.⁴⁴⁷ Specifically, Compass Lexecon bases its projections on Mr. Crick’s production forecasts, which Compass Lexecon has found to be consistent with the information on actual production and reserves produced by Ecuador from early 2010 onwards.⁴⁴⁸
 - v. Compass Lexecon forecasts future crude oil prices using North Sea Brent Crude (Brent) prices as a marker for Oriente crude (the crude oil produced by Block 7) and Napo crude (the crude oil produced by Block 21) prices. To

⁴⁴⁷ Mem., ¶ 77.

⁴⁴⁸ Compass Lexecon ER1, ¶ 6.

forecast Brent prices, Compass Lexecon uses a median of projections published by industry analysts and US government agencies. After reviewing the historical relationship between Brent prices and Oriente/Napo prices, Compass Lexecon computes expected price paths for Oriente and Napo crudes from the date of valuation until the expected expiration of the PSCs.⁴⁴⁹

- vi. Compass Lexecon assumes operating costs (OPEX) and capital expenditures (CAPEX) that are consistent with the Consortium's historical expenditures, updated with US PPI. With respect to the existing wells on Block 21, it also bases its projections on historical operating, drilling, and maintenance costs as incurred by the Consortium. With respect to the additional developments and production from new wells projected by Mr. Crick, Compass Lexecon uses "information on required investment costs based on Mr. Crick's calculations", and estimates "variable operating costs (on a per barrel basis) that increase proportionally to the volumes of fluids produced in line with the expected ratio of water to crude oil fluid extraction".⁴⁵⁰

289. Compass Lexecon also makes certain assumptions with respect to prices, taxation and others, which are discussed in the sections below.

290. Using the methodology and assumptions described above, in its Second Report Compass Lexecon values Burlington's claim at **USD 811.1 million**. In the Model submitted by both experts, this claim is updated to **USD 753.5 million** with a date of valuation of 31 March 2015.⁴⁵¹ In the Updated Model this amount is stated to be **USD 840,954,354**, including pre-award interest.

291. Burlington asserts that its experts have employed reasonable production estimates to calculate the financial consequences of Ecuador's unlawful conduct and that these estimates have been "fully validated" by documents Ecuador was obliged to produce in these proceedings.⁴⁵² Burlington states that it seeks no more than the fair

⁴⁴⁹ *Id.*, ¶ 5.

⁴⁵⁰ *Id.*, ¶ 7.

⁴⁵¹ If Compass Lexecon's assumptions are chosen as inputs in the Model, the item "Value of Operating Assets" amounts to **USD 753,533,729** with a valuation date of 31 March 2015.

⁴⁵² Reply, ¶ 2.

market value of its investment according to production volumes and estimates “according to Ecuador’s own figures”.⁴⁵³

1.2 Overview of Ecuador’s valuation

292. Ecuador acknowledges that Burlington has a right to compensation for the value of the PSCs, but contends that its claim is grossly inflated. According to Ecuador and its expert, Fair Links, once the FMV of the PSCs is properly calculated, Burlington’s claim for lost profits shrinks to USD 26.3 million.⁴⁵⁴
293. Ecuador agrees that damages correspond to the FMV of its lost investment and that the DCF is the proper method in the present case. However, it argues that Burlington’s valuation misapplies the relevant standards of compensation under the Treaty and international law, is based on false assumptions, and applies an exaggerated interest rate. In particular, it argues that:
- i. The appropriate standard of compensation is that provided under Article III of the Treaty, that is, the fair market value of Burlington’s investment on the date of the expropriation, plus interest up to the date of payment (both under the Treaty and customary international law). The customary international law principle of full reparation does not apply to this case.
 - ii. Burlington wrongly uses the date of the award as date of valuation, when it should use the date of the expropriation.
 - iii. Fair Links calculated the FMV of Burlington’s investment in the Blocks at USD 26.3 million (excluding interest) “considering all the information available as of the date of expropriation”.
 - iv. Burlington fails to account for Law 42 taxes when projecting future profits.
 - v. The interest rate used to actualize past lost profits can only be a risk-free rate, as opposed to the WACC.

⁴⁵³ *Ibid.*

⁴⁵⁴ Rejoinder, ¶ 451.

294. Ecuador takes particular issue with Burlington's application of interest, which Ecuador points out amounts to USD 366 million out of a total valuation of USD 811.1 million.⁴⁵⁵
295. Finally, Ecuador acknowledges that, besides the interest rate, the other value drivers chosen by Compass Lexecon have "a lesser impact" on the calculation of the FMV. The values for CAPEX, OPEX, oil prices, and oil production volumes adopted by Compass Lexecon "only affect Fair Links' base case by USD 9.9 million, increasing it from USD 26.3 million to USD 36.2 million".⁴⁵⁶

2. The DCF valuation method

2.1 Burlington's position

296. Burlington requests the Tribunal to apply the DCF methodology to quantify its lost profits claim. According to Burlington, to calculate the FMV of a going concern with an established track record of historical cash flows, the future profit-making potential of the investment must be taken into account.⁴⁵⁷ As explained by Compass Lexecon, the DCF method is the most appropriate technique in present circumstances, since it ascertains the value of an asset on the basis of expected future cash flows, taking into account the risk and the time value of money.⁴⁵⁸ This method has been applied by most recent awards and has become the industry standard for valuing oil and gas interests.⁴⁵⁹ For instance, in *CMS*, the tribunal held the DCF method to be "universally adopted". The *Walter Bau* tribunal deemed it to be the "only method that can accurately track value through time".⁴⁶⁰ In *Occidental II*, DCF was called the "standard economic approach".⁴⁶¹ Accordingly, expected free cash flows generated under the PSCs, "absent [i.e., 'but for'] unlawful government

⁴⁵⁵ *Ibid.*

⁴⁵⁶ *Id.*, ¶¶ 660-661, referring to: Fair Links ER2, ¶ 122, Figure 11.

⁴⁵⁷ Mem., ¶ 148.

⁴⁵⁸ *Id.*, ¶ 149. Burlington further explains that a "forward-looking DCF valuation is not the same as a calculation of damages for lost profits. It is simply a calculation of the fair market value of the asset by reference to the future earnings potential of the asset". *Id.*, note 203.

⁴⁵⁹ Mem., ¶ 151, referring in particular to: *Occidental v. Ecuador II*, Award of 5 October 2012, ¶ 779 (**Exh. CL-240**).

⁴⁶⁰ Mem., ¶ 152, citing: *CMS Gas Transmission Company v. The Argentine Republic*, ICSID Case No. ARB/01/8 ("*CMS v. Argentina*"), Award of 12 May 2005, ¶ 416 (**Exh. CL-99**); *Walter Bau AG v. Kingdom of Thailand* (UNCITRAL) ("*Walter Bau v. Thailand*"), Award of 1 July 2009, ¶ 14.12 (**Exh. CL-284**).

⁴⁶¹ Mem., ¶ 153, citing: *Occidental v. Ecuador II*, Award of 5 October 2012, ¶ 708 (**Exh. CL-240**).

conduct”, must be discounted “at a rate reflecting the business’s costs of raising capital and the appropriate levels of risk”.⁴⁶²

2.2 Ecuador’s position

297. Ecuador agrees that the DCF method is the proper method in the present case.⁴⁶³ Its expert, Fair Links, notes that “[t]he DCF approach is a widely accepted and implemented valuation method to determine the Fair Market Value of an asset”.⁴⁶⁴ Ecuador does not agree, however, that the FMV is “simply a proxy for the lost future cash flows”, since under certain circumstances “lost future cash flows operate as a proxy for FMV”, and argues that Compass Lexecon has admitted to calculating the value of future cash flows, not the FMV of Burlington’s investment.⁴⁶⁵
298. In addition, for Ecuador, Compass Lexecon calculates the FMV by misrepresenting the impact of various variables. Compass Lexecon “considers the value drivers underlying a DCF valuation in a sequence that is not in keeping with how a DCF is built”. For instance, Burlington’s expert considers taxation – Law 42 – before considering oil production and oil prices, and thus does not show its full impact. Nor does it show the full impact of applying an exaggerated 12.5% interest (actualization) rate until the date of the award.⁴⁶⁶ Both Law 42 and interest should be considered “at the end of the sequence once revenue (production and price) are determined”.⁴⁶⁷ Indeed, when these value drivers are analyzed in the correct order, “it becomes clear that the key differences in the Parties’ damages calculations are (i) the application of Law 42 (a USD 409 million impact) and (ii) Burlington’s use of an exaggerated 12.5% actualization rate to calculate pre-judgment interest (a USD 366 million impact)”.⁴⁶⁸ By contrast, the other parameters (such as price, production, CAPEX, OPEX and discount rate) have a lesser impact.⁴⁶⁹

⁴⁶² Mem., ¶ 150.

⁴⁶³ Rejoinder, ¶ 454.

⁴⁶⁴ Fair Links ER2, ¶ 40.

⁴⁶⁵ Rejoinder, ¶ 455.

⁴⁶⁶ *Id.*, ¶ 576.

⁴⁶⁷ *Ibid.*

⁴⁶⁸ Rejoinder, ¶ 577, referring to: Fair Links ER2, ¶ 60.

⁴⁶⁹ *Id.*, ¶ 578.

2.3 Analysis

299. The Parties agree that Burlington's investment should be valued using the DCF method. The Tribunal concurs: as both Parties' experts have noted, the DCF method is widely accepted as an appropriate method to value going concerns, and has been endorsed by the World Bank.⁴⁷⁰
300. The DCF method is an income-based valuation method. As Fair Links has explained, this method "values an asset by considering its ability to generate future economic benefits".⁴⁷¹ As Compass Lexecon puts it, "[b]usinesses have value because they are expected to produce net cash flows to the investor at some point. The DCF approach determines value on a particular date on the basis of the net cash flows that the asset is expected to generate over time".⁴⁷² Similarly, Fair Links explains that "[u]nder this approach, the value of an asset is related to its expected economic benefit, i.e. the remaining cash available to the investor or creditor once the operating costs and capital expenditure of the asset have been paid. Assessing these expected economic benefits allows one to determine the 'free cash flows' generated by the asset".⁴⁷³
301. Despite this, Ecuador appears to take issue with Compass Lexecon's use of free cash flows. The Tribunal is somewhat puzzled by this comment, as both Parties' experts expressly agree on the use of the DCF method and thus necessarily agree on valuing the investment on the basis of its future cash flows. The Tribunal thus dismisses Ecuador's objection, to the extent that it is one.
302. Although there is agreement on the method of valuation, the Parties' disagree on several variables and assumptions to be used to perform the valuation, in particular the date of valuation and whether the experts should use *ex ante* or *ex post* data, and as well as the actualization rate to apply to past cash flows. The Tribunal addresses these assumptions and variables in the following sections.

⁴⁷⁰ The World Bank considers that the determination of compensation for the FMV of a going concern with a proven record of profitability will be deemed reasonable if undertaken on the basis of the discounted cash flow value. World Bank (1992), "Guidelines on the Treatment of Foreign Direct Investment", Foreign Investment Law Journal, Chapter IV Expropriation and unilateral alterations or termination of contracts, paragraphs 5 and 6 (**Exh. CLEX-12**).

⁴⁷¹ Fair Links ER2, ¶ 40.

⁴⁷² Compass Lexecon ER1, ¶ 17.

⁴⁷³ Fair Links ER2, ¶ 41.

303. Ecuador also objects to the sequence used by Compass Lexecon in its DCF calculation. The Tribunal addresses this objection in Section VII.D.5.2.6 below.

3. Date of valuation

3.1 Burlington's position

304. As explained in Section VII.B.1 above, Burlington submits that the standard of compensation in cases of unlawful expropriation is the international law principle of full reparation. Since an award of compensation must take the place of restitution, it is "appropriate and logical to value the investment at the date of the award".⁴⁷⁴

305. According to Burlington, this was the position adopted by the PCIJ in *Chorzów*, where the Court held that the wrongdoer should pay the value of the undertaking "at the time of the indemnification".⁴⁷⁵ This approach was adopted in other cases such as *Unghlaube*, *Kardassopoulos*, and *ADC*, and was again recently confirmed by the *Yukos* tribunal.

306. Tribunals, such as in *ADC*, have particularly used this valuation date where the value of the assets taken increased after the expropriation "due to objective factors, such as improving market conditions".⁴⁷⁶ Adopting another date, says Burlington, would allow Ecuador to retain the increase in value and would thereby create "perverse incentives, financially rewarding a State for its own unlawful conduct".⁴⁷⁷ Burlington argues that in the present case it is particularly important to compensate for any increase in value, as this increase "is attributable to subsurface conditions known by the investor at the time of expropriation but not fully exploited due to the economic disincentives created by the State's unlawful conduct".⁴⁷⁸

307. Burlington further argues that valuing the expropriated investment as at the date of the award also ensures that the Tribunal has all relevant evidence at its disposal

⁴⁷⁴ Mem., ¶ 58; Reply, ¶ 23, citing: E. Jiménez de Aréchaga, "International Responsibility", in M. Sørensen, *Manual Of Public International Law* (New York: St. Martin's Press, 1968), ¶ 9.18 (**Exh. CL-260**).

⁴⁷⁵ Mem., ¶ 59, citing: *Chorzów*, p. 48 (**Exh. CL-102**). Also referring to: *The Arbitration between the Lena Goldfields, Ltd. and the Soviet Government*, Award of 3 September 1930, 36 Cornell Law Quarterly 31 (1950), pp. 51-52 (**Exh. CL-259**).

⁴⁷⁶ Mem., ¶ 61, referring to: *ADC v. Hungary*, Award of 2 October 2006, ¶¶ 496-497 (**Exh. CL-101**).

⁴⁷⁷ Mem., ¶ 62.

⁴⁷⁸ *Id.*, ¶ 64. See also: Mem., ¶¶ 83-86; Crick WS1, ¶¶ 5-10, 22-24, 39-65, 103-107, 120, 150-172, 187-200, 279-282; Reply, ¶ 6.

with respect to the value of the assets at the time of the award.⁴⁷⁹ Burlington notes in particular that it is now known to both Parties and the Tribunal how much Ecuador actually produced in the oilfields since the expropriation, which supports Burlington's projections.⁴⁸⁰

308. For Burlington, the date of the award is the appropriate date of valuation regardless of the nature of the unlawfulness that taints the expropriation. Whether the State failed to make compensation or breached any of the "conduct" requirements of the Treaty is irrelevant. The case law confirms this point. In *ConocoPhillips*, the expropriation was unlawful because of the failure to comply with the compensation standard under the treaty, and the tribunal valued the investment on the date of the award.⁴⁸¹ Similarly, in *Unglaube*, the tribunal held that Costa Rica's failure to offer adequate and timely compensation was sufficient in itself to make the expropriation unlawful, triggering the application of the customary international law standard.⁴⁸²
309. Ecuador's attempts to discard these "settled principles" so as to minimize the amount of damages are misplaced.⁴⁸³ As discussed in Section VII.B.1 above, Burlington is of the view that the case law of the European Court of Human Rights (ECtHR), which distinguishes between "inherently unlawful dispossession" and expropriation unlawful for failure to pay compensation, provides little guidance in investment disputes.⁴⁸⁴
310. With respect to investment case law and doctrine, Ecuador's arguments are equally unavailing and unpersuasive. Burlington stresses that, while the tribunal in *Rurelec* took the date of the taking as the date of valuation, that solution resulted from the plaintiff's choice of that specific date for the valuation.⁴⁸⁵ Furthermore, it should be

⁴⁷⁹ Mem., ¶ 60, referring to: *ADC v. Hungary*, Award of 2 October 2006, ¶¶ 496-499 (**Exh. CL-101**); *CMS v. Argentina*, Award of 12 May 2005, ¶¶ 441-447 (**Exh. CL-99**).

⁴⁸⁰ Tr. Quantum (Day 1) (ENG), 67:6-68-20 (Opening, Blackaby).

⁴⁸¹ Reply, ¶¶ 35-37, citing: *ConocoPhillips v. Venezuela*, Decision on Jurisdiction and the Merits of 3 September 2013, ¶¶ 342-343, 401 (**Exh. CL-343**); and Reply, ¶¶ 38-41, referring to: *Unglaube v. Costa Rica*, Award of 16 May 2012, ¶ 305 (**Exh. CL-243**); *Siemens v. Argentina*, Award of 6 February 2007, ¶ 273 (**Exh. CL-79**); *Funnekotter v. Zimbabwe*, Award of 22 April 2009, ¶¶ 98, 107 (**Exh. CL-150**).

⁴⁸² Reply, ¶ 38.

⁴⁸³ *Id.*, ¶ 24, referring to: CM, ¶¶ 347-351.

⁴⁸⁴ Reply, ¶ 47.

⁴⁸⁵ *Id.*, ¶ 51; referring to: *Guaracachi America, Inc. and Rurelec PLC v. The Plurinational State of Bolivia*, UNCITRAL, PCA Case No. 2011-17 ("*Rurelec v. Bolivia*"), Award of 31 January 2014, ¶ 410 (**Exh. EI-260**). See also: CM, ¶ 350, note 333.

noted that the tribunal did hold the taking to be unlawful for lack of payment, notwithstanding the fact that Bolivia made efforts to seek a solution.⁴⁸⁶ And in *Funnekotter*, the date of the award was not used because the value of the farms had not increased in the meantime. That decision rather supports the opinion that the date that best assures full reparation should be adopted.⁴⁸⁷ Moreover, reliance on *Santa Elena* is misplaced since that case concerned a lawful taking in which the state recognized that compensation was due and the only issue to be determined was the amount of compensation owed.⁴⁸⁸

311. Burlington states that Ecuador’s argument based on *Kardassopoulos* according to which the date of the award is only appropriate if the investor would have retained the investment, is misconceived.⁴⁸⁹ In that case, the determination of the appropriate valuation date did not hinge on whether the investor *wished* to retain the investment, but whether he *would have* retained it. There, the tribunal held that the co-investors likely would have bought the plaintiff’s investment. In the present case, to the contrary, by the time of the taking “it was clear that Burlington was *not* going to sell its interests in Ecuador, regardless of Burlington’s preference”.⁴⁹⁰ As Mr. Martinez confirmed, prospective purchasers rescinded their offers after the introduction of Decree 662, and with the seizures it became clear that “Burlington had no option but to retain its investment”.⁴⁹¹ Hence, whether Burlington wished to sell its investment prior to the taking is irrelevant to the question whether it “would or could have done so, but for the expropriation, in the period between the expropriation date and the date of award”.⁴⁹²
312. As to Ecuador’s reliance on *Murphy v. Ecuador*,⁴⁹³ Burlington contends that the relevance of this decision is overstated because it did not concern an expropriation

⁴⁸⁶ Reply, ¶ 52.

⁴⁸⁷ *Id.*, ¶ 53.

⁴⁸⁸ *Id.*, ¶ 54.

⁴⁸⁹ *Id.*, ¶ 72, referring to: CM, ¶ 368; *Kardassopoulos and Fuchs v. The Republic of Georgia*, ICSID Case Nos. ARB/05/18 and ARB/07/15 (“*Kardassopoulos v. Georgia*”), Award of 3 March 2010, ¶ 514 (**Exh. CL-261**).

⁴⁹⁰ Reply, ¶ 73.

⁴⁹¹ *Id.*, ¶ 73, referring to: Martinez WS1 Supp., ¶ 27; ConocoPhillips Summary of RCAT Study, 23 June 2008 (**Exh. C-468**); Memorandum from Roy Lyons in Response to RCAT Study, 24 November 2008 (**Exh. C-469**).

⁴⁹² Reply, ¶ 73, note 99.

⁴⁹³ *Murphy Exploration & Production Company International v. Republic of Ecuador* (PCA Case No. AA434) (“*Murphy v. Ecuador*”), Partial Final Award of 6 May 2016 (**Exh. EL-424**).

claim and because its findings (in particular its decision not to rely on *ex-post* data), “are entirely dependent on the unique factual circumstances of that case”.⁴⁹⁴ In particular, the tribunal held that, because *Murphy* had sold its interest, actual post-sale production under new contractual conditions was not an appropriate proxy for *Murphy’s* but-for scenario. For Burlington, *Murphy* “supports the principle that *ex-post* data should be used to determine the value of an investment when that data reflects the but-for scenario, as is the case in this arbitration”,⁴⁹⁵ and confirms that “*ex-post* data can properly be used to validate *ex-ante* assumptions”, as is the case here.⁴⁹⁶ Burlington stresses that “Mr. Crick’s projections were first prepared in the absence of the Petroamazonas data. Ecuador then produced that data, which proved to line up almost perfectly with Mr. Crick’s projections. Moreover, even if this Tribunal were to follow the *Murphy* tribunal’s decision not to use *ex post* information, the result would be the same because Mr. Crick’s projections yield results fully consistent with the actual performance of the Blocks in Ecuador’s hands and as assessed by Ryder Scott, *even when Mr. Crick’s inputs are limited to technical data available up to July 2009*”.⁴⁹⁷

313. On this basis, Burlington submits that the appropriate valuation date is the date of the award, or the closest proxy. Accordingly, in its first expert report, Compass Lexecon used 30 April 2013 as the proxy date; in its second report, 15 September 2014, and in the Updated Model, 31 August 2016.
314. By contrast, says Burlington, Ecuador’s instructions to Fair Links to employ the date of expropriation for valuation purposes must be rejected. Fair Links’ entire damage analysis is flawed because it relied on old and incorrect data (production forecast, oil price forecast, CAPEX figures), that are inconsistent with actual figures.⁴⁹⁸

3.2 Ecuador’s position

315. For Ecuador, it is clear that under both the BIT standard and customary international law Burlington’s interests in Blocks 7 and 21 must be valued on the date of the

⁴⁹⁴ Burlington’s letter of 26 August 2016, p. 3.

⁴⁹⁵ *Ibid.*

⁴⁹⁶ *Id.*, p. 4.

⁴⁹⁷ *Ibid.*, referring to: C-PHB, ¶ 63-64 (emphasis in original).

⁴⁹⁸ Reply, ¶ 133.

“purported expropriation”, as the expropriation at issue here was held to be unlawful by the Tribunal solely for lack of compensation.⁴⁹⁹

316. As noted in Section VII.B.2 above, Ecuador argues that the standard of compensation is set out in Article III(1) of the Treaty. That provision makes clear that the FMV of the expropriated asset is to be calculated on the date of the expropriation:

“Compensation shall be equivalent to the fair market value of the expropriated investment **immediately before the expropriatory action was taken or became known, whichever is earlier**, be calculated in a freely usable currency on the basis of the prevailing market rate of exchange at that time; be paid without delay; include interest at a commercially reasonable rate **from the date of expropriation**; be fully realizable and be freely transferable”.⁵⁰⁰

317. According to Ecuador, this is particularly the case for expropriations that are unlawful only for failure to pay compensation, as is the case here. This is confirmed by the reference to interest from the date of the expropriation.⁵⁰¹

318. Ecuador contends that customary international law leads to the same result. According to Ecuador, “Burlington continues to devote the entirety of its analysis to an assessment of compensation under customary international law without making the distinction at the heart of the foundational case on which its analysis purports to rest”,⁵⁰² i.e. the *Chorzów* case. In that case, the PCIJ drew a fundamental distinction between expropriations that would have been lawful had compensation been paid, and expropriations that would have been unlawful even if payment had been made. The PCIJ “went out of its way to clarify that it is where the wrongful act consists of the failure to pay compensation for the taking that customary international law limits compensation ‘to the value of the undertaking at the moment of dispossession, plus interest to the day of payment’”.⁵⁰³

319. Ecuador also points to the ECtHR’s distinction between “inherently unlawful dispossession” and “per se illegal dispossessions”, while some commentators refer to expropriations unlawful only by virtue of failure to pay compensation as only

⁴⁹⁹ Rejoinder, ¶ 461.

⁵⁰⁰ Article III(1) of the Treaty (emphasis added).

⁵⁰¹ See: Section VII.B.2 above.

⁵⁰² Rejoinder, ¶ 499.

⁵⁰³ *Id.*, ¶ 499.

“unlawful *sub modo*” or “provisionally unlawful”.⁵⁰⁴ Ecuador emphasizes that “[t]he point of principle lies [...] not in the characterization of the taking, but in the universal recognition that the phenomena being described is different from (and has a different remedial response to) expropriations which would have been unlawful regardless of whether compensation was paid”.⁵⁰⁵

320. Ecuador further emphasizes that Burlington has not cited to a single case involving the expropriation of a going concern that was unlawful solely for failure to pay compensation where the tribunal has valued the investment on the date of the award, and the damages awarded corresponded to the value of restitution in kind. Despite Burlington’s arguments, *ConocoPhillips* is not such a case, because the tribunal held the expropriation to be unlawful not because of lack of compensation, but because Venezuela breached the BIT requirement to engage in good faith negotiations over the amount of compensation.⁵⁰⁶ Nor can Burlington rely on *Siemens*, *ADC* or *Kardassopoulos*, which all involved expropriations that were unlawful for reasons other than failure to pay compensation.⁵⁰⁷ Nor does *Funnekotter* assist Burlington; in that case the value of the investment had not changed between the date of the taking and the date of the award, so the tribunal found that the differences in computation for lawful and unlawful expropriation were not at issue.⁵⁰⁸ Finally, Burlington’s “blind reliance” on *Yukos* is also misplaced, as that was “manifestly not a case in which the taking was unlawful only because it was unaccompanied by prompt, adequate and effective compensation”.⁵⁰⁹
321. In the present case, according to Ecuador, the Tribunal found the expropriation to be unlawful solely due to Ecuador’s failure to pay compensation. As a result, whether the Tribunal applies the treaty standard or customary international law, Burlington is

⁵⁰⁴ *Id.*, ¶ 500, referring to: *Scordino v. Italy (No. 1)*, No. 36813/97, ECHR, Grand Chamber, 29 March 2006, ¶¶ 254-255 (**Exh. EL-262**); *Former King of Greece and Others v. Greece* (Just Satisfaction), No. 25701/94, ECHR, Grand Chamber, 28 November 2002, ¶ 78 (**Exh. EL-261**).

⁵⁰⁵ Rejoinder, ¶ 501.

⁵⁰⁶ *Id.*, ¶ 504, referring to: *ConocoPhillips v. Venezuela*, Decision on Jurisdiction and the Merits of 3 September 2013, ¶¶ 342 and 401 (**Exh. CL-343**).

⁵⁰⁷ CM, ¶ 361, referring to: *ADC v. Hungary*, Award of 2 October 2006 (**Exh. CL-101**); *Siemens v. Argentina*, Award of 6 February 2007 (**Exh. CL-79**); and *Kardassopoulos v. Georgia*, Award of 3 March 2010 (**Exh. CL-261**).

⁵⁰⁸ Rejoinder, ¶ 508, referring to: *Funnekotter v. Zimbabwe*, Award of 22 April 2009, ¶ 112 (**Exh. CL-150**).

⁵⁰⁹ Rejoinder, ¶ 510, referring to: *Yukos Universal Limited (Isle of Man) v. The Russian Federation*, UNCITRAL, PCA Case No. AA 227 (“*Yukos v. Russia*”), Final Award of 18 July 2014, ¶¶ 1580-1585 (**Exh. CL-384**).

only entitled to compensation of its investment valued on the date of the expropriation plus interest.⁵¹⁰

322. In any event, Burlington cannot purport to profit from the alleged increased value of the asset after the date of expropriation. For Ecuador, “[c]ompensation for increased value between the date of the expropriation and the date of the award is premised on the fact that the investor intended to keep the asset”.⁵¹¹ This was confirmed in *Kardassopoulos*, where the tribunal clearly stated that this rationale only applies “in cases where it is demonstrated that the Claimants would, but for the taking, have retained their investment”.⁵¹² This is not the case here: the evidence in the record shows that even before Law 42 came into effect, Burlington had the intention to sell its interest in the Blocks, and continued to seek to do so in 2007 and 2008.⁵¹³

323. Ecuador also relies on *Murphy v. Ecuador*⁵¹⁴ to argue that the Tribunal must value the expropriated investment on the date of the expropriation. Ecuador emphasizes that the *Murphy* decision “deals with exactly the same legal issues and the same factual background that this Tribunal is currently dealing with”.⁵¹⁵ Ecuador notes in particular that the *Murphy* tribunal applied the Treaty governing in the present case and analyzed the impact of Law 42 on similar participation contracts, albeit in the context of breaches to Article III(2) of the Treaty. For Ecuador, *Murphy* supports a valuation on the date of the expropriation using *ex ante* information because that tribunal:

- i. “[D]ecided that, whilst *Chorzow* was applicable in that case, the full reparation standard aims at ‘full reparation’ of the concrete and actual damage incurred and that it provides a large margin of appreciation to tribunals with respect to the selection of an appropriate valuation method”, and

⁵¹⁰ Rejoinder, ¶ 512.

⁵¹¹ CM, ¶ 368.

⁵¹² *Ibid.*, referring to: *Kardassopoulos v. Georgia*, Award of 3 March 2010, ¶ 514 (**Exh. CL-261**).

⁵¹³ CM, ¶¶ 368-370, referring to: Mr. Martinez’s testimony during the hearing on provisional measures (Tr. Provisional Measures (Day 1) (ENG), 149:9-11) and during the hearing on liability (Tr. Quantum (Day 2) (ENG), 384:1-9), and **Exhs. E-116, E-124, C-335**.

⁵¹⁴ *Murphy v. Ecuador*, Partial Final Award of 6 May 2016 (**Exh. EL-424**).

⁵¹⁵ Ecuador’s letter of 7 July 2016 (emphasis in the original).

ii. “[F]ound that an ex-post approach was not appropriate because the ex-post data generated after March 2009 (such as oil price and production data) did not reflect what the situation would have been in a but-for scenario”.⁵¹⁶

324. For the reasons set out above, Ecuador submits that, if compensation is due, it should be based on the value of the investment on the date of the expropriation (i.e., 30 August 2009) using *ex ante* information, plus interest.

3.3 Analysis

325. The Tribunal has already determined that the standard of compensation in this case is the full reparation principle under customary international law. It has also clarified that it need not determine whether the standard of compensation under customary international law is different for expropriations that are unlawful solely as a result of the failure to pay compensation as opposed to expropriations that are unlawful on other grounds (see paragraph 176 above), given that Ecuador’s expropriation of Burlington’s investment was unlawful not only as a result of Ecuador’s failure to pay compensation, but also because the expropriation was not done in accordance with other conditions for a lawful expropriation.

326. In the majority’s view, the full reparation standard requires that the damages resulting from the unlawful act be valued on the date of the award, using information available at that point in time. This conclusion derives from the *Chorzów* case, where the PCIJ stated that, in cases where the State’s wrongful act was not limited to failure to pay compensation, the compensation to be awarded “is not necessarily limited to the value of the undertaking at the moment of the dispossession, plus interest to the day of payment”.⁵¹⁷ According to the Court, “[t]his limitation would only be admissible if the Polish Government had the right to expropriate, and if its wrongful act consisted merely in not having paid to the two Companies the just price of what was expropriated”.⁵¹⁸ By contrast, when the expropriation is unlawful,⁵¹⁹ the

⁵¹⁶ Ecuador’s letter of 7 July 2016 (emphasis in the original).

⁵¹⁷ *Chorzów*, p. 47 (**Exh. CL-102**). The PCIJ reiterates this principle when rejecting the use of a previously negotiated contract price or offer of sale. The PCIJ states that “[i]t has already been pointed out above that the value of the undertaking at the moment of dispossession does not necessarily indicate the criterion for the fixing of compensation. Now it is certain that the moment of the contract of sale and that of the negotiations with the Genevese Company belong to a period of serious economic and monetary crisis; the difference between the value which the undertaking then had and that which it would have had at present may therefore be very considerable”. *Id.*, p. 50.

⁵¹⁸ *Id.*, p. 47 (**Exh. CL-102**).

State is required to make full reparation for the injury caused, and this “reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed”.⁵²⁰ According to the Court, this “involves the obligation to restore the undertaking and, if this be not possible, to pay its value *at the time of the indemnification*, which value is designed to take the place of restitution which has become impossible”.⁵²¹ The Court highlighted that to conclude otherwise would be “tantamount to rendering lawful liquidation and unlawful dispossession indistinguishable in so far as their financial results are concerned”.⁵²²

327. The Court’s task was thus to determine “what sum must be awarded [...] to place the dispossessed Companies as far as possible in the economic situation in which they would probably have been if the seizure had not taken place”.⁵²³ To this end, the Court requested an expert to conduct two valuations: one based on the asset value of the undertaking on the date of the taking plus any additional profits accrued until the date of the judgment (Question I),⁵²⁴ and another based on the asset value of the undertaking on the date of the judgment (Question II).⁵²⁵ Both valuations had

⁵¹⁹ The Court refers to “[t]he dispossession of an industrial undertaking – the expropriation of which is prohibited by the Geneva Convention – [...]”. *Id.*, pp. 47-48.

⁵²⁰ *Id.*, p. 48.

⁵²¹ *Ibid.* (emphasis added).

⁵²² *Id.*, p. 47.

⁵²³ *Id.*, p. 49.

⁵²⁴ In Question I, the Court requested the expert to establish the value of the undertaking on the date of the expropriation on the basis of its assets, as well as the financial results (profits or losses) that would have accrued from the date of the taking to the date of the judgment. It did so in the following terms: “I.- A. What was the value, on July 3rd, 1922, expressed in Reichsmarks current at the present time, of the undertaking for the manufacture of nitrate products of which the factory was situated at Chorzow in Polish Upper Silesia, in the state in which that undertaking (including the lands, buildings, equipment, stocks and processes at its disposal, supply and delivery contracts, goodwill and future prospects) was, on the date indicated, in the hands of the Bayerische and Oberschlesische Stickstoffwerke?

B. What would have been the financial results, expressed in Reichsmarks current at the present time (profits or losses), which would probably have been given by the undertaking thus constituted from July 3rd, 1922, to the date of the present judgment, if it had been in the hands of the said Companies?”. *Id.*, p. 51.

⁵²⁵ In Question II, the Court requested the expert to establish the value of the undertaking on the date of the judgment if that undertaking (considering all of its assets) had remained in the hands of the dispossessed companies and had either remained substantially as it had been on the date of the taking or had developed in a similar fashion as other undertakings of the same kind. It did so in the following terms: “II.- What would be the value at the date of the present judgment, expressed in Reichsmarks current at the present time, of the same undertaking (Chorzow) if that undertaking (including lands, buildings, equipment, stocks, available processes, supply and delivery contracts, goodwill and future prospects) had remained in the hands of the Bayerische and Oberschlesische Stickstoffwerke, and had

the same purpose, which was to establish the value of the losses suffered by the dispossessed companies on the date of the Court's judgment. The losses on the date of the judgment could be assessed either by reference to the value of the undertaking on the date of the taking plus any lost profits accrued between the taking and the judgment, or by reference to the value of the undertaking on the date of the judgment. Although the Court did not use a DCF computation but an asset-based valuation, under both valuations it would have awarded the value of the losses on the date of the judgment.⁵²⁶

328. After recognizing the difficulties of this exercise, especially considering “the time that elapsed between the dispossession and the demand for compensation, and with the transformations of the factory and the progress made in the industry with which the factory is concerned”,⁵²⁷ the Court “reserve[d] every right to review the valuations referred to in the different formulae; basing itself on the results of the said valuations and of facts and documents submitted to it, it will then proceed to determine the sum to be awarded to the German Government, in conformity with the legal principles set out above”.⁵²⁸
329. The *Chorzów* case settled thereafter, with the result that we do not know how the Court would have determined the amount of damages. However, three fundamental conclusions can be drawn from the Court's ruling: (i) under the full reparation principle, damages should be a substitute for restitution that has become impossible; (ii) because damages must replace restitution, they should be valued on the date on which compensation is awarded; and (iii) tribunals have full discretion to assess the valuations for purposes of determining the amount to be awarded.
330. On this basis, the majority concludes that where the expropriation was unlawful for several reasons, including the failure to pay compensation (as is the case here), the appropriate valuation date is the date of the award or a proxy for that date – it being noted once again that here it is not necessary to determine whether a different standard is called for where the unlawfulness results solely from a failure to pay

either remained substantially as it was in 1922 or had been developed proportionately on lines similar to those applied in the case of other undertakings of the same kind, controlled by the Bayerische, for instance, the undertaking of which the factory is situated at Piesteritz?”. *Id.*, pp. 51-52.

⁵²⁶ See in particular: *Quiborax v. Bolivia*, Award of 16 September 2015, ¶ 374. See also: *Amoco v. Iran*, Partial Award No ITL 310-56-3 of 14 July 1987, 15 IRAN-U.S. CTR 189, ¶¶ 198-206 (**Exh. CL-173**).

⁵²⁷ *Chorzów*, p. 53 (**Exh. CL-102**).

⁵²⁸ *Id.*, pp. 53-54.

compensation. Other investment tribunals⁵²⁹ and adjudicatory bodies (including the ECtHR),⁵³⁰ as well as several scholars,⁵³¹ have come to the same conclusion.

331. It is true that Ecuador has submitted that Burlington cannot benefit from increases in the value of its investment after the expropriation because it was in any event seeking to sell Blocks 7 and 21. In support of this argument, Ecuador relies on *Kardassopoulos*, where the tribunal stated that “[i]t may be appropriate to compensate for value gained between the date of the expropriation and the date of the award in cases where it is demonstrated that the Claimants would, but for the taking, have retained their investment”.⁵³² It is undisputed that Burlington was trying

⁵²⁹ See, for instance: *ADC v. Hungary*, Award of 2 October 2006, ¶ 497 (**Exh. CL-101**); *ConocoPhillips v. Venezuela*, Decision on Jurisdiction and the Merits of 3 September 2013, ¶ 343 (**Exh. CL-343**); *Yukos v. Russia*, Final Award of 18 July 2014, ¶¶ 1763-1769 (**Exh. CL-384**); and *Quiborax v. Bolivia*, Award of 16 September 2015, ¶ 377. See also: *Amco Asia v. Indonesia II*, Award of 31 May 1991, ¶¶ 170-187, 196 (**Exh. CL-331**), where an ICSID tribunal ruling on a contract case equated a denial of justice arising from the revocation of a license to an unlawful taking of contract rights and awarded damages valued on the date of the award; *Siemens v. Argentina*, Award of 6 February 2007, ¶¶ 322-389 (**Exh. CL-79**), where although the tribunal endorsed the view that the principle of full reparation required awarding the value of the investment on the date of the award, it was ultimately guided by the claimant’s request for relief, which sought the book value of the investment at the time of the expropriation plus lost profits and other consequential damages arisen thereafter.

⁵³⁰ See, for instance: *Amoco v. Iran*, Partial Award of 14 July 1987, ¶¶ 192-204 (**Exh. EL-39**); *Papamichalopoulos and others v. Greece*, 9 ECHR 118, Judgment of 31 October 1995, ¶ 36. See also: I. Marboe, *Compensation and Damages in International Law: The Limits of “Fair Market Value”*, TDM, Vol. 4, Issue 6, November 2007, p. 752 (noting that the European Court of Human Rights “has repeatedly awarded amounts that took into account the increase in value of unlawfully expropriated property between the time of dispossession and the date of the judgment”, and citing in this respect: *Belvedere Alberghiera S.r.l. v. Italy*, ECHR No. 31524/96, 2000-VI, ¶ 35; *Motais de Narbonne v. France* (satisfaction équitable), ECHR No. 48161/99, 27 May 2003, ¶ 19; *Terazzi S.R.L. v. Italy* (satisfaction équitable), ECHR No. 27265/95, 26 October 2004, ¶ 37) (**Exh. EL-255**).

⁵³¹ See, for instance: I. Marboe, *Calculation of Compensation and Damages in International Investment Law* (Oxford: Oxford University Press, 2009), ¶ 3.266 (“As unlawful expropriations represent violations of international law they entail the State’s responsibility to fully repair the financial harm done to the former owner. The applicable differential method requires assessing the difference between the financial situation of the person affected and the financial situation he or she would be in, if the expropriation had not taken place. This comparison is made on the day of the judgment or award. It follows that the decisive valuation date is the date of the award”) (**Exh. EL-284**). See also: M. Sørensen, *Manual of Public International Law* (New York: St. Martin’s Press, 1968) p. 567, ¶ 9.18 (“[s]ince monetary compensation must, as far as possible, resemble restitution, the value at the date when the indemnity is paid must be the criterion”); and G. Schwarzenberger, *International Law as Applied by International Courts and Tribunals*, Vol. 1 (London: Stevens & Sons Limited, 1957), p. 666 (“[m]uch is to be said in favour of the date of the judgment as the operative date. It is the judgment or award which establishes between the parties with binding force that reparation is due from one party to the other. If restitution in kind were possible, it would have to take place as soon as possible after the judgment or award. It, therefore, appears appropriate that the amount of any monetary substitute for actual restitution should be related to the same date”) (**Exh. CL-258**).

⁵³² *Kardassopoulos v. Georgia*, Award of 3 March 2010, ¶ 514 (**Exh. CL-261**).

to sell its investment prior to the enactment of Law 42 and continued to do so at least until 2007.⁵³³ However, Burlington was unable to sell, and this failure was due at least in part to the increasingly hostile environment for oil investments in Ecuador. As a result, but for the expropriation, the Tribunal accepts on the basis of the record that Burlington would in fact have kept its investment.

332. The majority's conclusion on the valuation date has two implications. First, it means that the Tribunal may take into consideration information post-dating the expropriation. The Tribunal's task is to place Burlington in the situation it would have been had Ecuador not expropriated the PSCs. For this, the Tribunal must assess what the PSC's value would have been in real life on the date of the award. Such a valuation will obviously be more accurate and reliable if actual information is used in respect of relevant facts that have occurred between the expropriation and the award, rather than projections based on information available on the date of the expropriation. The valuation will be closer to reality if the Tribunal decides with "maximum information" rather than "maximum ignorance".⁵³⁴ The same rationale was adopted in *Amco II*:

"If the purpose of compensation is to put Amco in the position it would have been in had it received the benefits of the Profit-Sharing Agreement, then there is no reason of logic that requires that to be done by reference only to data that would have been known to a prudent businessman in 1980. It may, on one view, be the case that in a lawful taking, Amco would have been entitled to the fair market value of the contract at the moment of dispossession. In making such a valuation, a Tribunal in 1990 would necessarily exclude factors subsequent to 1980. But if Amco is to be placed as if the contract had remained in effect, then subsequent known factors bearing on that performance are to be reflected in the valuation technique. [...]"⁵³⁵

⁵³³ Mr. Martinez testified during the hearing on provisional measures that "Burlington Resources has attempted to sell, and actually we were fairly close to the sale prior to the enactment of Law 42, which affected that sale" (Tr. Provisional Measures (Day 1) (ENG), 149:9-11 (Cross, Martinez)). Mr. Martinez confirmed this during the hearing on liability (Tr. Liability (ENG) (Day 2), 385:1-9 (Direct, Martinez): "Q: Mr. Martinez, shifting gears again, Ecuador has made much of the fact that Burlington was looking to sell its interests in Blocks 7 and 21 even before Law 42 went into effect. Can you address this. Is it true that Burlington was looking to sell these two Blocks? A. We had some unsolicited offers in 2006. In 2007, we were looking to just divest of the Blocks, so, yes").

⁵³⁴ Tr. Quantum (Day 5) (ENG), 1376:4-6 (Closing, Paulsson).

⁵³⁵ See: *Amco Asia v. Indonesia II*, ¶ 186. See also: I. Marboe, *Compensation and Damages in International Law The Limits of "Fair Market Value"*, TDM, Vol. 4, Issue 6, November 2007, p. 753 ("It follows, thus, from the principle of full reparation as formulated by the PCIJ in *Chorzów Factory*, that the valuation is not normally limited to the perspective of the date of the illegal act or some other date in the past. An increase in value of the valuation object, consequential damage, subsequent events and information, at least up until the date of the

333. One might object that using information post-dating the expropriation would somehow conflict with the requirement of causation, which is sometimes linked to foreseeability. However, the fact that some of the information used to quantify lost profits on the date of the award may not have been foreseeable on the date of the expropriation does not break the chain of causation. What matters is that the injury suffered must have been caused by the wrongful act. It is true that factual causation is not sufficient, and that an additional element linked to the exclusion of injury that is too remote or indirect (sometimes referred to as legal or adequate causation) is required, and it is in this context where foreseeability plays a role.⁵³⁶ If an injury was not objectively foreseeable because it was caused by an unusual chain of events that could not foreseeably derive from the act, legal causation may be absent and recovery may be excluded. However, if the injury was objectively foreseeable (i.e., because the act was objectively capable of causing the injury), then the test for both factual and legal causation will normally be met. It is generally accepted that the expropriation of a going concern is objectively capable of causing the loss of its future profit stream, and thus this loss is foreseeable. It is also foreseeable that these future profits may fluctuate depending on various economic and other variables, including prices, costs, inflation and interest rates, among others.
334. Contrary to Ecuador's contentions, the Tribunal does not believe that the *Murphy* decision⁵³⁷ stands for the proposition that valuations must necessarily be carried out solely on the basis of *ex ante* information. First, the *Murphy* tribunal held that "[t]he full reparation standard aims at 'full reparation' of the concrete and actual damage incurred", and "provides a large margin of appreciation to tribunals with respect to the selection of an appropriate valuation method",⁵³⁸ two propositions that underlie the Tribunal's analysis above. Second, the *Murphy* tribunal did not say that the use of *ex post* information is proscribed; to the contrary, it held that "an *ex-post* approach

judgment or award, must be taken into account in the evaluation of damages") (**Exh. EL-255**).

⁵³⁶ See: ILC Articles, Article 31, Commentary 10. ("[C]ausality in fact is a necessary but not a sufficient condition for reparation. There is a further element, associated with the exclusion of injury that is too "remote" or "consequential" to be the subject of reparation. In some cases, the criterion of "directness" may be used, in others "foreseeability" or "proximity").

⁵³⁷ *Murphy v. Ecuador*, Partial Final Award of 6 May 2016 (**Exh. EL-424**).

⁵³⁸ *Id.*, ¶ 425. See also: ¶ 481 ("The applicable international law standard of full reparation, as reflected in the Chorzów Factory judgment and Article 31 of the ILC Articles on State Responsibility, does not determine the valuation methodology. Nor does the Treaty. Tribunals enjoy a large margin of appreciation in order to determine how an amount of money may 'as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed'").

is not appropriate *in this case* because the *ex-post* data generated after the sale of Murphy Ecuador does not reflect what the situation would have been in a but-for scenario”.⁵³⁹

335. In the Tribunal's reading, *Murphy* thus confirms that tribunals have a large margin of appreciation in attempting to quantify the amount of compensation that will wipe out the effects of the wrongful act. If, in the circumstances of the particular case, the use of *ex post* information is relevant, reasonable and reliable, it is the majority's opinion that it should be preferred to *ex ante* information. As noted in *Quiborax*, “[t]he Tribunal must value the loss with reasonable certainty. If the available *ex post* data is not reasonably certain, then it will have no choice but to resort to appropriately adjusted *ex ante* data [...]”.⁵⁴⁰ As discussed further below, in building its counterfactual scenario the Tribunal has used *ex post* data whenever it has considered that it allows to calculate Burlington's loss with reasonable certainty.
336. The second implication of a valuation on the date of the award is that the Tribunal must consider two sets of lost profits: profits that would have accrued from the date of the expropriation until the date of award (past lost profits) and profits that would have accrued from the date of the award until the expiry of the contractually agreed term of the PSCs (future lost profits).⁵⁴¹ Both sets of cash flows must be brought to present value: past cash flows must be brought forward to present value through the application of an interest rate and future cash flows must be brought to present value through the application of a discount rate. Past cash flows are calculated on the basis of information available on the date on which those cash flows would have accrued, while future cash flows are projected on the basis of the latest available information on the date of the award (or its closest proxy). The Tribunal discusses these valuations in more detail in the following sections.

⁵³⁹ *Id.*, ¶ 484 (emphasis added). See also: ¶ 485.

⁵⁴⁰ *Quiborax v. Bolivia*, Award of 16 September 2015, ¶ 384.

⁵⁴¹ The majority is aware that in *Chorzów* the PCIJ reasoned that the valuation on the date of the judgment (Question II) would only include profits (*lucrum cessans*) between the date of the dispossession and the date of the judgment if those profits had not been absorbed in the cost of the upkeep, development and improvement of the undertaking (*Chorzów*, p. 53). However, the PCIJ was using an asset-based valuation method, so any such profits would have been added to the value of the undertaking's assets, creating a risk of double-counting. Here, the Tribunal is using an income-based valuation method (specifically, the DCF method) that values the investment exclusively on the basis of the economic benefit it is expected to generate (see: paragraph 300 above). As a result, in the majority's view, the risk of double-counting identified by the PICJ does not arise here.

337. For the reasons set out above, the majority will value the compensation due to Burlington for the unlawful expropriation of its investment on 31 August 2016 (the date used by the Parties' quantum experts in their Updated Model) as a proxy for the date of the award. Arbitrator Stern disagrees with this method of valuation.⁵⁴²

4. Should the economic effects of Law 42 be accounted for?

4.1 Burlington's position

338. Burlington submits that "in valuing Burlington's expropriated investment, [the Tribunal should] give full value to its contract rights".⁵⁴³ In particular, the valuation of Burlington's lost profits should be insulated against the economic effects of Law 42. In other words, the valuation should assume that Ecuador would have complied with its tax absorption obligations under the PSCs. As a result, Burlington contends that:

- i. Its cash flows should be valued as if Ecuador had provided Burlington with its production share indemnified against the effects of Law 42.⁵⁴⁴
- ii. Burlington's production should be calculated as it would have been but for the "crushing effects of Ecuador's breaches of the PSCs", i.e., assuming that Burlington would have continued its pre-Law 42 investment program. Consequently, when building Burlington's production profile, Compass Lexecon assumes that Burlington's drilling would have been consistent with its pre-Law 42 investment profile, as described by Mr. Crick.⁵⁴⁵ As noted above, because Burlington stopped investing in December 2007, Compass Lexecon starts its lost profits analysis on that date.⁵⁴⁶

339. In respect of (i), Burlington submits that the valuation of this claim should disregard the effects of Law 42 for the following main reasons. First, relying on *Occidental II* and *SPP*, Burlington argues that compensation for expropriation "must proceed on the basis that the expropriated investment includes the contractual entitlements that

⁵⁴² Arbitrator Stern disagrees with the analysis using *ex post* information, as well as adding profits between the date of the expropriation and the date of the award, as she is convinced that this methodology opens the way to some possible form of double counting. For further discussion, see: Partially Dissenting Opinion to the Award of 16 September 2015 in *Quiborax S.A. & Non Metallic Minerals S.A. v. Plurinational State of Bolivia* (ICSID Case No. ARB/06/2).

⁵⁴³ Tr. Quantum (Day 1) (ENG), 73:21-74:1 (Opening, Blackaby).

⁵⁴⁴ Mem., ¶ 76.

⁵⁴⁵ Compass Lexecon ER1, ¶ 6.

⁵⁴⁶ Mem., ¶ 77.

were its foundation”.⁵⁴⁷ The Tribunal confirmed that the value of Burlington’s investment included the right to receive its production share shielded from the economic effects of Law 42.⁵⁴⁸ Indeed, the Tribunal found that “the contract rights under the PSCs represented a key component of Burlington’s investment”, that it was “by virtue of these contract rights that, through its subsidiary, Burlington had access to a share of the oil produced”, and that these rights had “a direct incidence on the economic value of Burlington’s investment”.⁵⁴⁹ The Tribunal further found that “[t]he tax absorption clauses contained in the PSCs were part and parcel of the value of Burlington’s investment”.⁵⁵⁰ The Tribunal need not declare Law 42 illegal or expropriatory, but Burlington has the right to be indemnified against the effects of Law 42, and that indemnity “operated until the expiry of the PSCs”.⁵⁵¹

340. Second and in relation to the foregoing argument, Burlington asserts that damages must be calculated presuming compliance with the contractual framework.⁵⁵² To prevent Ecuador from expropriating contractual rights with impunity, damages must be calculated “as if” Ecuador had complied with its contractual obligations, (in other words, “but for” its breach of those obligations).⁵⁵³ In *Occidental II*, Ecuador’s argument that Law 42 should be taken into consideration when assessing a “hypothetical sale” of Block 15 was rejected as suffering a “fundamental flaw”, since Occidental’s investment “was protected against the economic effects of Law 42”.⁵⁵⁴ As a result, the tribunal in that case held that “what must be calculated is the discounted cash flow value of the Participation Contract excluding breaches of it by the Respondent”⁵⁵⁵ and it disregarded Law 42 for the purpose of its valuation of the quantum.⁵⁵⁶ It is Burlington’s submission that the solution adopted in *Occidental II* is

⁵⁴⁷ *Id.*, ¶ 80, referring to: *Occidental v. Ecuador II*, Award of 5 October 2012, ¶¶ 538-539 (**Exh. CL-240**), and Tr. Quantum (Day 1) (ENG), 18:13-21:7 (Opening, Paulsson), 28:7-13 (Opening, Paulsson), and 81:7-83-5 (Opening, Coriell), referring to: *SPP v. Egypt*.

⁵⁴⁸ Mem., ¶¶ 78-81.

⁵⁴⁹ DoL, ¶ 261.

⁵⁵⁰ *Id.*, ¶ 405.

⁵⁵¹ Mem., ¶ 81.

⁵⁵² *Id.*, ¶¶ 69-71.

⁵⁵³ *Id.*, ¶ 69.

⁵⁵⁴ *Id.*, ¶ 70, referring to: *Occidental v. Ecuador II*, Award of 5 October 2012, ¶¶ 538-539 (**Exh. CL-240**).

⁵⁵⁵ *Occidental v. Ecuador II*, Award of 5 October 2012, ¶ 539.

⁵⁵⁶ Mem., ¶ 71.

“commanded by international law” and should be followed “in the present, virtually identical circumstances”.⁵⁵⁷

341. In the same vein, Burlington argues that Ecuador cannot rely on its own breach of contract to lower the damages.⁵⁵⁸ Arbitral tribunals have consistently applied the principle *nullus commodum capere de sua injuria propria*. As a result, “for ‘full reparation’ to wipe out *all* of the effects of the wrongful acts, value-depressing measures taken prior to an ultimate confiscation must be excluded from the assessment of damages”.⁵⁵⁹ For instance, in *Phillips Petroleum*, the tribunal held that it “must exclude from its calculation of compensation any diminution of value resulting from the taking of the Claimant’s property or from any prior threats or actions by the Respondent related thereto”.⁵⁶⁰ Likewise, in *Amoco* the tribunal disregarded any value-depressing conduct prior to the breach.⁵⁶¹ Similarly, *Chorzów*’s statement that damages are “not necessarily limited to the value of the undertaking at the moment of dispossession” means that, “in order for reparation to ‘wipe out all the consequences’ of expropriation, measures that chip away at an investment’s value prior to the final taking must be taken as seriously as the final act that extinguishes the investment completely”.⁵⁶² In *Sedco*, the tribunal thought it to be “highly improper” to discount the value of a going concern based on the State’s prior wrongful conduct,⁵⁶³ and in *Azurix* damages were determined “in a hypothetical context where the State would not have resorted to such maneuvers but would have fully respected the provisions of the treaty and the contract concerned”.⁵⁶⁴
342. Faced with Ecuador’s argument that the Tribunal found no creeping expropriation in this case, Burlington submits that “[i]nternational law requires exclusion of the effects of any [...] wrongful conduct” and does not distinguish “by category of wrongful conduct so long as it’s related to the same enterprise or the same general set of facts – here, the same enterprise or general sets of facts being the investment

⁵⁵⁷ *Id.*, ¶¶ 71, 80.

⁵⁵⁸ Tr. Quantum (Day 1) (ENG), 77:14-18 (Opening, Coriell).

⁵⁵⁹ Mem., ¶ 88 (emphasis in original).

⁵⁶⁰ *Id.*, ¶ 65; Reply, ¶ 82, referring to: *Phillips Petroleum v. Iran*, Award of 29 June 1989, ¶ 135 (**Exh. CL-157**); *Azurix v. Argentina*, Award of 14 July 2006, ¶ 417 (**Exh. CL-121**); *Sedco, Inc. v. National Iranian Oil Company and the Islamic Republic of Iran* (“*Sedco v. Iran*”), Award No. ITL 309-129-3 of 3 July 1987, ¶ 31 (**Exh. CL-236**).

⁵⁶¹ Mem., ¶ 66, referring to: *Amoco v. Iran*, Partial Award of 14 July 1987, ¶ 128 (**Exh. CL-173**).

⁵⁶² Reply, ¶ 82, citing: *Chorzów*, p. 47 (**Exh. CL-102**).

⁵⁶³ Reply, ¶ 95, referring to: *Sedco v. Iran*, Award of 7 July 1987, ¶¶ 68-69 (**Exh. CL-236**).

⁵⁶⁴ Reply, ¶ 96, referring to: *Azurix v. Argentina*, Award of 14 July 2006, ¶ 417 (**Exh. CL-121**).

in Block 7 and Block 21”.⁵⁶⁵ Burlington in particular invokes *American International Group*, where the tribunal stated that “[i]n ascertaining the going concern value of an enterprise at a previous point in time for purposes of establishing the appropriate quantum of compensation for nationalization, it is [...] necessary to exclude the effects of actions taken by the nationalizing State in relation to the enterprise which actions may have depressed its value”.⁵⁶⁶

343. Here, the Tribunal should follow the approach taken in *Occidental II*, where in a similar situation the tribunal (by majority) excluded the effects of Law 42 from the consideration of damages.⁵⁶⁷ According to *Occidental II*, the only value-depressing acts that may be taken into account in the valuation of damages are “general political, social and economic conditions”, i.e., acts that are not aimed at and do not concern the specific investment.⁵⁶⁸ As to the *Occidental II* dissent, the crux of that opinion was to say that the contract contained a renegotiation and not a tax absorption clause.⁵⁶⁹ In the present case, however, the Tribunal has already held that the PSCs *do* contain “mandatory” tax absorption clauses.⁵⁷⁰ Hence, Law 42 must be disregarded in the computation of Burlington’s future damages.

344. Burlington further contends that Ecuador’s defenses should be disregarded for the following further reasons. Whether the Tribunal has jurisdiction or not over Burlington’s contract claims is irrelevant. Burlington’s claim is a treaty, not a contract claim. Burlington is not asking the Tribunal to uphold its contract claims under the PSCs; it is simply asking the Tribunal to compensate the value of its expropriated investments, which include its contract right to tax absorption under the PSCs.⁵⁷¹

⁵⁶⁵ Tr. Quantum (Day 1) (ENG), 89:9-16 (Opening, Coriell).

⁵⁶⁶ *American International Group, Inc. and American Life Insurance Company v. The Islamic Republic of Iran and Central Insurance of Iran (Bimeh Markazi Iran)* (“*American International Group v. Iran*”), Case No. 2, Award No. 93-2-3 of 19 December 1983, 4 IRAN-U.S. C.T.R. 96, p. 0010 (**Exh. CL-257**).

⁵⁶⁷ Mem., ¶ 89; Reply, ¶¶ 85-86 citing: *Occidental v. Ecuador II*, Award of 5 October 2012, ¶¶ 542-546 (**Exh. CL-240**); and referring to: *American International Group v. Iran*, p. 107 (**Exh. CL-257**); I. Marboe, *Calculation of Compensation and Damages in International Investment Law* (Oxford: Oxford University Press, 2009), ¶ 3.258 (**Exh. CL-263**).

⁵⁶⁸ Reply, ¶ 88, referring to: *Occidental v. Ecuador*, Award of 5 October 2012, ¶ 542, (**Exh. CL-240**) (citing: *American International Group v. Iran*, Award of 19 December 1983, p. 107 (**Exh. CL-257**), and I. Marboe, *Calculation of Compensation and Damages in International Investment Law* (Oxford: Oxford University Press, 2009), ¶ 3.255 (**Exh. CL-263**)).

⁵⁶⁹ Reply, ¶ 91.

⁵⁷⁰ *Id.*, ¶ 92, citing: DoL, ¶ 268.

⁵⁷¹ Tr. Quantum (Day 1) (ENG), 75:8-76:15, 97:10-22 (Opening, Coriell).

345. In addition, Burlington insists that, as explained in Section VII.C.1.1 above, Ecuador’s argument on contractual waiver fails. The Tribunal has already held that Burlington’s Subsidiaries did not waive the underlying rights and that Burlington can thus rely on them to pursue its treaty claims.⁵⁷² More specifically, “Burlington [did not] waive its Treaty right to be compensated for the full effects of Law 42”.⁵⁷³

4.2 Ecuador’s position

346. According to Ecuador, the Tribunal must take into account the effects of Law 42 when calculating the FMV of Burlington’s investment.⁵⁷⁴

347. First, for the reasons set out in Section VII.V.1.2 above, Ecuador argues that the Tribunal lacks jurisdiction over Burlington’s claims relating to Law 42 because they are based in contract. To value Burlington’s investment on the basis of these contract rights would allow Burlington to reintroduce through the back door claims that have already been dismissed.⁵⁷⁵

348. Even if the Tribunal were to consider that it has jurisdiction over these claims, Ecuador contends that the valuation of Burlington’s investment must reflect the effects of Law 42 because (i) as a result of the waiver of contractual rights, a willing buyer could not enforce the right to be protected from the effects of Law 42, and (ii) even if the waiver argument fails, Law 42 cannot be construed as a value-depressing measure that should be disregarded for valuation purposes.

349. With respect to (i), Ecuador submits that “as a result of the waiver with prejudice, Burlington’s alleged contractual right to be insulated against the effects of Law 42 is unenforceable and, hence, valueless”.⁵⁷⁶ This is because an hypothetical willing buyer would be placed in the same position as a willing seller, namely Burlington, whose Subsidiaries have “waived the possibility of ever refiling their claims under the Participation Contracts in any form in the future”.⁵⁷⁷ Any willing buyer would thus be barred from enforcing the right to be indemnified against the effects of Law 42.⁵⁷⁸ According to Ecuador, this is true not only of Burlington’s already existing but also of

⁵⁷² Tr. Quantum (Day 1) (ENG), 18:4-9 (Opening, Paulsson), referring to: DoL, ¶ 199.

⁵⁷³ Tr. Quantum (Day 1) (ENG), 77:5:7 (Opening, Coriell).

⁵⁷⁴ Rejoinder, ¶ 515.

⁵⁷⁵ *Id.*, ¶¶ 317-339.

⁵⁷⁶ R-PHB, ¶ 135.

⁵⁷⁷ Tr. Quantum (Day 1) (ENG) 258:21-259:1 (Opening, Silva Romero).

⁵⁷⁸ R-PHB, ¶ 136.

its future contract claims.⁵⁷⁹ Burlington's contention that a willing buyer could enforce new claims based on new violations of the contract rights is unavailing since the willing buyer would have "acquired Burlington's shares in the Contract Claimants (as opposed to the Participation Contracts)", and hence any claim brought in the future on the basis of the tax renegotiation clauses "would still be the same claims that were waived by the Contract Claimants, and not 'new' claims".⁵⁸⁰

350. With respect to (ii), Ecuador asserts that, even in the absence of a waiver, Law 42 should not be construed as a value-depressing measure and should be taken into account when assessing damages.⁵⁸¹ This is essentially so for two reasons. First, a willing buyer would necessarily have taken the impact of Law 42 into account when assessing the FMV of the investment. Any valuation of Burlington's assets must take into account the impact of "generally applicable Ecuadorian law prior to the date of expropriation":⁵⁸² Law 42 was duly enacted and its constitutionality was affirmed by the Ecuadorian Constitutional Court. As a result, a willing buyer would not have discarded its impact.⁵⁸³ Nor can a valuation ignore the impact of "binding restrictions and the effects on the price of existing risks".⁵⁸⁴ In particular, "[m]easures similar to Law 42 are common in the petroleum industry and should be factored in when determining the price that a willing buyer may agree to pay".⁵⁸⁵ Moreover, in its own negotiations, Burlington never hinted that the effects of Law 42 should be ignored.⁵⁸⁶ In particular, ConocoPhillips' memorandum of May 2007 for the proposed sale of its assets in Ecuador (the "ConocoPhillips Sales Memorandum") referred to the existence of Law 42, but did not state that the PSCs contained a tax stabilization clause that would wipe out the effects of Law 42.⁵⁸⁷ Tellingly, the offers made by prospective buyers in 2007 did take into account the impact of Law 42 in the assessment of the value of the Blocks.⁵⁸⁸

⁵⁷⁹ *Id.*, ¶ 137.

⁵⁸⁰ Rejoinder, ¶ 521.

⁵⁸¹ *Id.*, ¶¶ 527-570.

⁵⁸² CM, ¶ 395.

⁵⁸³ Rejoinder, ¶¶ 531-532.

⁵⁸⁴ *Id.*, ¶ 530, referring to: M. Kantor, *Valuation for Arbitration: Uses and Limits of Income-Based Valuation Methods*, TDM, Vol. 4, Issue 6, November 2007 (**Exh. EL-277**).

⁵⁸⁵ CM, ¶ 397.

⁵⁸⁶ Rejoinder, ¶¶ 533-536.

⁵⁸⁷ *Id.*, ¶¶ 534, referring to: **Exh. E-214**.

⁵⁸⁸ Rejoinder, ¶ 536, referring to: **Exhs. E-215, E-574, E-575, E-576, E-577**.

351. As a second reason not to view Law 42 as value-depressing, Ecuador invokes that such law is not an internationally wrongful act.⁵⁸⁹ In its Decision on Liability, the Tribunal refused to find that Law 42 was an internationally wrongful act, whether at 50% or at 99%. According to Ecuador, the Tribunal held it liable only for the failure to pay compensation to Burlington following its intervention in the Blocks.⁵⁹⁰
352. Nor is Law 42 a value-depressing measure intended to diminish the value of Burlington's investment.⁵⁹¹ The cases relied upon by Burlington are inapposite since they deal with breaches consisting of composite acts, as set out in Article 15 of the ILC Articles.⁵⁹² For instance, in *Phillips Petroleum*, the tribunal dealt with a "chain of events", just as the *Azurix* tribunal was confronted with "cumulative actions" leading to the treaty breaches.⁵⁹³ *American International* and *Sedco* make clear that "it is only when the measures, in combination, are intended to depress the value of an investment" that they are deemed part of a creeping expropriation.⁵⁹⁴ In the present case, the Tribunal excluded the hypothesis of creeping expropriation.⁵⁹⁵ Equally unavailing is Burlington's reliance on *Sempra* and *Enron*. Not only did both of these cases relate to composite acts, but the tribunals denied the existence of an expropriation, finding only FET breaches.⁵⁹⁶
353. It is Ecuador's further submission that reliance on *Occidental II* is equally misplaced. Indeed, that tribunal had jurisdiction over contract claims and held that Law 42 breached the participation contract, thus flouting the investor's legitimate

⁵⁸⁹ Rejoinder, ¶¶ 537-544.

⁵⁹⁰ *Id.*, ¶ 543, citing: DoL, ¶¶ 433, 457; Rejoinder, ¶ 374.

⁵⁹¹ Rejoinder, ¶¶ 545-570.

⁵⁹² CM, ¶ 406; Rejoinder, ¶ 548, referring to: ILC Articles, Article 15 (**Exh. EL-249**) ("Breach consisting of a composite act: 1. The breach of an international obligation by a State through a series of actions or omissions defined in aggregate as wrongful occurs when the action or omission occurs which, taken with the other actions or omissions, is sufficient to constitute the wrongful act. 2. In such a case, the breach extends over the entire period starting with the first of the actions or omissions of the series and lasts for as long as these actions or omissions are repeated and remain not in conformity with the international obligation").

⁵⁹³ CM, ¶ 406; Rejoinder, ¶¶ 550-551, referring to: *Phillips Petroleum v. Iran*, Award of 29 June 1989, ¶ 101 (**Exh. CL-157**); *Azurix v. Argentina*, Award of 14 July 2006, ¶ 418 (**Exh. CL-121**).

⁵⁹⁴ Rejoinder, ¶ 552, referring to: *American International Group v. Iran*, Award of 19 December 1983, p. 8 (**Exh. CL-257**); *Sedco v. Iran*, Award of 7 July 1987, ¶ 31 (**Exh. CL-236**).

⁵⁹⁵ Rejoinder, ¶ 554, citing: DoL, ¶¶ 538, 540.

⁵⁹⁶ Rejoinder, ¶¶ 558-559, referring to: *Sempra v. Argentina*, Award of 28 September 2007, ¶¶ 303, 314 (**Exh. CL-80**); *Enron v. Argentina*, Award of 22 May 2007, ¶¶ 241-250 (**Exh. CL-81**).

expectations.⁵⁹⁷ Here, the Tribunal already held that Law 42 did not breach the PSCs or the BIT.⁵⁹⁸ Burlington's (and *Occidental II*'s) reliance on Prof. Marboe's treatise is also misguided, as the quote on which they rely relates to measures intended to depress the value of an investment just before the expropriation, which was not the case here.⁵⁹⁹ Ecuador also recalls that Prof. Stern dissented in *Occidental II*, holding that Law 42 should have been taken into account in the calculation of damages.⁶⁰⁰

354. Finally, argues Ecuador, there is no basis for relying on *Tippetts* and *Siemens* since these cases did not deal with a situation where contract rights had been waived. Moreover, in both cases, the receivables under scrutiny were in fact not in dispute at the time of expropriation.⁶⁰¹
355. For these reasons, the valuation of Burlington's investment should reflect the taxation of extraordinary revenues at 99%, as well as a production profile assuming that Burlington had made and would have continued to make Law 42 payments.
356. Fair Links' reports show how disregarding Law 42 inflates revenues and production volumes by USD 409 million.⁶⁰² Specifically:
- i. With respect to revenues, Fair Links "considers that 99% of the Extraordinary Revenues above the Reference Price would have to be contributed to Ecuador. Instead, based on instructions from Burlington, Compass Lexecon includes all the Extraordinary Revenues in Burlington's revenues for the purposes of calculating its claimed damage".⁶⁰³

⁵⁹⁷ Rejoinder, ¶¶ 560-561, referring to: *Occidental v. Ecuador II*, Award of 5 October 2012, ¶ 527 (**Exh. CL-240**).

⁵⁹⁸ Rejoinder, ¶ 561, referring: to DoL, ¶¶ 412, 457.

⁵⁹⁹ Rejoinder, ¶ 562, referring to: I. Marboe, *Calculation of Compensation and Damages in International Investment Law* (Oxford: Oxford University Press, 2009), ¶ 3.255 (**Exh. CL-263**).

⁶⁰⁰ Rejoinder, ¶ 564, referring to: *Occidental v. Ecuador II*, Award of 5 October 2012, Dissenting Opinion of B. Stern, ¶ 13 (**Exh. EL-240**).

⁶⁰¹ Rejoinder, ¶¶ 565-569, referring to: *Tippetts v. Iran*, Award of 22 June 1984, p. 228 (**Exh. CL-264**); *Siemens v. Argentina*, Award of 6 February 2007, ¶ 389 (**Exh. CL-79**).

⁶⁰² Rejoinder, ¶¶ 586-590. To isolate the impact of Law 42, Fair Links has calculated the Blocks' FMV using all of Compass Lexecon's operation and discount rate assumptions, (a) adding production and related CAPEX figures to new wells that would have been drilled (without the Block 7 extension), and (b) adding to the revenues 99% of the extraordinary revenues that would have been owed to Ecuador pursuant to Law 42.

⁶⁰³ Fair Links ER2, ¶ 42.

- ii. With respect to production, disregarding Law 42 allows Burlington to allege that additional wells would have been drilled in Block 7, which in turn impacts crude oil production and related capital expenditures.⁶⁰⁴

4.3 Analysis

357. The standard of compensation being full reparation, the Tribunal's task is to place Burlington in the position in which it would have been but for the expropriation. The Tribunal has found that the expropriation deprived Burlington of the possibility of exercising its rights under the PSCs and deriving revenues therefrom from 30 August 2009 onwards. The Tribunal must therefore quantify the compensation that will replace the value of the PSCs. It is common ground that this quantification can be effected on the basis of the PSCs' future profit-generating capacity using the DCF method. This exercise requires calculating as accurately as possible the revenues which would have accrued to Burlington under the PSCs from the date of the expropriation until the date of the scheduled expiry of the PSCs in a counterfactual scenario in which the expropriation is deemed not to have occurred. The question here is whether, when assessing the value of the PSCs' revenue stream, the Tribunal should assume that extraordinary revenues are taxed at 99% (as mandated by Law 42) or that Ecuador absorbs the impact of this tax.
358. In the Tribunal's view, when quantifying the value of the expropriated assets, the Tribunal must proceed on the basis that Burlington is entitled to exercise all of the contractual rights it would have had but for the expropriation, and that Ecuador would have complied with its contractual obligations going forward. In other words, when building the counterfactual scenario in which the expropriation has not occurred, the Tribunal must assume that Burlington holds the rights that made up the expropriated assets and that those rights are respected. This does not mean that the Tribunal is enforcing a contract claim. What the Tribunal does is to value an expropriated asset, which the Parties agree consists of a bundle of rights allowing Burlington to obtain future revenues.
359. In this case, the expropriated contracts included a mandatory tax absorption clause which cannot be ignored for valuation purposes. Indeed, in the Decision on Liability, "for the sole purpose of the resolution of the Treaty claim before it", the Tribunal found that "the PSCs provided for the following rights: (i) the right to receive and sell the contractor's share of oil production irrespective of the price of oil and its internal

⁶⁰⁴ *Id.*, ¶ 43.

rate of return, subject to the payment of the taxes and employment contributions specified in the PSCs; and (ii) the right to the application of a mechanism that would absorb the effects of any tax increase affecting the economy of the PSCs, i.e. a right to tax absorption under certain conditions”.⁶⁰⁵

360. After analyzing the relevant language, purpose and context of the PSC,⁶⁰⁶ the Tribunal found that Ecuador was under an obligation to apply a correction factor that would wipe out the effects of Law 42.⁶⁰⁷ This meant in practice that, after having taxed Burlington’s extraordinary revenues at 99% (as mandated by Law 42), Burlington’s oil production share had to be increased to the point at which the impact of Law 42 was eliminated.⁶⁰⁸ In other words, Burlington’s revenues should be restored to their pre-Law 42 levels. Accordingly, the PSCs gave Burlington the contractual right to generate revenues as if Law 42 did not exist. The Tribunal is aware that the *Perenco* tribunal adopted a different reasoning, but this Tribunal stands by its finding that the impact of new taxes needed to be wiped out.
361. As determined in the Decision on Liability, the “[t]he tax absorption clauses contained in the PSCs were part and parcel of the value of Burlington’s investment”.⁶⁰⁹ As a result, the value of the expropriated assets going forward includes the right to the application of a correction factor which would wipe out the effects of Law 42.
362. It follows that when calculating the PSCs’ future revenue stream, the effects of Law 42 must be ignored. This is not because Law 42 was an internationally wrongful act

⁶⁰⁵ DoL, ¶ 335.

⁶⁰⁶ See: Article 11.7 of the Block 7 PSC and Article 15.2 of the Block 21 PSC, transcribed at DoL, ¶¶ 335 and 405, respectively.

⁶⁰⁷ See: DoL, ¶ 327 (“[...] the tax modification provision contained in clause 11.12 of the PSC for Block 7 calls for the application of a mandatory correction factor that absorbs any impact of a tax increase or decrease on the economy of the Contract”), ¶ 333 (“[...] the language of [the tax modification clause of the PSC for Block 21] calls for the mandatory adjustment of the parties’ oil production shares ‘in order to restore the economics of the contract in place before the tax modification’”), and ¶ 334 (“the application of a correction factor is mandatory when a tax affects the economy of the PSCs for Blocks 7 or 21. This correction factor must be of such extent as to wipe out the effects of the tax on the economy of the PSC. Otherwise stated, the correction factor must restore the economy of the PSC to its pre-tax modification level”).

⁶⁰⁸ See: *Id.*, ¶ 315 (“[...] the economy of the PSCs was not a function of either a projected oil price of USD 15/bbl or of a contractor’s IRR of 15%. Rather, the economy of the PSCs entitled the contractor to receive its oil participation share, dispose of it on the market irrespective of price, and thus to obtain its oil share’s market value – subject to the applicable taxes and to the contract provisions on new taxes”).

⁶⁰⁹ *Id.*, ¶ 405.

or an otherwise unlawful value-depressing measure. It is because Ecuador was contractually required to apply a correction factor that would “wipe out the effects of the tax on the economy of the PSC”,⁶¹⁰ and that right is “part and parcel of the value of Burlington’s investment”.⁶¹¹ The fact that Ecuador had breached this contractual obligation in the past⁶¹² and threatened to do so in the future cannot diminish Ecuador’s liability. As the Iran-US Claims Tribunal observed in *Tippetts*, “[i]t is a well recognized principle in many municipal systems and in international law that no one should be allowed to reap advantages from their own wrong, *nullus commodum capere de sua injuria propria*”.⁶¹³ In particular, when quantifying the value of a going concern, the Tribunal must disregard the effects of value-depressing measures taken by the State related to the investment.⁶¹⁴

363. The Tribunal’s determination that Ecuador’s breaches of the PSCs’ tax absorption clauses was not an expropriation does not modify this conclusion. The Tribunal must quantify the value of what was taken, and what was taken were contracts providing among other things for the right to tax absorption. Nor is this inconsistent with the Tribunal’s dismissal of Burlington’s claim for past Law 42 dues: the tax absorption clauses form part of the asset that was taken, so when building the counterfactual scenario the Tribunal must assume that they apply. By contrast, Burlington’s credits against Ecuador for the amounts owed by Ecuador as a result of the application of these clauses *before* the expropriation were not taken by Ecuador’s takeover of the Blocks.

364. The value of Burlington’s investment must thus assume that Burlington can exercise its contractual rights, including the right to tax absorption. Ecuador contends however that “as a result of the waiver with prejudice, Burlington’s alleged contractual right to be insulated against the effects of Law 42 is unenforceable and,

⁶¹⁰ *Id.*, ¶ 334.

⁶¹¹ *Id.*, ¶ 405.

⁶¹² See, for instance: *Id.*, ¶¶ 417-419.

⁶¹³ *Tippetts v. Iran*, Award of 22 June 1984, p. 228 (**Exh. CL-264**).

⁶¹⁴ See, for instance: *American International Group v. Iran*, Award of 19 December 1983, p. 9 (**Exh. CL-257**) (“In ascertaining the going concern value of an enterprise at a previous point in time for purposes of establishing the appropriate quantum of compensation for nationalization, it is [...] necessary to exclude the effects of actions taken by the nationalizing State in relation to the enterprise which actions may have depressed its value”). See also: *Phillips Petroleum v. Iran*, Award of 29 June 1989, ¶ 135 (**Exh. CL-157**), referring to: *American International* (“[I]t is well established that the Tribunal must exclude from its calculation of compensation any diminution of value resulting from the taking of the Claimant’s property or from any prior threats or actions by the Respondents related thereto”).

hence, valueless”.⁶¹⁵ This is allegedly so because a hypothetical willing buyer would be placed in the same position as Burlington, whose Subsidiaries “have waived the possibility of ever re-filing their claims under the Participation Contracts in any form in the future”.⁶¹⁶ According to Ecuador, any willing buyer would thus be barred from enforcing the right to be indemnified against the effects of Law 42.⁶¹⁷

365. The Tribunal cannot agree. First, while the Tribunal held that “the Burlington Subsidiaries have waived the possibility of ever re-filing their claims under the PSCs in any form in the future”, it also considered that “[t]hey have not waived the underlying rights and Burlington may thus rely on these underlying rights to pursue its Treaty claims in this arbitration”.⁶¹⁸ Accordingly, these underlying rights must be considered when valuing Burlington’s expropriated investment.
366. Second and more importantly, as the standard of compensation is full reparation, the Tribunal must value what Burlington lost as a result of the expropriation. What Burlington lost was a contract with a full set of rights, each of which must be given its value. While the Parties agree that the Tribunal must search for the FMV of these rights, the Tribunal is not bound by the “willing buyer-willing seller” analogy. This analogy is only a tool to calculate the FMV of the expropriated investment, to be used if and when it helps to appropriately quantify the investor’s loss. As Burlington argued at the Hearing, as a result of the expropriation, Burlington did not lose an opportunity to sell its contract rights; it lost an opportunity to exercise them.⁶¹⁹ The relevant question is thus not whether a hypothetical buyer would have paid full value for the PSCs, it is what value Burlington would have derived from exercising the rights under the PSCs, but for their expropriation.
367. The *Occidental II* tribunal adopted a similar reasoning. When addressing Ecuador’s argument that future cash flows should take into account the effect of Law 42, that tribunal concluded that this argument “suffer[ed] from a fundamental flaw” because the relevant test was not what a hypothetical buyer would pay under the current circumstances, but rather what the claimants had lost:

⁶¹⁵ R-PHB, ¶ 135.

⁶¹⁶ Tr. Quantum (Day 1) (ENG), 258:21-259:1 (Opening, Silva Romero), citing: DoL, ¶ 199.

⁶¹⁷ R-PHB, ¶ 136.

⁶¹⁸ DoL, ¶ 199.

⁶¹⁹ Tr. Quantum (Day 1) (ENG), 98:20-99:1 (Opening, Coriell).

“It is obvious that a hypothetical third party would not pay more than would be justified by the prospective returns on an investment, and that Law 42 would have to figure in an assessment of these returns (either because of the risk of its continued application or because Ecuador would insist on this as a pre-condition to authorization). But asking what a hypothetical investor would pay under Law 42 which the Tribunal has found to be in breach of the Participation Contract is irrelevant to assessing what OEPC, whose contract protected it against things like Law 42, has actually lost. To reiterate, the test is not “what would a hypothetical buyer pay in the circumstances as they are now”; the test is “what have the Claimants lost.” The fair market value is a guide to answering this question, but what must be calculated is the discounted cash flow value of the Participation Contract (i.e. Block 15) excluding breaches of it (i.e. Law 42) by the Respondent”.⁶²⁰

368. For these reasons, the Tribunal finds that Burlington’s lost profits claim must be valued assuming compliance by Ecuador with its contractual obligations under the PSCs, in particular its tax absorption obligations. As the Tribunal discusses further below, this means that the effect of Law 42 must be ignored when calculating the production values that give rise to the projected cash flows on the basis of which Burlington’s damages are quantified.

5. Computation of cash flows

369. Having determined that the proper valuation methodology is the DCF method, the Tribunal must now compute Burlington’s lost cash flows. To this effect, it will first refer to the Updated Model (Section 5.1). It will then examine the variables and assumptions proposed by the Parties to compute those lost cash flows (Section 5.2). Thereafter, it will address the distinction between past and future cash flows, including the relevant actualization or discount rate applicable to each (Section 5.3). It will then address the sequence of the DCF analysis (Section 5.4) and end with the computation of the lost cash flows, for which it has relied on the Updated Model (Section 5.5).

5.1 The Updated Model

370. To compute Burlington’s lost (past and future) cash flows, the Tribunal has relied on the Joint Valuation Model (the “Model”) provided by the Parties’ damages experts. The Model was prepared jointly by Compass Lexecon and Fair Links pursuant to the

⁶²⁰ *Occidental v. Ecuador II*, Award of 5 October 2012, ¶ 539 (**Exh. CL-240**). The Tribunal notes that this part of the Occidental tribunal’s reasoning was not affected by the partial annulment (See: *Occidental v. Ecuador*, Decision on Annulment of 2 November 2015, ¶ 590(1) and (2)).

Tribunal's invitation and specifications in PO29.⁶²¹ Specifically, the Tribunal requested the experts jointly to prepare a valuation model allowing it to choose between the different variables proposed by the Parties for the computation of cash flows as specified by the Tribunal. The experts submitted a first version of the Model, together with an explanatory memorandum, on 24 April 2015. On the Tribunal's invitation,⁶²² the experts updated the Model on 20 September 2016 (the "Updated Model"), again with a joint explanatory memorandum (the "Joint Memorandum"). The Parties provided their comments to the Updated Model on 4 October 2016.

371. Burlington essentially agrees with the Updated Model.⁶²³ Ecuador, by contrast, has expressed certain reservations as to the accuracy and reliability of the model. It emphasizes that it fundamentally disagrees with some of the technical and legal assumptions upon which the model is based. It is also concerned about the *caveats* set out by the experts in their Joint Memorandum. Accordingly, "[g]iven the numerous limitations inherent in the Updated Model, Ecuador urges the Tribunal to exercise the utmost caution in the reliance it may place on said Model for quantum purposes".⁶²⁴
372. The Tribunal cannot accept Ecuador's suggestion that the Updated Model is flawed because it contains legal and technical assumptions with which Ecuador disagrees. By definition, a joint valuation model must contain each side's legal and technical assumptions, regardless of their merit. It is then for the Tribunal to choose the ones which it considers well-founded to carry out its computation.
373. The Tribunal notes that the experts jointly stated that they "agree with the functionalities, computations and calculations of the Joint Model based on the options that were put to us by the Tribunal, where feasible (not all the Tribunal's requests could be implemented)".⁶²⁵ That said, the Tribunal has reviewed the *caveats* raised by the experts in their Joint Memorandum (most of which refer to functionalities that could not be implemented and thus require approximations)⁶²⁶

⁶²¹ PO29 of 13 March 2015.

⁶²² Tribunal's letter of 27 July 2016.

⁶²³ Burlington's letter of 4 October 2016.

⁶²⁴ Ecuador's letter of 4 October 2016, pp. 1-2.

⁶²⁵ Joint Memorandum by Compass Lexecon and Fair Links, "Overview of the Updated Joint Valuation model Produced in Response to the July 2016 Letter", ¶ 3.

⁶²⁶ See, for instance: *Id.*, ¶¶ 19-21.

and Ecuador's specific objections. Given the Tribunal's choices below, some of these *caveats* become moot, and the Tribunal addresses those that are still relevant in the context of its discussion of the pertinent variable.

5.2 Variables and assumptions for cash flows

374. The Tribunal will start with the production profile (Section 5.2.1), followed by crude oil prices (Section 5.2.2), operating expenditures (Section 5.2.3), capital expenditures (Section 5.2.4), and taxation (5.2.5).

5.2.1 Production profile

a. Burlington's position

375. Compass Lexecon values Burlington's investment "in a hypothetical scenario where Ecuador complied with its legal obligations regarding the tax absorption".⁶²⁷ It explains that "[i]n such a scenario, [Burlington] would have had economic incentive to invest in new drilling, which, according to [Burlington], and as described by Mr. Crick, would have resulted in additional production from new wells beginning in December 2007 for Block 7, and January 2008 for Block 21. Consequently, [Burlington's] investment and production profile would have differed from what has been actually observed in both Block 7 and Block 21 from 2007 onwards".⁶²⁸
376. According to Burlington, it would be improper to rely on a production profile based on actual investment on the date of the expropriation, as actual production was diminished by Ecuador's unlawful value-depressing measures. Messrs. Martinez and Crick confirmed that Ecuador's failure to absorb the 50% tax affected the incentive to further invest.⁶²⁹ With the 99% tax, "the viability of any further investment was wiped out", and by the end of 2007, all investment ceased.⁶³⁰ Accordingly, actual production was "far lower" than in the but-for scenario. Had Ecuador absorbed the tax, the Consortium would have had "the economic incentive to continue" investing.⁶³¹

⁶²⁷ Compass Lexecon ER1, ¶ 14.

⁶²⁸ *Ibid.*

⁶²⁹ Mem., ¶ 83, referring to: Martinez WS1 Supp., ¶¶ 15-18; Martinez WS4 Supp., ¶¶ 5-8; Crick WS, ¶¶ 5-10, 22-24, 103.

⁶³⁰ Mem., ¶ 83, referring to: Five-Year Plans (**Exh. C-187**); Martinez WS1 Supp., ¶¶ 19-21; Martinez WS4 Supp., ¶¶ 5-8.

⁶³¹ Mem., ¶ 86.

377. As a result, Burlington argues that it is entitled “to compensation representing the present value of the incremental production that it would have generated from December 2007 onwards, had Ecuador’s unlawful actions not forced the Consortium to curtail, then cease, its investment”.⁶³² Burlington further stresses that it only seeks damages for “the decrease in investment and resulting production from December 2007 onwards” (i.e. after imposition of 99%, not from April 2006 onwards with the 50% tax).⁶³³
378. Compass Lexecon relies on the projections of production volume found in Mr. Crick’s witness statements.⁶³⁴ Mr. Crick’s witness statements forecast how much oil would have been produced by the Consortium from the oilfields in Blocks 7 and 21 had the Consortium been permitted to continue operations through the end of each Block’s contract term (8 June 2021 for Block 21 and 16 August 2010 for Block 7).⁶³⁵ In making these forecasts, Mr. Crick assumes that Ecuador complied with its obligations under the PSCs.⁶³⁶
379. Mr. Crick calculated the lost production volumes on the basis of the number of wells in existence at the time of dispossession, as well as the incremental wells that would have been drilled “but for” the taking.⁶³⁷ He then applied a “production/decline rate” to both sets of wells to determine the number of barrels of oil that the wells would produce.⁶³⁸ More specifically:
- i. With respect to existing wells, Mr. Crick’s production analysis relied on actual oil production data drawn both from Perenco records and the records produced by Ecuador.⁶³⁹ Where appropriate, Mr. Crick extended the wells’ production values into the future using standard engineering techniques.⁶⁴⁰

⁶³² *Id.*, ¶ 87.

⁶³³ *Ibid.*, note 127.

⁶³⁴ Compass Lexecon ER1, ¶ 6.

⁶³⁵ Crick WS1, ¶ 5. Mr. Crick also forecasts an alternative scenario that assumes that the Block 7 contract would have been extended to August 2018, which is relied on by Compass Lexecon for its valuation of the Block 7 extension and is irrelevant here.

⁶³⁶ *Ibid.*

⁶³⁷ *Id.*, ¶¶ 5-6.

⁶³⁸ Mem., ¶ 157.

⁶³⁹ Crick WS1, ¶ 6.

⁶⁴⁰ *Ibid.*

- ii. With respect to incremental wells, Mr. Crick explains that the Consortium's program of additional investment reflects what a reasonable and prudent investor would have invested unconstrained by Ecuador's breaches.⁶⁴¹ After determining the number of incremental wells that the Consortium would have drilled in each Block, Mr. Crick applied "a reasonable drilling schedule for that Block that takes into account Perenco's historical practices, its financial capabilities, and the equipment that would have been available to it".⁶⁴² He then forecasted production for the new wells using data ranging from seismic information to actual production data from the existing wells. Mr. Crick adopted different approaches for his calculations depending on the field characteristics (for instance, for Oso, the actual production and decline rates; and for Lobo and CPUF, water injection simulations).⁶⁴³

380. Mr. Crick concludes that, but for the expropriation and ignoring the effects of Law 42, the Consortium would have produced **17.7 million barrels of oil** from Block 7 from December 2007 to August 2010 (the scheduled expiry of the Block 7 PSC), as follows:⁶⁴⁴

- i. The production from existing wells (68 at the time of the expropriation)⁶⁴⁵ between December 2007 and August 2010 would have been 4.3 million barrels of oil.⁶⁴⁶ This was the actual volume produced by Petroamazonas from existing wells in that period and Mr. Crick assumes that Perenco would have produced the same amount.⁶⁴⁷
- ii. With respect to production from incremental wells, Mr. Crick explains that "[i]f Perenco had not been granted an extension it would have continued the programme of drilling on Oso, by far the largest and most important project on Block 7", at a rate of one well per month, but would have stopped any new

⁶⁴¹ Mem., ¶ 87, referring to: Crick WS1, ¶¶ 5, 9-10; as well as Martinez WS4 Supp., ¶ 7.

⁶⁴² Crick WS1, ¶ 6.

⁶⁴³ Mem., ¶ 168.

⁶⁴⁴ Mr. Crick also provides a forecast for Block 7 in an extension scenario. However, as the Tribunal has rejected this head of claim it will disregard this forecast for reasons of procedural efficiency.

⁶⁴⁵ According to: Compass Lexecon ER1, ¶ 40.

⁶⁴⁶ Crick WS1, ¶¶ 139-142 and Figure 1.

⁶⁴⁷ *Id.*, ¶¶ 139, 142.

investments one year before the end of the contract.⁶⁴⁸ Mr. Crick thus calculates that 21 additional wells would have been drilled in Block 7, specifically in the Oso field, from December 2007 until August 2009, resulting in 13.4 million barrels for the 21 new wells.⁶⁴⁹ To calculate production from these new wells, Mr. Crick used a correlation for the initial rate and then a decline curve based on a type curve derived from the existing wells.⁶⁵⁰

381. According to Mr. Crick, this timeline and forecast are reasonable, which is confirmed by Petroamazonas' actual drilling and production since the expropriation.⁶⁵¹ Mr. Crick notes in particular that the 2013 Ryder Scott Reserves Report⁶⁵² "demonstrates that Petroamazonas is planning to drill far more wells at Oso than were contemplated in the 2008 Perenco development plan, and projects total recoverable oil volumes higher than what [Mr. Crick] predicted in the 2018 extension case".⁶⁵³ By June 2013, Petroamazonas had drilled 88 wells in the Oso field (the first 21 in just 18 months),⁶⁵⁴ and had stated that it would drill 110 more.⁶⁵⁵ In addition, Petroamazonas' Year-End Report for 2013 indicates that there are 761 million barrels of oil in place, which is over four times Perenco's estimate in 2008 (175 million barrels).⁶⁵⁶ Mr. Crick concludes that "Block 7's Oso field was a very good field that just kept getting better, and it would have been drilled aggressively, just as Petroamazonas is doing now".⁶⁵⁷

⁶⁴⁸ *Id.*, ¶ 140.

⁶⁴⁹ Mem., ¶ 164; Reply, ¶ 182; Crick WS1, ¶¶ 140, 165-172, as revised by Crick WS3, Appendix A. Mr. Crick also opined that the Consortium would have drilled an additional 70 wells had the Block 7 PSC been extended until 2018, yielding a further 105.8 million barrels (for a total forecast of 125.7 million) (Reply, ¶¶ 134, 182; Crick WS1, ¶¶ 145-148, as revised by Crick WS3, Appendix A). As noted in note 644 above, this forecast is irrelevant for this claim.

⁶⁵⁰ Crick WS1, ¶¶ 173-178; Tr. Quantum (Day 2) (ENG), 387:8-17 (Direct, Crick); Direct Presentation, Slide 26.

⁶⁵¹ Crick WS1, ¶¶ 139-144.

⁶⁵² Report dated 20 October 2013 prepared by the oil and gas consultancy Ryder Scott Company at Petroamazonas's request on the proved, probable, and possible reserves in Blocks 7 and 21 as of 30 June 2013 (Annex D to Crick WS2 and Exh. C-493).

⁶⁵³ Crick WS2, ¶ 8.

⁶⁵⁴ *Id.*, ¶ 140.

⁶⁵⁵ Tr. Quantum (Day 2) (ENG), 390:21-391:1 (Direct, Crick).

⁶⁵⁶ Tr. Quantum (Day 2) (ENG), 385:16-386:3, 390:16-17 (Direct, Crick); Exh. C-492.

⁶⁵⁷ Crick WS2, ¶ 8.

382. With respect to Block 21, Mr. Crick forecasts that, “but for” the expropriation and Law 42, the Consortium would have produced a total of **37.9 million barrels of oil**, as follows:

- i. With respect to existing wells, Mr. Crick forecasts the production of the 33 wells in place in the Yuralpa field on the date of the expropriation⁶⁵⁸ on the basis of their historical production until August 2009, as well as Petroamazonas’ actual production data.⁶⁵⁹ Mr. Crick initially prepared his forecast on the basis of type-curve analysis.⁶⁶⁰ According to Mr. Crick, the actual performance of the wells drilled by Perenco shows an initial 43% well production decline that stabilized at 9%, which is confirmed by the actual performance of the wells drilled by Petroamazonas.⁶⁶¹ On that basis, Mr. Crick calculated that total recovery from existing wells in Block 21 until June 2021 would be 25.7 million barrels.⁶⁶²
- ii. With respect to incremental wells, Mr. Crick starts by explaining that “[b]y the end of March 2013 the Main Hollin in Yuralpa had produced 35.2 million barrels, only 10% of the original oil in place” which “confirms the low volumetric sweep efficiency of the present wells and implies that many more new wells are needed to properly drain the reservoir”.⁶⁶³ After discounting the fringe of the reservoir (which Perenco did not expect to develop due to its low oil thickness), “the volume of oil originally considered developable is reduced to 246 million barrels”.⁶⁶⁴ This means that “the wells in the Yuralpa Main Hollin have produced 14.3% of the developable oil”, which is low, showing that “there is still a

⁶⁵⁸ Mr. Crick explains that the Yuralpa field is the only producing field in Block 21 (Crick WS1, ¶ 32). He further explains that by the time Perenco ceased drilling there were 32 wells able to produce and 31 wells actually producing. Crick WS ¶ 98; see also: Figures 9 and 11, Crick WS1, pages 26, 28 and Tr. Quantum (Day 2) (ENG), 370:5-6 (Direct, Crick), in relation to Slide 9 of Mr. Crick’s Direct Presentation. See also: Yuralpa Simulation Study, Annex E to Crick WS1, p. 2. That being said, the table included at paragraph 190 of Mr. Crick’s Second Witness Statement refers to 33 existing wells.

⁶⁵⁹ Crick WS1, ¶¶ 66-92.

⁶⁶⁰ Crick WS2, ¶¶ 11-36. Dr. Strickland explains that type curve analysis “plots the oil rate against time for multiple wells on the same plot. The time reflected on the x-axis is usually displayed as months since the date of first production rather than time as a calendar date. Thus, in this type of plot, all wells start at the same time (0) regardless of the calendar date on which each well was drilled. At each point in time, the average rate of all wells combined is calculated. Mr. Crick used this average to develop his rates of decline for future well production” (Strickland ER, ¶ 46).

⁶⁶¹ Crick WS1, ¶¶ 66-92.

⁶⁶² See: Table in Mem., ¶ 162.

⁶⁶³ Crick WS1, ¶ 93.

⁶⁶⁴ *Id.*, ¶ 95.

tremendous amount of undrained oil in place”.⁶⁶⁵ Mr. Crick forecasts that the Consortium would have drilled a further 24 wells until 2021 but for Ecuador’s unlawful conduct, 21 of which would have consisted of “in fill” drilling (i.e., drilling that “filled in” the areas of unrecovered oil between existing wells) in the center of the reservoir (the 1900 acre area with an oil column greater than 90 feet), and 3 additional wells outside that area.⁶⁶⁶ Mr. Crick assumes a drilling rate of one well per month (which is consistent with Perenco’s historical drilling rate),⁶⁶⁷ starting in January 2008⁶⁶⁸ and ending in December 2009.⁶⁶⁹ Again relying initially on type-curve analysis, and using the empirical data on average initial production and decline rates,⁶⁷⁰ Mr. Crick projects that the Consortium would have recovered an additional 12.2 million barrels from these 24 wells⁶⁷¹ (which, added to the 25.7 million barrels from existing wells, results in a total production forecast of 37.9 million barrels).⁶⁷²

383. Mr. Crick used four different methods to forecast oil production in the Yuralpa field: (i) type-curve analysis; (ii) individual decline-curve analysis of existing wells (his initial methodology); (iii) the Yuralpa full-field simulation model made in 2007, and (iv) the same model, updated with data to July 2009 and modified to match performance per date.⁶⁷³ The results of these four methods essentially concur.⁶⁷⁴ Mr. Crick explains that type-curve analysis is more reliable than well-by-well analysis because, as a result of the poor behavior of some wells, reviewing their history on

⁶⁶⁵ *Ibid.*

⁶⁶⁶ Mem., ¶ 165, Reply, ¶ 134; Crick WS1, ¶¶ 98-101.

⁶⁶⁷ Crick WS1, ¶¶ 102-107.

⁶⁶⁸ Mr. Crick explains that Perenco stopped drilling in Yuralpa on 10 February 2007 mainly because of the uncertainty and economic penalty created by Law 42, but he does not assume continuous drilling on Block 21. Rather, because Perenco was already conducting a field study to better understand the nature of the reservoir, Mr. Crick assumes that Perenco would have stopped drilling in February 2007, waited for the results of the study, and recommenced drilling on 1 January 2008. *Id.*, ¶¶ 103-104.

⁶⁶⁹ Mr. Crick explains that the 24 new wells would have taken two years to drill, and while “[a]dditional wells may well have been profitable beyond these, [...] it is difficult to predict how much oil would remain for such wells once the appropriate pump upgrades and water shut-offs had been implemented”. As a result, he assumed no drilling in the Yuralpa field after December 2009. *Id.*, ¶ 107.

⁶⁷⁰ As summarized by Dr. Strickland, Mr. Crick’s recovery forecast for future wells “was based on (1) the initial oil rate (known for existing wells, and projected for new wells); and (2) the average production decline rate” (Strickland ER, ¶ 45).

⁶⁷¹ Crick WS1, ¶¶ 108-118, 136.

⁶⁷² *Id.*, ¶ 137.

⁶⁷³ Tr. Quantum (Day 2) (ENG), 371:9-17 (Direct, Crick).

⁶⁷⁴ Tr. Quantum (Day 2) (ENG), 378:3-379:15 (Direct, Crick).

an individual basis is not a good predictor of the future. By contrast, type-curve analysis looks for constants in well behavior, which allows for better prediction. In particular, it clearly shows a 9% decline rate after 36 to 40 months, whether one looks at the performance between 2003 and 2004 or between 2006 and 2007.⁶⁷⁵

384. Mr. Crick regards his forecast for Block 21 as conservative and reasonable for at least four reasons: (i) 21 of the 24 wells are located in a proven oil producing area and are 1P wells;⁶⁷⁶ (ii) his forecast assumes that Perenco stopped drilling in February 2007 and did not resume until 1 January 2008⁶⁷⁷ when, in reality, but for Law 42 the drilling would have been continuous;⁶⁷⁸ (iii) his recovery rate is at the low end of the spectrum;⁶⁷⁹ and (iv) the data received from Ecuador confirms the reasonableness of the drilling plan: by 2013, Petroamazonas' had already drilled 8 new wells and redrilled 3 in the Yuralpa field,⁶⁸⁰ but the 2013 Ryder Scott Reserves Report shows that Petroamazonas intended to drill 28 new wells in the Yuralpa field (a total of 36 new wells in Yuralpa after July 2009, compared to the 24 new wells forecasted by Mr. Crick).⁶⁸¹
385. It arises from the foregoing that Burlington's total "but for" production forecast (i.e., freed from the effects of Law 42) is as follows:⁶⁸²
- i. Block 7 (according to its original term) would have yielded an ultimate recovery of 17.7 million barrels (4.3 + 13.4 million barrels).⁶⁸³

⁶⁷⁵ Tr. Quantum (Day 2) (ENG), 371:18-374:4 (Direct, Crick).

⁶⁷⁶ Crick WS1, ¶¶ 97, 119.

⁶⁷⁷ See: note 668 above.

⁶⁷⁸ Crick WS1, ¶ 120.

⁶⁷⁹ Mr. Crick explains that, according to a 2008 study by Denis Beliveau, the expected ultimate recovery factor for 27 viscous oil reservoirs such as Yuralpa ranged between 15% and 52%, and his recovery factor for the Main Hollin in Yuralpa including the proposed new wells is 15.5%. Crick WS2, ¶¶ 9, 157-161, Tr. Quantum (Day 2) (ENG), 379:16-380:15 (Direct, Crick), and Slide 20 of his Direct Presentation.

⁶⁸⁰ Crick WS1, ¶¶ 126.

⁶⁸¹ Crick WS2, ¶ 188. ("The report states that a development plan of 28 new wells was proposed by Petroamazonas for the Hollin reservoir in Yuralpa. Ryder Scott considered 18 of the further wells proposed by Petroamazonas to be 'proved' (1P) locations, a further four wells to be 'probable' (2P), and six additional sites as 'possible' (3P). Given that Petroamazonas had already drilled eight new wells after taking over operations from Perenco (together with three re-drills), this makes a total of 36 additional wells proposed or drilled by Petroamazonas in Yuralpa field after July 2009, compared to the 24 new wells proposed in my prior witness statement").

⁶⁸² Crick WS3, Appendix B.

- ii. Block 21 would have yielded an ultimate recovery of 37.9 million barrels (25.7 + 12.2 million barrels).⁶⁸⁴

386. The following table illustrates Burlington's forecasts (as adjusted in Mr. Crick's Supplemental Witness Statement):⁶⁸⁵

BLOCK 7			
		Original Term	With Extension
From Existing Wells	from 01/08/2009 to 16/08/2010		from 01/08/2009 to 16/08/2018
	Coca Payamino	1,605,545	
	Other block 7	2,651,148	
Net Gain from new Wells	from 01/12/2007 to 16/08/2010		from 01/12/2007 to 16/08/2018
	Coca Payamino		23,459,876
	Other block 7	13,473,339	78,750,507
Block 7 Totals		17,730,032	125,722,569
BLOCK 21			
		Original Term	Original Term
From Existing Wells	from 01/08/2009 to 08/06/2021	25,738,793	from 01/08/2009 to 08/06/2021
Net Gain from new Wells	from 01/01/2008 to 08/06/2021	12,199,358	from 01/01/2008 to 08/06/2021
Block 21 Totals		37,938,151	37,938,151
	Block 7 original Term + Block 21		Block 7 with extension + Block 21
GRAND TOTALS		55,668,182	163,660,720

387. That being said, the Tribunal notes that the figures quoted by Burlington in its Opening Statement at the Hearing and shown below,⁶⁸⁶ as well as those quoted by Mr. Crick at Slide 3 of his Direct Presentation, are slightly different from those shown in Mr. Crick's Supplemental Witness Statement and quoted above:

⁶⁸³ *Id.*, Appendix A.

⁶⁸⁴ Crick WS1, ¶¶ 134-137.

⁶⁸⁵ Crick WS3, Appendix B.

⁶⁸⁶ Burlington's Opening Presentation, Slide 77; Tr. Quantum (Day 1) (ENG), 114:19-115:8 (Opening, Miles).

Burlington Correctly Forecasts “But For” Oil Production

Mr. Crick v. RPS: “But For” Oil Production to Contract Expiry			
	Block 21 (to August 2021)	Block 7 (to August 2010)	Block 7 (to August 2018)
Mr. Crick	37.6 million barrels	17.4 million barrels	125.4 million barrels
RPS	11.24 million barrels	3.61 million barrels	no forecast

Crick First Witness Statement, June 24, 2013, ¶ 10; Ecuador’s Motion for Reconsideration and Counter Memorial on Quantum, May 23, 2014, ¶¶ 448, 429; Crick Supp. Statement, February 16, 2015, ¶ 6

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388. The Tribunal thus understands that Burlington has amended its forecasted production volumes, or at least limits its submissions as regards those volumes, to a total of 37.6 million barrels for Block 21 and 17.4 million barrels for Block 7 (in a no extension scenario).
389. Burlington argues that Mr. Crick’s forecast is reasonable, technically sound, and accurate, as it has been confirmed by Ecuador’s own data.
390. Burlington first contends that Mr. Crick’s drilling forecasts are reasonable. This is because (i) the Blocks’ performance under Petroamazonas confirms that the only reason that Burlington stopped drilling was Ecuador’s failure to absorb the impact of Law 42; (ii) the evidence otherwise shows that the Consortium would have drilled more wells but for Ecuador’s unlawful conduct, and (iii) the new wells forecasted by Mr. Crick would have been profitable. Specifically:
- i. With respect to (i), Burlington observes that Petroamazonas, which is not subject to Law 42, has undertaken a successful drilling and production program that is very similar to the one forecasted by Mr. Crick for a scenario in which Ecuador honors its obligation to absorb the economic impact of Law 42.⁶⁸⁷ This proves that, had Ecuador honored its tax absorption obligations, the Consortium would have continued drilling. Indeed, Ecuador’s failure to absorb the impact of Law 42 was the only reason why the Consortium stopped drilling. Contrary to

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Reply, ¶ 142.

Ecuador's contentions, the 9 October 2007 email from Jim Johnson,⁶⁸⁸ then Partnership Operations Manager at Burlington, does not prove that the Consortium believed that all drilling on Blocks 7 and 21 would still be economic under Law 42 at 99%; that email clearly refers only to the drilling of four wells in the Oso field in Block 7, which was still considered economic because the Consortium had already paid to drill these wells (making them sunk costs), and Block 7 benefitted from a higher reference price.⁶⁸⁹ If anything, that email shows that the Consortium was hesitant to continue drilling, as Mr. Johnson recommended that Burlington drill only the next programmed well on Oso, "and then watch the situation and make decisions on the remaining wells based on what happens in the country".⁶⁹⁰

- ii. With respect to (ii), Ecuador's claim that, even absent Law 42, the Consortium would in any event not have continued drilling in the Blocks is incorrect. Burlington's witnesses confirm that, had Ecuador not breached the PSCs, the Consortium would have continued drilling.⁶⁹¹ While Mr. Crick's drilling projections reflect Perenco's proposed investment plan, Mr. Martinez confirmed that Burlington would have supported this investment plan had Ecuador honored its obligations under the PSCs.⁶⁹² More specifically:
 - a. Mr. Crick confirmed that the Consortium planned to continue developing Block 21 despite the fact that the wells drilled in the first few years of operation had produced less than expected.⁶⁹³ Instead of abandoning the field, Mr. Crick explains that the Consortium stopped drilling in 2006 and undertook a major study to better understand the reservoir's behavior.⁶⁹⁴ Ecuador's claim that the Consortium stopped drilling in Block 21 because it believed that it was fully developed is incorrect. The documents on which Ecuador relies (specifically, the January 2007 Yuralpa Mapping Update,⁶⁹⁵ the May 2007 Latin American Reserves Review,⁶⁹⁶ the

⁶⁸⁸ **Exh. E-523.**

⁶⁸⁹ Reply, ¶¶ 147-150; Johnson WS, ¶¶ 15, 23.

⁶⁹⁰ **Exh. E-523.**

⁶⁹¹ Crick WS ¶¶ 21-26, Johnson WS, ¶ 10,

⁶⁹² Mem., ¶ 87, referring to: Martinez WS4 Supp., ¶ 8.

⁶⁹³ Reply, ¶ 152, referring to: Crick WS2, ¶ 168.

⁶⁹⁴ Reply, ¶ 152, referring to: Crick WS2, ¶ 168.

⁶⁹⁵ **Exh. E-555.**

ConocoPhillips 2007 Sales Memorandum,⁶⁹⁷ the September 2007 Budget Committee Meeting Presentation,⁶⁹⁸ and the Yuralpa Field Upper and Main Hollin Reservoir Evaluation)⁶⁹⁹ are not useful for measuring damages in the proper “but for” scenario, because they reflect the impact of Law 42 on the Consortium’s business plans.⁷⁰⁰ In any event, Ecuador and RPS take these documents out of context: properly interpreted, these documents prove that only Law 42 caused the Consortium to stop drilling.⁷⁰¹ Finally, Mr. Crick asserts that there is no evidence of an open or extensive natural fracture network in the Yuralpa field; to the contrary, the evidence suggests that no such fracturing exists or that the permeability of existing fractures is such that their behavior is the same as that of the reservoir rock.⁷⁰² In Mr. Crick’s opinion, the cause for the water breakthrough in the Yuralpa wells is water coning, which means that the oil between the water cones may be extracted through in-fill drilling, providing additional reserves.⁷⁰³

- b. Ecuador’s claim that the Consortium stopped drilling on Block 7 due to concerns about reservoir quality is equally unfounded. The documents on which Ecuador relies (specifically, the May 2007 Latin American Reserves Review,⁷⁰⁴ the 2007 ConocoPhillips Sales Memorandum,⁷⁰⁵ and the 9 October 2007 email from Mr. Johnson)⁷⁰⁶ actually prove that the

696 **Exh. E-553.**

697 **Exh. E-214.**

698 **Exh. C-470.**

699 Appendix E to Crick WS1.

700 Reply, ¶ 153.

701 *Ibid.*

702 Reply, ¶ 176; Crick WS2, ¶¶ 123, 140-143, referring to the watering out experienced in the YCA-3 and YCB-4 wells. Mr. Crick recognizes, however, that “[i]t remains possible that somehow a fracture was suddenly created linking the two wells YCA 3 and YCB 4 directly to the aquifer, but nobody has yet satisfactorily explained how that might have happened”. (Crick WS2, ¶ 144).

703 Crick WS2, ¶ 146.

704 **Exh. E-553.**

705 **Exh. E-214.**

706 **Exh. E-523.**

Consortium planned to continue drilling on Block 7 but for the effects of Law 42.⁷⁰⁷

iii. With respect to (iii), Compass Lexecon has run a profitability test⁷⁰⁸ on Mr. Crick's production forecasts from late 2007 onwards and concludes that, but for Ecuador's failure to absorb the impact of Law 42, Mr. Crick's 24 proposed new wells on Block 21 would have yielded USD 134 million in profits, while the 21 new wells for Block 7 (in the non-extension case) would have yielded USD 294 million.⁷⁰⁹

391. Burlington further argues that Mr. Crick's "but for" production forecast is technically sound, as is confirmed by Dr. Strickland's independent assessment. Using different forecasting techniques, Dr. Strickland reaches very similar conclusions about the future performance of the Blocks, proving that Mr. Crick's forecasting methods and conclusions are accurate and reliable.⁷¹⁰ Specifically with respect to Block 21, Dr. Strickland confirmed that (a) the conditions for drilling on the Main Hollin are good (the reservoir is fed by strong underground aquifer providing enough pressure to extract oil, and the soil has a sufficient porosity to allow oil flow), (b) the wells still perform economically in case of water coning, (c) the best way to extract further oil was through in-fill drilling (decreasing space between wells from 70 to 40 acres),⁷¹¹ (d) contrary to RPS' claim, the Main Hollin reservoir is *not* fractured,⁷¹² and (e) the use of "type curves" of existing wells by Mr. Crick to determine future production is more appropriate than the well-by-well analysis employed by RPS.⁷¹³ Finally, Dr. Strickland also confirmed Mr. Crick's production forecasts for new wells in Block 21.⁷¹⁴

392. More importantly, in addition to being reasonable and technically sound, Burlington submits that Mr. Crick's forecast is accurate, as it has been confirmed by Petroamazonas' actual production data and Ryder Scott's report providing reserves

⁷⁰⁷ Reply, ¶¶ 155-161, Johnson WS, ¶¶ 22-24; Crick WS2, ¶¶ 8, 200.

⁷⁰⁸ Compass Lexecon explains that this analysis compares the net present value of expected profits from the new wells forecasted by Mr. Crick with their respective estimated investments. Compass Lexecon ER2, ¶ 23.

⁷⁰⁹ Reply, ¶ 144; Compass Lexecon ER2, ¶¶ 10, 23-26 and Table 3.

⁷¹⁰ Reply, ¶ 140.

⁷¹¹ *Id.*, ¶¶ 173-174, referring to: Strickland ER, ¶¶ 22, 28, 35.

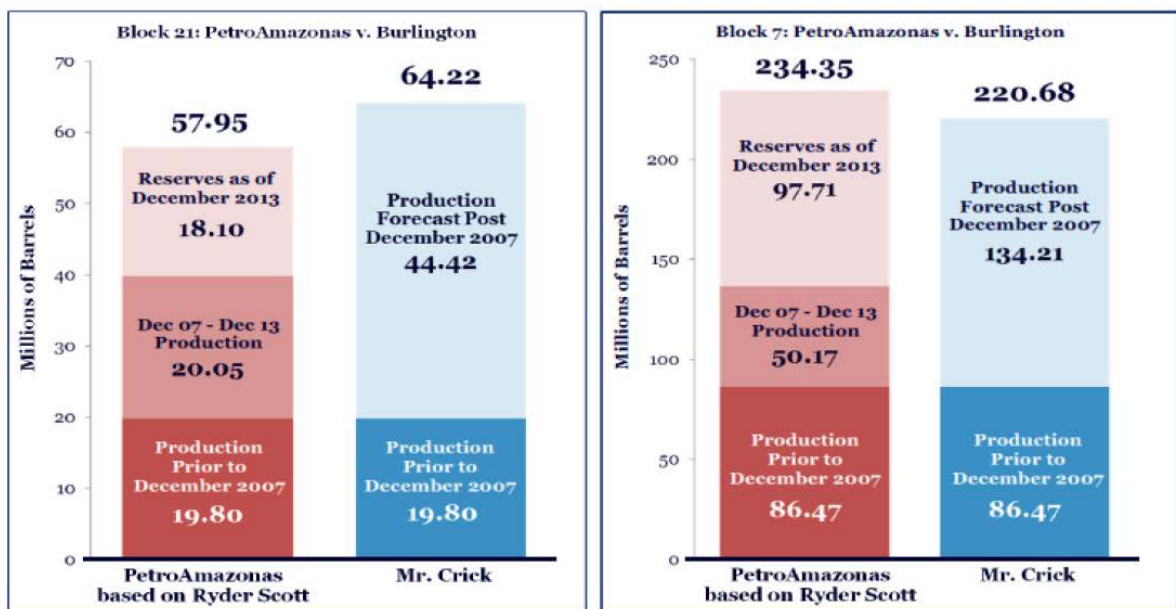
⁷¹² Reply, ¶ 175, referring to: Strickland ER, ¶¶ 100-112.

⁷¹³ *Id.*, ¶ 177.

⁷¹⁴ *Id.*, ¶¶ 180-181.

projections which had been commissioned by Petroamazonas.⁷¹⁵ The Ryder Scott Reserves Report indeed shows that the ultimate recovery possible from the Blocks is in line with Mr. Crick's estimate: in June 2013, Ryder Scott calculated that the total proven and probable reserves of oil that could be recovered from Block 21 was 60 million barrels, while Mr. Crick's estimate was only marginally higher at 63 million barrels.⁷¹⁶ Similarly, Ryder Scott's calculation of total proven and probable reserves for Block 7 (230 million barrels) is higher than Mr. Crick's estimate (205 million barrels).⁷¹⁷ This is reflected in Slide 101 of Burlington's Closing Presentation at the Hearing:

Petroamazonas Productivity Data Matches Crick's Projections



C-519, Block 7 Well-by-Well Production Data, prepared by Dr. Strickland; C-520, Block 21 Well-by-Well Production Data, prepared by Dr. Strickland C-493, PetroAmazonas and Ryder Scott Reserves Assessment; Mr. Crick's Witness Statements

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⁷¹⁵ See: paragraphs 381 and 384 above.

⁷¹⁶ Reply, ¶ 137, Compass Lexecon ER2, ¶ 9. The Tribunal notes that during the Hearing Mr. Crick estimated the expected ultimate recovery (EUR) from the Yuralpa field at 64.2 million barrels (Tr. Quantum (Day 2) (ENG), 361:9-10 (Direct, Crick) and Slide 22 of his Direct Presentation). Similarly, Slide 101 of Burlington's Closing Presentation shows it at 64.22 million barrels.

⁷¹⁷ Reply, ¶ 137, Compass Lexecon ER2, ¶ 9. The Tribunal notes that during the Hearing Burlington stated that the EUR for Block 7 was 220.68 million barrels (Slide 101 of Burlington's Closing Presentation).

393. By contrast, Burlington argues that RPS's predictions must be rejected, for the following reasons:

- i. RPS's forecast is fundamentally flawed because it relies on the incorrect assumption that the Consortium would have been subject to the full effects of Law 42. This assumption invalidates RPS's entire forecast as it is premised on a reduced investment and drilling program that does not correspond to the applicable "but for" scenario.⁷¹⁸ In particular, RPS wrongly assumes no new wells in Block 7 due to the effects of Law 42.⁷¹⁹
- ii. RPS's opinion that, by August 2009, Block 21 was "fully developed" and that additional wells would have only accelerated production of existing reserves is wrong.⁷²⁰ Mr. Crick and Dr. Strickland, through the use of different forecasting techniques, confirm that the Main Hollin reservoir still had large quantities of oil.⁷²¹ Mr. Crick gives four reasons why RPS's conclusion in this respect is wrong: (a) the wells drilled by Petroamazonas in 2011-2012 have produced new reserves⁷²² (the Tribunal understands this to mean that the wells have allowed Petroamazonas to discover reserves previously unknown); (b) RPS's recovery factor for Yuralpa is unreasonably low (10.5%, when the minimum considered in the Beliveau study is 15%), and is based on a flawed calculation of initial oil in place;⁷²³ (c) RPS's opinion is founded on a "misguided interpretation of the 2007 study and model of the Yuralpa field",⁷²⁴ and (d) as noted at (iii) below, the Ryder Scott Reserves Report shows reserves that are much higher than those used by RPS and more new wells than those proposed by Mr. Crick.⁷²⁵ This is confirmed by the fact that Mr. Daigre of RPS conceded at the Hearing that Block 21 was in fact not fully developed in August 2009.⁷²⁶

⁷¹⁸ Reply, ¶¶ 136-137, 162-163, 184.

⁷¹⁹ *Id.*, ¶ 184, referring to: RPS ER3, ¶ 216.

⁷²⁰ Reply, ¶ 166, referring to: RPS ER3, ¶ 217.

⁷²¹ Reply, ¶¶ 169-171 (Mr. Crick) and 172-174 (Dr. Strickland).

⁷²² Crick WS2, ¶¶ 149-156.

⁷²³ *Id.*, ¶¶ 157-166.

⁷²⁴ *Id.*, ¶¶ 148, 167-187.

⁷²⁵ *Id.*, ¶¶ 188-189.

⁷²⁶ C-PHB, ¶¶ 125-127.

iii. More importantly, RPS's projections have been proven wrong by Petroamazonas' actual figures. Mr. Crick explains that "[a]s of 2014, Petroamazonas has already produced more oil from Block 21 than RPS's forecasts say the Block was capable of producing through 2021", which means that Petroamazonas is currently producing reserves that RPS believed do not exist.⁷²⁷ Indeed, by July 2014, the wells on Block 21 had produced more than 41 million barrels of oil and were still producing new reserves.⁷²⁸ This proves that RPS's production forecast of 11.24 million barrels by the end of the Block 21 PSC and of an ultimate recovery of 39 million barrels was obviously incorrect.⁷²⁹ At the Hearing, RPS conceded that actual data had proven its forecast to be incorrect.⁷³⁰ Although RPS persists in stating that the drilling program was a failure since "the wells only accelerated production from existing wells",⁷³¹ the evidence in fact shows that reserves have increased year after year for the past three years, despite continuous production,⁷³² a fact that Mr. Daigre also conceded.⁷³³

394. The differences between RPS's ultimate recovery projections for Block 21 and those of Mr. Crick, Dr. Strickland, Ryder Scott and Petroamazonas are illustrated in the following graph:⁷³⁴

⁷²⁷ Crick WS2, ¶ 10.

⁷²⁸ Reply, ¶ 165, referring to: Crick WS2, ¶ 150.

⁷²⁹ Reply, ¶ 165.

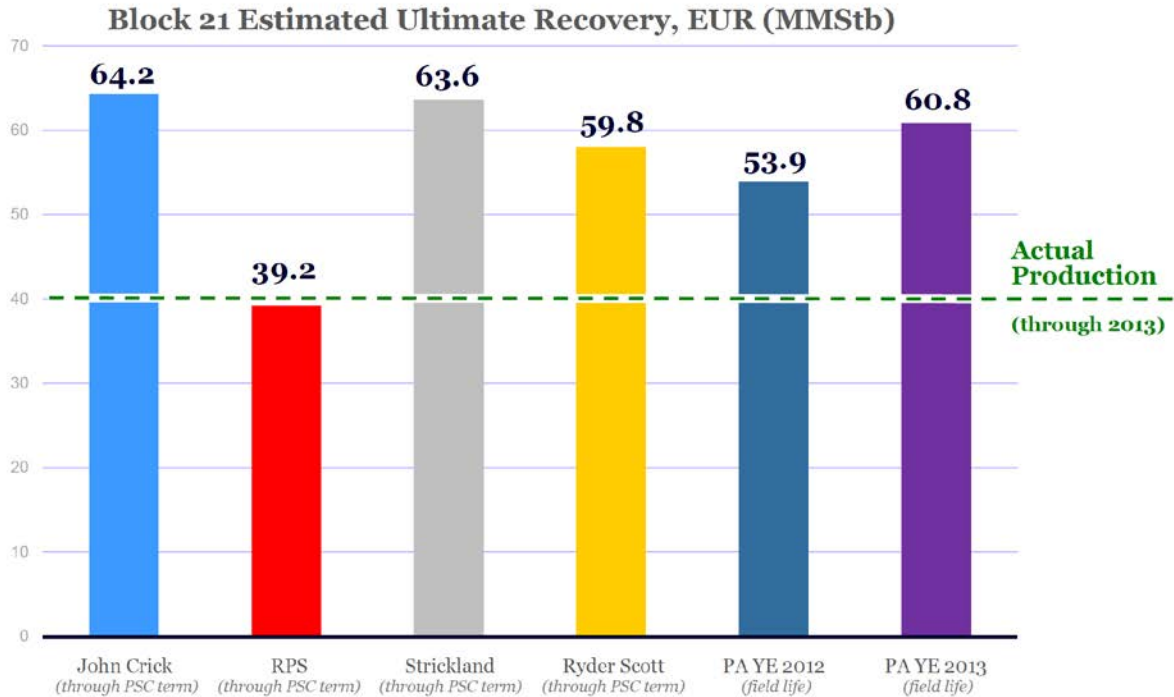
⁷³⁰ C-PHB, ¶¶ 123-125, referring to: Tr. Quantum (Day 4) (ENG), 1152:21-1153:22 (Tribunal, Daigre).

⁷³¹ Reply, ¶ 170, referring to: RPS ER3, ¶ 311.

⁷³² C-PHB, ¶ 184, relying on: Compass Lexecon ER2, ¶ 39, Figures 6 & 7, and reserves data prepared by Petroamazonas (**Exh. CLEX-50** and **Exh. CLEX-23**).

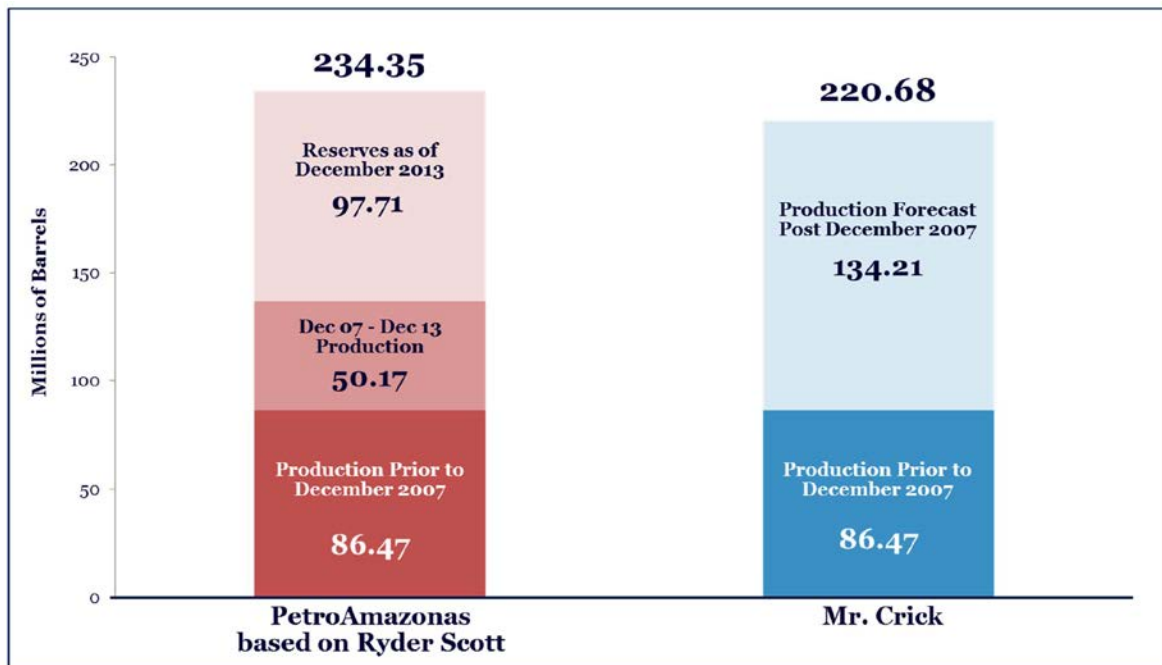
⁷³³ C-PHB, ¶ 119; Tr. Quantum (Day 4) (ENG), Day 4, 1067:1-15 (Cross, Daigre).

⁷³⁴ C-PHB, ¶ 119, referring to: Dr. Strickland's Direct Presentation, Slide 8, also at Slide 29 of Burlington's Closing Presentation.



Crick Second Witness Statement, ¶ 190; 2014 RPS Report, ¶ 199; Strickland Report, ¶¶ 72-73; C-461, Petroamazonas, Volumetric Calculation of Original Petroleum in Place and Reserves, dated December 31, 2012 (Spanish); C-491, Petroamazonas, Block 7 and 21 Reserves as of April 1, 2013 (Spanish) 29

395. With respect to Block 7, Burlington points out that Mr. Crick's forecast was even more conservative than the one prepared by Ryder Scott for Petroamazonas, as is clear from the following chart:⁷³⁵



C-519, Block 7 Well-by-Well Production Data, prepared by Dr. Strickland; C-493, PetroAmazonas and Ryder Scott Reserves Assessment; Mr. Crick's Witness Statements

⁷³⁵

C-PHB, ¶ 121, referring to: Burlington's Closing Presentation, Slide 44.

396. Finally, Burlington argues that Ecuador's excuses for RPS's failed forecast should be disregarded. Ecuador cannot blame the inaccuracy of RPS's forecast on the fact that it used pre-expropriation data, because Mr. Crick checked his Block 21 forecast against three alternative methods that were based solely on pre-expropriation data, and concluded that they confirmed his original forecast.⁷³⁶ Nor can RPS argue that Petroamazonas is not an appropriate proxy for the Consortium: like the Consortium, Petroamazonas is a prudent operator which operates the Blocks with a profit-maximizing motive.⁷³⁷ Further, while it is true that Petroamazonas would have obtained 100% of the proceeds of the fields and the Consortium only 70-80%, Compass Lexecon confirmed (on the basis of profitability tests) that "the net crude oil prices that the Consortium would have received in the 'but for' scenario were high enough for the Consortium to have drilled and produced at least at the same level as Petroamazonas".⁷³⁸ The evidence also suggests that the Consortium would have pursued a drilling strategy similar to the one of Petroamazonas. For instance, it would have also developed the fringe area of the field, and given the duration remaining on the Block 21 PSC, it would have had the time to refine its drilling strategy.⁷³⁹
397. For the reasons set out above, Burlington submits that the Tribunal should use Mr. Crick's production forecast to calculate cash flows.

b. Ecuador's position

398. Ecuador strongly objects to Compass Lexecon's valuation of production volumes. According to Ecuador, Compass Lexecon's calculation of these production volumes is flawed for three main reasons:
- i. Compass Lexecon's valuation relies on the production forecasts estimated by Mr. Crick, which Ecuador characterizes as "unrealistic, technically flawed, and accelerated".⁷⁴⁰

⁷³⁶ C-PHB, ¶ 130, referring to: Crick WS2, ¶ 6 and Tr. Quantum (Day 2) (ENG), 378:3-5 (Direct, Crick).

⁷³⁷ C-PHB, ¶ 131.

⁷³⁸ *Id.*, ¶ 132, citing: Compass Lexecon WS2, ¶ 33.

⁷³⁹ C-PHB, ¶¶ 133-134, referring to: Tr. Quantum (Day 4) (ENG), 1078:15-1079:8 and 1082:14-20 (Cross, Daigre); Tr. Quantum (Day 3) (ENG), 878:14-879:5 (Cross, Strickland); Johnson WS, ¶¶ 8-12; Compass Lexecon ER2, ¶ 34.

⁷⁴⁰ CM, ¶ 428.

- ii. Ecuador alleges that “in a DCF valuation as performed by Compass Lexecon, the earlier years of the model are the most valuable ones (because less impacted by the discount rate), which gives an incentive to Burlington and Perenco to accelerate production as much as possible in the earlier years to increase the net present value of the Block 7”.⁷⁴¹ This is compounded by the fact that Compass Lexecon is applying an exaggerated actualization rate of 12.1% to bring past cash flows to the valuation date, which gives Burlington and Perenco a further incentive to boost production in 2007 and 2008.⁷⁴²
- iii. Compass Lexecon artificially inflates the significance of production volumes by applying value drivers in the calculation of FMV in an incorrect order (i.e., applying Law 42 and the actualization rate at the outset, instead of at the end).⁷⁴³ The Tribunal addresses this argument of Ecuador in Section VII.D.5.2.6 below.

399. By contrast, Fair Links applies the proper DCF methodology and production profile. Fair Links modelled three different production scenarios “in order to reflect a full understanding of the level of production a willing buyer would have expected”⁷⁴⁴ for Blocks 7 and 21, specifically (i) a base case building on RPS’s production profile, (ii) a low case (20% lower than RPS), and (iii) and a high case (20% and 15% higher than RPS in Blocks 21 and 7 respectively).⁷⁴⁵

400. For its base case, Fair Links relied on RPS’s forecast, according to which the Consortium would have produced the following volumes but for the expropriation:

- i. With respect to Block 7, RPS forecasts that the Consortium would have produced 3.61 million barrels of oil from Block 7 from 30 August 2009 until the PSC’s scheduled termination on 16 August 2010.⁷⁴⁶ RPS’s forecast is based on the historical production performance of the wells through August 2009, which is consistent with what a willing buyer would have done. RPS also considers that

⁷⁴¹ *Id.*, ¶ 427.

⁷⁴² *Ibid.*

⁷⁴³ Rejoinder, ¶ 685, referring to: Fair Links ER3, ¶ 51.

⁷⁴⁴ Fair Links ER3, ¶ 87.

⁷⁴⁵ *Id.*, ¶¶ 87-89.

⁷⁴⁶ CM, ¶¶ 429-430, referring to: RPS ER3, ¶¶ 27 and 191.

the Block 7 PSC would not have been renewed⁷⁴⁷ and, given the proximity of the expiry date (one year from the date of the expropriation), no new drilling would have been performed.⁷⁴⁸

- ii. With respect to Block 21, RPS assessed that the Consortium would have produced 11.24 million barrels of oil after 30 August 2009 until the termination of the Block 21 PSC (8 June 2021).⁷⁴⁹ RPS reaches this figure by projecting the Block's historical performance into the future, assuming no new drilling. This is because in RPS's opinion the Yuralpa field was fully developed by February 2007 and "[f]urther drilling would have resulted in accelerated recovery of the remaining reserves, but no new reserves would have been added".⁷⁵⁰

401. RPS's production and reserves estimates are summarized in the following table:⁷⁵¹

Remaining Reserves by Field and Block (barrels)		
As of 31 August 2009		
Adjusted for Uncertainty ("Risky")		
Field	1P	2P
Coca-Payamino	1,279,346	1,321,148
Oso	1,721,886	1,782,168
Mono	178,369	182,692
Gacela	205,701	209,312
Lobo	212,738	259,054
Jaguar	-	-
Total Block 7	3,598,040	3,754,374
Block 21 (Yuralpa)	10,375,685	11,239,730
Total Block 7 & 21	13,973,724	14,994,103

402. In Ecuador's view, RPS used the correct methodology and assumptions to calculate its production profiles:

- i. Instructed to adopt the view of a willing buyer on the date of the expropriation and to consider the effects of Law 42, RPS "disregarded events after 30 August

⁷⁴⁷ Because Ecuador objects to Burlington's extension scenario for Block 7, it instructed RPS not to draw a production profile for that scenario. Rejoinder, ¶ 689.

⁷⁴⁸ CM, ¶ 431, referring to: RPS ER3, ¶ 125.

⁷⁴⁹ CM, ¶ 448; RPS ER3, ¶¶ 27 and 191.

⁷⁵⁰ RPS ER3, ¶ 217.

⁷⁵¹ RPS ER4, ¶ 112.

2009 that could not have been anticipated by a willing buyer/seller at the time”.⁷⁵²

- ii. RPS conducted a well-by-well analysis, in which it analyzed the performance of every well and prepared 1P and 2P forecasts for all of the wells that were producing as of August 2009. Contrary to Mr. Crick and Dr. Strickland, “RPS did not create any new ‘evidence’ to support its analyses and conclusions, such as the ‘simple’ simulation models the Burlington witnesses have created to show ‘evidence’ of water coning. RPS merely reviewed the production data and the related documents and presentations prepared by the Consortium, including 3rd party engineering studies commissioned by it, in the full context of the time in question, 2006-2009”.⁷⁵³
- iii. RPS used a 25% decline curve, which would have been conservative even using post-expropriation data.⁷⁵⁴
- iv. RPS applied a Reserves Adjustment Factor (“RAF”) to account for the different uncertainty levels of proven and probable reserves, as well as whether those reserves are developed or undeveloped.⁷⁵⁵ Mr. Crick’s failure to apply a RAF to developed reserves is misconceived because, as RPS explains, “willing buyers of oil and gas assets recognize that there is uncertainty in reserves estimates. As a result, prospective buyers apply adjustments based on several factors including, but not limited to, reserve classifications of Proved, Probable and Possible and whether or not the reserves are Developed or Undeveloped”.⁷⁵⁶

403. By contrast, Ecuador opposes Mr. Crick’s production forecast. Ecuador and RPS advance the following general criticisms of those forecasts:

- i. The proper valuation date from the perspective of a willing buyer is the date of Ecuador’s intervention in the Blocks, 30 August 2009. This means that the only new wells that could be considered for valuation purposes are those that would

⁷⁵² Rejoinder, ¶ 690.

⁷⁵³ RPS ER4, ¶ 10.

⁷⁵⁴ Rejoinder, ¶ 698, referring to: RPS ER4, ¶ 151.

⁷⁵⁵ Rejoinder, ¶ 700, referring to: RPS ER3, ¶ 229 and RPS ER4, ¶ 363.

⁷⁵⁶ RPS ER4, ¶ 359.

have been drilled from that date onwards. As a result, any predicted drilling that predates 30 August 2009 should be discarded outright.⁷⁵⁷

- ii. To support his incremental drilling forecast starting from December 2007, Mr. Crick wrongly assumes that Law 42 has no impact. Law 42 should not be disregarded and, as Burlington has forever waived its contractual right to be indemnified against the effects of Law 42, this right is valueless. As a result, “it is wrong to assume as Mr. Crick does that additional investment would have been made from the proceeds of indemnification for the effects of Law 42”.⁷⁵⁸
- iii. Mr. Crick wrongly relies on post-expropriation data, including Petroamazonas’ actual production data and Ryder Scott’s 2011 and 2013 reserves certification reports. This information would neither have been available nor foreseeable to a willing buyer at the time of the expropriation.⁷⁵⁹ In any event, as explained further below, Petroamazonas is not the correct proxy for the Consortium.
- iv. Finally, Burlington has failed to prove that the Consortium stopped drilling only because of the impact of Law 42. As explained in more detail below, Burlington has failed to establish with certainty which incremental wells would have been drilled “but for Law 42 at 99%” (which was the test enunciated in Burlington’s Memorial on Quantum),⁷⁶⁰ as opposed to those which it would have drilled but for Law 42 at 50%.

404. More specifically, Ecuador and RPS criticize Mr. Crick’s production forecast for Block 7 (in the non-extension scenario)⁷⁶¹ for the following reasons:

- i. Mr. Crick assumes that the Consortium stopped drilling because of the impact of Law 42. This is false: the 9 October 2007 email from Mr. Johnson shows that Burlington considered that drilling in the Oso field would have been profitable

⁷⁵⁷ R-PHB, ¶ 284.

⁷⁵⁸ CM, ¶ 436.

⁷⁵⁹ Rejoinder, ¶ 705.

⁷⁶⁰ R-PHB, 287-288, referring to: Mem., p. 44, note 127.

⁷⁶¹ Ecuador also objects to Mr. Crick’s projection for the extension scenario, but as it argues that Burlington would not have obtained an extension, it limits its discussion to Mr. Crick’s non-extension case (CM, ¶ 433). That being said, in RPS’s view, Burlington’s extension forecast is “completely unsupported” and is contradicted by the documents produced by Burlington. See: RPS ER3, Section 5.3.4.

even with Law 42 at 99%. Burlington's argument that the Consortium faced a great deal of uncertainty at the time does not change this conclusion.⁷⁶²

- ii. Mr. Crick's drilling schedule for the 21 incremental wells is "overly aggressive (thereby artificially increasing production in the earlier years) and not corroborated by the Consortium's contemporaneous documents".⁷⁶³ Relying on the 2006 Oso Development Plan⁷⁶⁴ (which was approved in March 2007) and on the 2007 ConocoPhillips Sales Memorandum,⁷⁶⁵ Ecuador argues that the Consortium planned to drill a maximum of 8 new wells (plus 8 contingent wells, subject to agreement with Ecuador) before the expiry of the Block 7 PSC.⁷⁶⁶ This limited drilling plan was due to two factors: (a) the reservoirs in Block 7 are difficult to characterize and, as a result, the performance of the wells in the Oso field is more uncertain than Mr. Crick implies,⁷⁶⁷ and (b) the proximity of the expiry date for the Block 7 PSC.⁷⁶⁸
- iii. Mr. Crick's oil recovery forecasts are "overly optimistic and not technically sound",⁷⁶⁹ both for existing and incremental wells:
 - a. With respect to existing wells, Ecuador objects to Mr. Crick's use of Petroamazonas' figures. As explained further below, Petroamazonas is not an appropriate proxy for what the Consortium would have done on Block 7. In addition, the favorable actual crude prices used by Compass Lexecon could not have been anticipated by a willing buyer in August 2009.⁷⁷⁰
 - b. With respect to incremental wells, Ecuador argues that Mr. Crick's forecasts are partly based on "average well curves" using a flawed methodology. Mr. Crick obtained these average well curves by dividing the total monthly production by the number of wells producing each

⁷⁶² Rejoinder, ¶¶ 721-722, referring to: **Exh. E-523**.

⁷⁶³ CM, ¶ 437.

⁷⁶⁴ **Exh. E-126**.

⁷⁶⁵ **Exh. E-214**.

⁷⁶⁶ CM, ¶ 438.

⁷⁶⁷ RPS ER1, ¶¶ 504-507.

⁷⁶⁸ *Id.*, ¶ 510.

⁷⁶⁹ CM, ¶ 443.

⁷⁷⁰ *Id.*, ¶ 444; Fair Links ER3, ¶ 76.

month, which results in a higher average, and selectively included only the wells that would result in higher production. The use of this methodology is also problematic as total fluid production rates change throughout the life of each well.⁷⁷¹

- c. Mr. Crick did not apply a RAF to his projections, which is necessary to quantify the uncertainty in the reserves forecasts. This results in an artificially inflated production profile.⁷⁷²

405. Ecuador also criticizes Mr. Crick's projections for Block 21 for the following reasons:

- i. Mr. Crick assumes that the Consortium stopped drilling because of the impact of Law 42. This is false: internal ConocoPhillips' documents from 2006 and 2007 show that Burlington would have stopped drilling regardless of the impact of Law 42. These documents (which include the January 2007 Yuralpa Mapping Update,⁷⁷³ the 2007 Latin American Reserves Review,⁷⁷⁴ the 2007 Sales Memorandum,⁷⁷⁵ the 2007 Budget Committee Meeting Presentation⁷⁷⁶ and the 2007 Yuralpa Simulation Study)⁷⁷⁷ show that it was the underperformance of this Block and its geological uncertainty, not Law 42, that caused the Consortium to stop drilling.⁷⁷⁸ Burlington's argument that these documents are not useful for measuring damages because they reflect the impact of Law 42 should be disregarded, as they "clearly show the information that a willing buyer would have had access to on 30 August 2009 in order to value the Blocks, including that Block 21 had performed lower than expected".⁷⁷⁹
- ii. Mr. Crick ignores the historical underperformance of Block 21 and its difficult geological conditions, in particular the watering out of certain wells.⁷⁸⁰ While Mr. Crick asserts that this is caused by water coning, this theory "ignores and

⁷⁷¹ CM, ¶¶ 445-446; RPS ER3, ¶¶ 317, 328, 520, 525.

⁷⁷² CM, ¶ 447; RPS ER1, Section 4.2.6, ¶ 39.

⁷⁷³ **Exh. E-555.**

⁷⁷⁴ **Exh. E-553.**

⁷⁷⁵ **Exh. E-214.**

⁷⁷⁶ **Exh. C-470.**

⁷⁷⁷ Annex E to Crick WS1.

⁷⁷⁸ Rejoinder, ¶ 724.

⁷⁷⁹ *Id.*, ¶ 723.

⁷⁸⁰ CM, ¶¶ 450, 454-459; Rejoinder, ¶ 713.

contradicts the evidence in Consortium and third-party documents strongly indicating that the source of Yuralpa water production is not water coning, but is associated with discrete zones of high permeability in this very heterogeneous Main Hollin reservoir".⁷⁸¹ Ecuador points out that the 2007 Sales Memorandum and other documents record the difficulties encountered between 2004 and 2007 (which included the watering out of wells, the difficulty of isolating water producing intervals, and lower oil production as a result of water encroachment).⁷⁸² According to Ecuador, two studies concluded that the problems were caused by fracturing, albeit with different conclusions as to the cause, and confirmed that there were "unpredictable water problems" on Block 21.⁷⁸³ Mr. Crick, however, overlooked the significance of these conclusions.

iii. Mr. Crick's aggressive well drilling program (according to which 24 additional wells would be drilled, 21 of which before 30 August 2009) (a) is not achievable⁷⁸⁴ and (b) shows an unrealistic profitability:

a. Mr. Crick ignores contemporaneous documents that show that his proposed drilling program was not achievable. The 2007 Sales Memorandum identifies only nine sites for potential drilling in Yuralpa.⁷⁸⁵ This figure was revised down in the 2007 Yuralpa Simulation study,⁷⁸⁶ which concluded that "[s]even additional wells was the maximum advisable to ensure complete field development and avoid drilling unnecessary wells",⁷⁸⁷ and that first production from the new wells would have occurred in September 2008, and not February 2008, as Mr. Crick and Compass Lexecon assume. As a result, a willing buyer in August 2009 would have relied on documents such as these when assigning a value to the fields.⁷⁸⁸ In any event, despite what is stated in the Yuralpa

781 RPS ER4, ¶ 366.

782 **Exhs. E-554, C-128, E-555, E-556.**

783 **Exh. E-554**; RPS ER3, ¶ 447.

784 CM, ¶¶ 460-464.

785 Rejoinder, ¶ 714.

786 Annex E to Crick WS1.

787 RPS ER3, ¶ 305.

788 Rejoinder, ¶ 715.

Simulation Study, RSP believes that the Yuralpa field was fully developed and new drilling would not have resulted in additional reserves.⁷⁸⁹

- b. Although Compass Lexecon claims to have run a profitability test on Mr. Crick's drilling program, Fair Links has tested Compass Lexecon's conclusions by calculating the Internal Rate of Return ("IRR") associated with that program. Fair Links concludes that Mr. Crick's production scenario involves an IRR of 165% for Block 7 and 43% for Block 21, which far exceed the standard profitability rate of 12% for an oil and gas investment.⁷⁹⁰
- iv. Finally, for Ecuador, Mr. Crick's forecasting techniques are fundamentally flawed:
- a. Mr. Crick used aggregated field-level production data to forecast future production from existing wells, which is contrary to recommended industry evaluation practice.⁷⁹¹ According to RPS, "[f]ield-level analysis should only be cautiously considered reliable when field conditions are not changing which was not the case for Yuralpa while Perenco operated the field".⁷⁹²
 - b. Mr. Crick used average well curves, which as explained above is problematic, and in this particular case allows a particular over-performing well to have a disproportionate impact. Mr. Crick's use of average decline rates also ignores that, historically, the average initial/peak rate of the wells on Block 21 has fallen significantly with each successive drilling program.⁷⁹³
 - c. There is no support for the 9% decline curve used by Mr. Crick, either in the performance data of the wells in August 2009 or in the post-expropriation data.⁷⁹⁴
 - d. Mr. Crick only applies a reserves adjustment factor to take into account uncertainty to three Yuralpa wells which it identified as 2P wells. This

⁷⁸⁹ RPS ER3, ¶ 217.

⁷⁹⁰ Rejoinder, ¶ 728, referring to: Fair Links ER4, ¶ 93.

⁷⁹¹ Rejoinder, ¶ 695-697, referring to: RPS ER4, ¶ 365.

⁷⁹² RPS ER4, ¶ 129.

⁷⁹³ CM, ¶¶ 466-468.

⁷⁹⁴ Rejoinder, ¶¶ 698-699, referring to: RPS ER4, ¶¶ 151, 202-203.

does not properly account for the uncertainty in the production of the remaining wells.⁷⁹⁵

406. By contrast, Ecuador maintains that RPS's projections are "far more reasonable" than Mr. Crick's.⁷⁹⁶ In order to ensure the reasonableness of RPS's production profile, Fair Links performed a comparative analysis of the production scenarios proposed by Mr. Crick and RPS.⁷⁹⁷ Specifically, Fair Links compared the production profiles to (i) the Consortium's historical production levels up to the expropriation, and (ii) ConocoPhillips' internal assessment of the levels of reserves at the Blocks between 2006 and 2009,⁷⁹⁸ and came to the following conclusions:

- i. When comparing the profiles to historical production levels, Fair Links found that "whereas RPS expected production levels are in line with historical (pre-August 2009) data, the forecasts of John Crick are markedly in excess of past production of Blocks 7 and 21".⁷⁹⁹
- ii. When comparing the production profiles to ConocoPhillips' assessment of the level of reserves, Fair Links found that RPS's projections were consistent with the levels internally assessed by ConocoPhillips, while Mr. Crick's assessment was more than three times higher.⁸⁰⁰ ConocoPhillips' internal documents show that "the estimated levels of proved reserves for Blocks 7 and 21 are stable over the years", and "do not show any significant expected increase in reserves (future oil production) that would result from the drilling of new wells".⁸⁰¹ Indeed, RPS's results are even "more optimistic than what ConocoPhillips would have itself considered just before the expropriation".⁸⁰²

407. With respect to Burlington's argument that Mr. Crick's forecast has been validated by Petroamazonas' own figures, Ecuador contends that Petroamazonas is not an appropriate proxy for the Consortium's performance:

⁷⁹⁵ CM, ¶ 469.

⁷⁹⁶ *Id.*, ¶ 476.

⁷⁹⁷ *Id.*, ¶ 471; Fair Links ER2, ¶¶ 66-86.

⁷⁹⁸ Fair Links also considered comparing the production scenarios with the actual production levels achieved by Petroamazonas, but rejected this method, as this would not have been "comparing like with like". Fair Links ER3, ¶ 76.

⁷⁹⁹ *Id.*, ¶ 51.

⁸⁰⁰ *Id.*, ¶ 85.

⁸⁰¹ *Id.*, ¶ 83.

⁸⁰² *Id.*, ¶ 478.

- i. As a public company, Petroamazonas is subject to a different tax system and receives 100% production. Indeed, “contrary to private operators, Petroamazonas’ main goal is to maximize production for the state, not profits”,⁸⁰³ which can only be achieved through heavy investment. Petroamazonas also has an unlimited time horizon to recoup its investments. By contrast, “the Consortium was seeking to maximize the return on its investment for a period limited to the remaining duration of its contract”, and had to give a share of its production to the state and comply with regulations (such as Law 42) which reduced its ability to invest in the Blocks.⁸⁰⁴
- ii. “From a purely technical perspective, Petroamazonas and the Consortium would not have drilled the same wells”.⁸⁰⁵ In particular, the Consortium would not have drilled the 11 wells that Petroamazonas drilled in Yuralpa in 2011 and 2012 because “[a]ll but one of the 11 wells in Petroamazonas’ 2011/ 2012 drilling campaign would have been considered, per the Consortium’s own benchmarks, ‘low EUR [estimated ultimate recovery] wells.’ Therefore, based on the Consortium’s own policy, 10 of the 11 wells drilled by Petroamazonas would not have even been drilled”.⁸⁰⁶ Nor is it likely that the Consortium would have drilled in the fringe area of the Main Hollin reservoir, because that entailed a high degree of risk that Petroamazonas could handle but not the Consortium.⁸⁰⁷ For the same reason, Mr. Crick cannot rely on the 2013 Ryder Scott Report for his production profile, because all of the 28 new wells shown in the Ryder Scott report are in fringe areas.⁸⁰⁸ Mr. Crick made clear that the

⁸⁰³ Rejoinder, ¶ 731.

⁸⁰⁴ *Id.*, ¶ 736.

⁸⁰⁵ *Id.*, ¶ 738.

⁸⁰⁶ *Id.*, ¶ 739 (emphasis removed), referring to: RPS ER3, ¶ 280 and **Exh. E-555**.

⁸⁰⁷ Rejoinder, ¶¶ 740-741, referring to: RPS ER4, ¶¶ 304-305.

⁸⁰⁸ Rejoinder, ¶ 743, referring to: RPS ER4, ¶ 282. RPS explains that “the majority of Ryder Scott undeveloped wells are in locations which the Consortium would not drill. Based on the 2011 Ryder Scott net pay map and Perenco’s 90-foot minimum oil pay criteria for new wells, the Consortium would not have elected to drill the 21 wells proposed in the southeastern and southern areas by Petroamazonas and Ryder Scott in the June 2013 Ryder Scott Reserves report. It is important to note that the additional seven wells proposed by Petroamazonas and Ryder Scott in the 2013 Ryder Scott report are technically on the “fringe” area of the developed Main Hollin reservoir and not in the heart of the developed area where most of Mr. Crick’s ‘infill’ wells would be located”. RPS ER4, ¶ 282.

Consortium's avoidance of the fringe areas "was a deliberate policy to avoid drilling wells that might produce very little oil."⁸⁰⁹

408. Finally, Ecuador objects to the use of Updated Model to forecast production, for the reasons explained further below.

c. Analysis

409. The Tribunal's task is to determine the volume of oil that Burlington would have produced "but for" the expropriation. In doing so, the Tribunal will rely on its prior legal determinations.

- i. First, the standard of compensation is full reparation. The goal is to determine what Burlington would have produced (and sold) "but for" the expropriation, not what a willing buyer would have paid for Burlington's oil assets on the date of the expropriation.
- ii. Second, a majority of the Tribunal has also found that, to award full reparation, the assets must be valued as at the date of the award (or its closest proxy). As a result, it is appropriate to rely on post-expropriation information, as Mr. Crick has done.
- iii. Third, the Tribunal has found that the impact of Law 42 must be disregarded. In other words, when projecting Burlington's cash flows in the counterfactual world, it must be assumed that Ecuador complies with its tax absorption obligations, thereby eliminating the impact of Law 42 on Burlington's production.

410. It follows that RPS's calculations cannot be used as a basis for the Tribunal's assessment. Indeed, RPS's objective was to forecast the production that a willing buyer would have estimated on the date of the expropriation using information available then and assuming that Burlington's oil production share was affected by Law 42. Even if RPS has carried out this exercise correctly (a question that the Tribunal does not need to address), its calculation is invalidated by these incorrect assumptions.

411. The Tribunal further notes that RPS's reserve estimates, as well as its assertion that more drilling would not have yielded more reserves, but would merely have accelerated the depletion of existing reserves, have been proven wrong by

⁸⁰⁹ Rejoinder, ¶ 744, referring to: Crick WS1, ¶ 94.

Petroamazonas' and Ryder Scott's most recent reports.⁸¹⁰ In particular, by July 2014, Petroamazonas had already produced more oil from Block 21 than RPS forecast as recoverable. Specifically, RPS forecast a total production of 11.24 million barrels by the end of the Block 21 PSC,⁸¹¹ and an expected ultimate recovery of 39 million barrels,⁸¹² while by July 2014 Block 21 had already yielded more than 41 million barrels and was still producing new reserves.⁸¹³ As for Block 7, RPS forecast production of 3.8 million barrels⁸¹⁴ through 2010 and an expected ultimate recovery of 99 million barrels.⁸¹⁵ However, from December 2007 to July 2014, Block 7 had produced an additional 50.17 million barrels of oil,⁸¹⁶ and by the end of 2013 Petroamazonas had updated its reserve figures to (at least) 761 million barrels.⁸¹⁷ The Tribunal agrees with Mr. Crick that "reality provides the surest check",⁸¹⁸ and reality shows that RPS's projections were wrong. RPS conceded this at the Hearing.⁸¹⁹

412. This does not mean that the Tribunal must adopt Mr. Crick's projections in their entirety. It is well-established that a claim for loss of profits requires the claimant to prove with reasonable certainty that it would have earned the profits sought but for the wrongful act.⁸²⁰ This means that Burlington must prove with reasonable certainty what volumes the Consortium would have produced "but for" the expropriation.

⁸¹⁰ **Exhs. C-491 and C-493**. See also: Strickland ER, ¶¶ 112, 132.

⁸¹¹ RPS ER3, ¶ 191, for 2P reserves.

⁸¹² *Id.*, ¶ 200, for 2P reserves.

⁸¹³ Crick WS2, ¶ 150; **Exh. C-491**. See also: Slide 8 of Dr. Strickland's direct presentation, included at C-PHB, ¶ 119, and at Slide 29 of Burlington's Closing Presentation, reproduced at paragraph 395 above. See also: the Block 21 well-by-well production analysis performed by Dr. Strickland (**Exh. C-520**).

⁸¹⁴ RPS ER3, ¶ 191, for 2P reserves.

⁸¹⁵ *Id.*, ¶ 200, for 2P reserves.

⁸¹⁶ See: the Block 7 well-by-well production analysis performed by Dr. Strickland (**Exh. C-519**).

⁸¹⁷ Tr. Quantum (Day 2) (ENG), 385:16-386:3, 390:16-17 (Direct, Crick). The Tribunal notes that, according to Petroamazonas' Year-End Report for 2013 (**Exh. C-492**), the figure of 761 million barrels refers only to the Oso Main Hollin. The total estimated oil in place for the Oso field is 918 million barrels.

⁸¹⁸ Crick WS2, ¶ 10.

⁸¹⁹ Tr. Quantum (Day 4) (ENG), 1152:21-1153:20 (Cross, Daigre).

⁸²⁰ See, for instance: M. M. Whiteman, *Damages in International Law*, vol. II (1937), p. 1837 (noting that the assessment of prospective profits requires proof that "they were reasonably anticipated; and that the profits anticipated were probable and not merely possible"). See also: note 434 above.

413. It must be stressed that the assumption underlying Mr. Crick's forecast is partially different from the one articulated in the preceding paragraph. Mr. Crick's goal was to establish how much oil the Consortium would have produced had Ecuador complied with its tax absorption obligations *prior* to the expropriation and had there been no expropriation. As a result, he calculates production from December 2007, the date on which the Consortium stopped drilling, allegedly as a result of the enactment of Law 42 at 99% and Ecuador's failure to comply with its tax absorption obligations. By contrast, the Tribunal must quantify the production foregone solely as a *result of the expropriation*. While the Tribunal has determined that this production must be quantified assuming that Ecuador would have complied with its tax absorption obligations *going forward*, it cannot take account of cash flows that would have accrued before the expropriation. As a result, the Tribunal will disregard any cash flows that would have accrued before the expropriation.
414. The Tribunal will first address Mr. Crick's forecast for Block 7 (i) and then his forecast for Block 21 (ii). It will end by addressing Ecuador's objections to the use of the Updated Model to forecast production (iii).
- (i) *Block 7*
415. With respect to existing wells, Mr. Crick concludes that the Consortium would have produced 4.3 million barrels of oil from 1 August 2009 to 16 August 2010.⁸²¹ To arrive at this figure, Mr. Crick has assumed that the Consortium would have produced as much oil as Petroamazonas from the same number of wells in that period.⁸²² The Tribunal accepts this forecast: there is no reason to believe that the Consortium would have produced less oil than Petroamazonas from the same wells during the same time period. The Tribunal is mindful of Ecuador's argument that Petroamazonas is not an appropriate proxy for the Consortium. While it may see the merits of the argument in respect of additional drilling (as discussed below), it rejects it with respect to production from existing wells.
416. With respect to incremental wells, Mr. Crick assumes that, if the Block 7 PSC had expired in August 2010, the Consortium would have continued drilling in the Oso field at a rate of one well per month, but would have stopped drilling one year before the end of the PSC (i.e. in August 2009), when new investments would have

⁸²¹ Crick WS1, ¶¶ 139-142 and Figure 1.

⁸²² *Id.*, ¶ 142.

become uneconomical.⁸²³ This would have resulted in 21 new wells drilled within 21 months (from December 2007 inclusive to August 2009 inclusive).

417. In this connection, the first question that arises is whether it is reasonable to assume that the Consortium would have drilled new wells in Block 7 but for the expropriation. For this purpose, the Tribunal will assume that any new drilling would have restarted after the expropriation, i.e., in September 2009, and not in January 2008, as Mr. Crick assumes. As noted in paragraph 413 above, the Tribunal cannot take into consideration cash flows that would have accrued before the expropriation. The Tribunal has also asked itself whether it may assume that drilling would have restarted in January 2008 for its quantification of cash flows accruing *after* the expropriation (in other words, whether to quantify cash flows accruing after the expropriation it may assume a production profile resulting from new drilling commencing in January 2008). It has concluded that it cannot: while the Tribunal can use the assumptions it considers appropriate to quantify the situation that Burlington would have found itself in, had the expropriation not occurred, it cannot change what happened before the expropriation. As a result, the Tribunal will assume that any new drilling in Block 7 would have resumed in September 2009.
418. However, as noted above, Mr. Crick admits that any new drilling in Block 7 would have stopped one year before the termination of the Block 7 PSC, i.e. in August 2009. Accordingly, the Tribunal cannot reasonably assume any drilling in Block 7 beyond that date. The Tribunal thus does not accept Mr. Crick's incremental drilling projections for Block 7.
419. The Tribunal has inserted its conclusions with respect to production for existing wells in the Updated Model, and the results are included in the computation provided in Section 5.3.4 below.
- (ii) *Block 21*
420. With respect to existing wells, Mr. Crick forecasts that, between 30 August 2009 and June 2021, when the Block 21 PSC would have expired, the 33 existing wells in the Yuralpa field would have produced 25.7 million barrels of oil. Mr. Crick has reached this figure by applying an initial well production decline rate of 43% that stabilized at

⁸²³

Id., ¶ 140.

9%.⁸²⁴ The Tribunal is satisfied that Mr. Crick's quantification of production, which originally relied on type-curve analysis, is reliable. The Tribunal accepts Mr. Crick's explanations on the reliability of type curve analysis and notes that Dr. Strickland also approved the use of type curve analysis.⁸²⁵ The Tribunal notes in particular that Mr. Crick's type curve analysis for the Yuralpa wells shows a 9% decline rate after 36 to 40 months, whether one looks at the performance of the wells between 2003 and 2004 or between 2006 and 2007.⁸²⁶ In any event, Mr. Crick tested his results through three alternative methods (individual decline curve analysis of existing wells, the 2007 Yuralpa full-field simulation model, and the same updated with data to July 2009 and modified to match performance to that date).⁸²⁷ Notably, Dr. Strickland separately calculated the estimated ultimate recovery ("EUR") of Block 21 with four different techniques (rate v. time, type curve, rate v. cumulative, and water to oil ratio v. cumulative) in three subsets of wells and on the entire field (a total of 8 different calculations), and obtained results strikingly similar to Mr. Crick's.⁸²⁸ The Tribunal finds this sufficient to substantiate the use of Mr. Crick's methodology.

421. The situation for incremental wells is more complex. Mr. Crick forecasts that 24 additional wells would have been drilled in the Yuralpa Main Hollin reservoir, 21 of them 1P wells in the center of the reservoir, and three 2P wells outside that area. The 21 1P wells were to be "infill" wells, that is, wells drilled between the

⁸²⁴ The Tribunal is aware that, during Dr. Strickland's cross-examination, Ecuador pointed out to a document produced by Burlington identified with Burlington Quantum number BURL-QUANT00021837, at Tab 18 of Dr. Strickland's cross-examination bundle. This document appeared to show the Consortium's year-end reserves estimate for 2004 and contained a note that a 25% exponential decline was "typical of Hollin wells" (for P50 wells), noting also a 30% decline for P90 wells. However, Counsel was not able to identify the document, and Dr. Strickland was not able to comment. The Tribunal has considered this document but has given it no weight in its overall assessment based on the record as a whole: the document was never identified, and Ecuador made no mention of it in its Post-Hearing Brief. The Tribunal is also puzzled by the fact that the document was not presented to Mr. Crick, who as a witness was in a better position to identify the document than Dr. Strickland. In any event, the Tribunal notes that Mr. Crick acknowledged a 43% initial decline rate which stabilized at 9%, which is not necessarily inconsistent with this document.

⁸²⁵ Strickland ER, ¶¶ 47, 53 (noting that "Mr. Crick's application of type-curve analysis is consistent with industry methods of forecasting future production for fields where individual wells are not well-behaved").

⁸²⁶ Tr. Quantum (Day 2) (ENG), 371:18-374:4 (Direct, Crick).

⁸²⁷ Tr. Quantum (Day 2) (ENG), 371:9-17, 378:3-379:15 (Direct, Crick). See also: Crick Direct Presentation, Slide 11.

⁸²⁸ Strickland ER, ¶¶ 52-68. Dr. Strickland's average results for all four methods were as follows: the aggregate EUR for all three groups of wells was 51,327 million barrels, and the EUR for all Perenco operated wells calculated together was 51,800 million barrels. These results are strikingly similar to Mr. Crick's forecast (52,053 million barrels). Strickland ER, table at p. 23, as revised by Annex 1 distributed during the Hearing (Tr. Quantum (Day 3) (ENG), 838:8-17; 839:19-22 (Direct, Strickland)).

existing wells to drain the reservoir. Mr. Crick explains that, because of the water coning in the Yuralpa reservoir, “the sweep of the Yuralpa Field is not good, and you are getting a very low recovery. There is, therefore, a large amount of oil to be recovered, and the 21 new wells in the center and the 3 other wells are intended to produce as much as possible of that remaining movable oil, producible oil”.⁸²⁹ More specifically, Mr. Crick explains that, as of the date of his first Witness Statement, the wells in the Yuralpa Main Hollin had produced only 14.3% of the developable oil in the reservoir, which is a low number, and that a significant amount of oil remains to be drained.⁸³⁰ The purpose of the infill drilling would be to recover the oil from those unswept areas and would provide additional reserves.⁸³¹ Mr. Crick assumes a drilling rate of one well per month (which he states is consistent with Perenco’s historical drilling rate),⁸³² starting in January 2008 and ending in December 2009. On the basis of the methodology discussed above, Mr. Crick projects that the Consortium would have recovered an additional 12.2 million barrels from these 24 wells.⁸³³

422. Again, the Tribunal must determine whether Mr. Crick’s projected incremental drilling is sufficiently certain to substantiate Burlington’s claim for lost profits in respect of such production. For this, the Tribunal will first determine whether the Consortium would have resumed drilling in Block 21 but for the expropriation and assuming that Ecuador complied with its tax absorption obligations (1), and, if so, how many new wells would reasonably have been drilled until the PSC’s expiration (2). It must then determine when such new drilling would have started (3), and whether Mr. Crick’s methodology for calculating the volumes to be produced from those new wells is appropriate (4).

- (1) But for the expropriation and assuming that Ecuador complied with its tax absorption obligations, would the Consortium have continued drilling in Block 21?

423. The Tribunal must first assess whether, but for the expropriation and assuming that Ecuador complied with its tax absorption obligations, it is reasonable to assume that the Consortium would have continued drilling in Block 21. This is not as evident as

⁸²⁹ Tr. Quantum (Day 2) (ENG), 415:7-13 (Cross, Crick).

⁸³⁰ Crick WS1, ¶ 93.

⁸³¹ Crick WS2, ¶ 146.

⁸³² Crick WS1 ¶¶ 102-107.

⁸³³ *Id.*, ¶¶ 108-118, 136.

for Block 7. Indeed, the Consortium stopped drilling in Block 21 not because of Law 42, but because of problems with the reservoir, which is why it initiated a study of the Yuralpa field. Mr. Crick's testimony is that, but for Ecuador's failure to absorb the effects of Law 42, the Consortium would have waited for the end of the study and recommenced in January 2008.

424. In the Tribunal's view, it is reasonable to assume that, but for the expropriation and assuming that Ecuador had complied with its tax absorption obligations, the Consortium would have recommenced drilling. While the record confirms (and, indeed, Burlington does not deny) that the Consortium stopped drilling in 2007 because of problems with the reservoir (in particular water problems)⁸³⁴ and because "disappointing well results in the latter part of 2006 reduced development opportunities",⁸³⁵ the documents cited by Ecuador show that the Consortium would have resumed drilling once these problems were identified and measures to increase production were put in place. In particular:

- i. The January 2007 Yuralpa Mapping Update⁸³⁶ analyzes the problems in the reservoir and describes possible strategies for drilling new vertical and horizontal wells, including infill drilling, noting a total of 9 contingent wells for the second semester of 2007 and early 2008.⁸³⁷ It also states that the purpose of the 2007 reservoir study and simulation (referred to at (v) below) is to "[c]onstruct a forecast model for the new well drilling with optimisation of spacing and recommendation on operational parameters such as drawdown, total fluid rates, etc."⁸³⁸ Finally, this document also shows the Consortium's concern with

⁸³⁴ See, for instance: 2007 Sales Memorandum, p. 44 (**Exh. E-214**) ("Development drilling in Yuralpa has been challenged due to the presence of a massive, unstable and highly fractured Napo formation and a fractured basalt layer above the Hollín reservoir, creating steering and well control problems. A total of 15 wells were drilled in 2005, 14 in 2006, and one well year to date 2007, the YCG-3. This field is under a strong water drive with relatively low mobility (oil reservoir viscosity is 60 cp) and due to earlier than expected water breakthrough in the latest wells, further drilling has been put on hold pending the completion of a reservoir and completion practices study").

⁸³⁵ ConocoPhillips: Latin America Reserves Review, Ecuador, dated 7 May 2007 (**Exh. E-553**), Slide 13. See also: January 2007 Yuralpa Mapping Update (**Exh. E-555**), Slides 4, 11-12.

⁸³⁶ January 2007 Yuralpa Mapping Update (**Exh. E-555**).

⁸³⁷ *Id.*, Slides 4, 16-19, 23, 29.

⁸³⁸ *Id.*, Slide 23.

Law 42, as it poses a question with respect to “[e]conomics of new hydrocarbon Law and with the risk of increasing State share”.⁸³⁹

- ii. The May 2007 Latin American Reserves Review⁸⁴⁰ states that drilling is currently halted to conduct a field study, noting that the key issue is water production and that reservoir management practices are needed to manage water influx.⁸⁴¹ This document also states that 4 additional wells are planned for 2007, contingent on the study.⁸⁴²
- iii. Similarly, while acknowledging the Consortium’s difficulties in developing a drilling program for Block 21, the 2007 Sales Memorandum⁸⁴³ notes that “a comprehensive field study commenced in October 2006 is being completed in an effort to improve the following geological modeling and reservoir management issues”, listing the various problems encountered in Block 21.⁸⁴⁴ It then explains that “[o]nce this field study has been completed (estimated by late summer 2007), the knowledge gained will provide for a more refined reservoir management and development strategy”.⁸⁴⁵ The document also notes that “[t]here are significant reserves in infill and offset locations, and the extent of the field to the south and southeast has to be determined”, adding that “five offset locations” and “four infill locations [...] have been identified as potential targets”.⁸⁴⁶ Notably, the Sales Memorandum also states that “[e]stimates suggest only a small portion of total oil in place has been produced to date leaving a significant exploitation opportunity”, adding that “[u]pon the completion of the current reservoir study, improved reservoir management and well operations ought to significantly enhance the productivity of the Block”.⁸⁴⁷

⁸³⁹ *Id.*, Slide 28.

⁸⁴⁰ ConocoPhillips: Latin America Reserves Review, Ecuador dated 7 May 2007 (**Exh. E-553**).

⁸⁴¹ *Id.*, Slide 5.

⁸⁴² *Ibid.*

⁸⁴³ Confidential Memorandum, ConocoPhillips: Proposed Sale of its Interests in Ecuador, Harrison Lovegrove & Co., August 2007 (**Exh. E-214**).

⁸⁴⁴ *Id.*, p. 45.

⁸⁴⁵ *Ibid.*

⁸⁴⁶ *Ibid.*

⁸⁴⁷ *Id.*, p. 47.

- iv. In the same vein, while the September 2007 Budget Presentation⁸⁴⁸ does state that the “[m]ain uncertainty for forecasting of new wells is the structure on the Western flank”⁸⁴⁹ and that “[n]o investment is proposed for the first half of 2008”,⁸⁵⁰ it also indicates that projects could start in the second half of 2008 “depending on the new Ecuadorian Constitution”.⁸⁵¹ It also notes that the “[r]eservoir model will help define [the] best development strategy” for Block 21, and indicates that the Consortium is considering drilling between 4 and 8 additional wells on Block 21 in 2008.⁸⁵²
- v. Finally, the 2007 Yuralpa Simulation Study (also called Yuralpa Field Study or Evaluation,⁸⁵³ to which the previous documents refer), clearly envisages further drilling on Block 21. In particular, the study states that “[t]o increase the remaining reserves additional wells have been considered to be drilled on the Yuralpa Field in [the] second half of 2008”.⁸⁵⁴ More specifically, it also states that:

“As a result of history match and predictions with existing wells, two areas have been identified where new wells could be drilled. One is in the southeast part of the reservoir between wells YCF-3 and CHO-01; the other one is in the central area between wells YCD-1 and YCF-4. Sensitivities with drilling between **5 and 7 new wells** and maintaining current liquid rates in existing wells indicate that remaining reserves can be increased to **32.0 MMstb**. Due to added production from new wells, it is predicted that it will be necessary to upgrade water handling capacity to 60,000 stb/d by converting CHO-01 to water disposal well in February 2009. By maintaining current drawdown in existing wells and drilling new infill wells, it can be expected that reserves could be increased even further”.⁸⁵⁵

⁸⁴⁸ Consortium Budget Committee Meeting Presentation, September 26-27, 2007 (**Exh. C-470**).

⁸⁴⁹ *Id.*, Slide 77.

⁸⁵⁰ *Id.*, Slide 164.

⁸⁵¹ *Ibid.*

⁸⁵² *Ibid.* See: paragraph 436 below.

⁸⁵³ **Annex E to Crick WS1**. While the document’s title appears to be “Yuralpa Field Upper and Main Hollin Reservoir Geological Modelling & Reservoir *Simulation*”, the header of each page refers to it as “Yuralpa Field Upper and Main Hollin Reservoir *Evaluation*”. As to the date, while the final version appears to have been issued in June 2008, the document states that “[e]dited results were presented at a partner TCM in Quito in September 2007” (p. 1). This was confirmed by Mr. Crick at the Hearing, who testified that the results of the study were presented during the Budget Committee Meeting in September 2007 (Tr. Quantum (Day 2) (ENG), 409:11-21 (Cross, Crick)). The Tribunal will refer to this document as the “2007 Yuralpa Simulation Study”, which is the name the Parties have used most frequently.

⁸⁵⁴ Annex E to Crick WS1, p. 2.

⁸⁵⁵ *Ibid.*, emphasis in original.

425. Despite this evidence, Ecuador and RPS argue that the Consortium would not have carried out new drilling in Block 21 because the Yuralpa field was fully developed on the date of the expropriation. As has been demonstrated by Petroamazonas' actual figures, which has drilled 39 new wells (out of which 3 re-drills), this contention has been proven wrong.⁸⁵⁶ Considering that the Block 21 PSC would not expire until 2021, it is reasonable to assume that the Consortium would have continued drilling if there were undrained reserves in the reservoir. Indeed, the September 2007 Budget Presentation notes in this respect that the “[l]onger remaining time gives more flexibility”⁸⁵⁷ (presumably for the Consortium's development strategy), and this was confirmed by Mr. Daigre of RPS at the Hearing.⁸⁵⁸

426. The Tribunal thus concludes that, but for the expropriation and assuming that Ecuador complies with its tax absorption obligations, the Consortium would have restarted drilling after the completion of the 2007 Yuralpa Simulation Study.

(2) How many new wells would reasonably have been drilled in Block 21?

427. The next question is how many wells it is reasonable to assume that the Consortium would have drilled until the expiration of the Block 21 PSC. The Tribunal will first assess whether Mr. Crick's incremental drilling forecast for Block 21 is reasonable. To recall, Mr. Crick proposed 24 wells, 21 of which would have been 1P infill wells in the center of the reservoir, in the 1900 acre area with an oil column greater than 90 feet, plus three 2P wells outside that area. According to Mr. Crick, these wells would have been drilled between January 2008 and December 2009 at a rate of one per month. In the Tribunal's view, for reasons relating to the number of wells forecast and their type and location, Mr. Crick's projections are overly aggressive.

428. First, Ecuador has pointed out the “significant discrepancy” between the number of new wells proposed by Mr. Crick, and the number of wells that the Consortium had envisaged drilling prior to the expropriation, a discrepancy which Mr. Crick acknowledged at the Hearing.⁸⁵⁹ Indeed, while the 2007 Budget Presentation considered a preliminary program of 4 to 8 wells, and the 2007 Yuralpa Simulation Study proposed drilling between 5 and 7 wells, Mr. Crick has proposed that 24 new wells would have been drilled.

⁸⁵⁶ See: paragraph 411 above and paragraph 441 below.

⁸⁵⁷ **Exh. C-470**, Slide 164.

⁸⁵⁸ Tr. Quantum (Day 4) (ENG), 1082:14-20 (Cross, Daigre).

⁸⁵⁹ Tr. Quantum (Day 2) (ENG), 414:12-16 (Cross, Crick).

429. Second, the Tribunal must consider if the location and technical characteristics of the wells proposed by Mr. Crick are reasonable. 21 of Mr. Crick's 24 wells were to be "infill wells" drilled in the center of the reservoir, i.e., wells drilled between existing wells in an area that had already been drilled.⁸⁶⁰ According to Mr. Crick, although there had been drilling in this area, only approximately 14% of the oil had been recovered. For Mr. Crick, this low recovery is mostly due to water coning and infill wells would allow the Consortium to recover oil that had not been swept by the current wells.⁸⁶¹ In the Tribunal's understanding, infill drilling as suggested by Mr. Crick is linked to the existence of water coning.⁸⁶²
430. The existence of water coning in Yuralpa is disputed. While Mr. Crick and Dr. Strickland affirm that the water encroachment problems in the Yuralpa field are a result of water coning,⁸⁶³ RPS denies this and opines instead that these problems are caused by fracturing.⁸⁶⁴
431. Mr. Crick explains that one of the "result[s] of the Main Hollin's powerful aquifer is that the water beneath the reservoir tends to push directly upwards underneath the producing wells thereby displacing the oil. This is a common process known as 'water coning' because the water forms a cone-like shape beneath the oil in each producing well".⁸⁶⁵ According to Mr. Crick, "[t]he existence of water coning in the Blocks is apparent from a simple application of physics", as a result of the characteristics of the field.⁸⁶⁶ Dr. Strickland shares this view and adds that the

⁸⁶⁰ Crick WS1, ¶¶ 59; 98-101.

⁸⁶¹ *Id.*, ¶ 95; Crick WS2, ¶ 146; Tr. Quantum (Day 2) (ENG), 414:21-416:21 (Cross, Crick).

⁸⁶² See, for instance: Crick WS2, ¶ 146; Tr. Quantum (Day 2) (ENG), 414:21-416:21 (Cross, Crick).

⁸⁶³ Crick WS1, ¶¶ 54-65; Crick WS2, ¶ 146; Strickland ER, ¶¶ 5, 18-40.

⁸⁶⁴ RPS ER3, ¶¶ 429-450. In particular, RPS notes that two studies commissioned by the Consortium, one by Beicip-Franlab in 2005 (Geomechanical audit of Yuralpa field, Final Report, June 2005) and another by Geoscience (2007 Geomechanical Model for the Main Hollin Reservoir) dismissed water coning as the cause of the water encroachment and instead posited that the probable cause for the water surges was fracturing.

⁸⁶⁵ Crick WS1, ¶ 54.

⁸⁶⁶ Crick WS2, ¶ 114. Mr. Crick explains that "[t]he force keeping the water below the oil – the gravity force – is weak and cannot be modified. But the force moving the oil and water towards the wellbore – the viscous force – is much stronger under economic production scenarios. Therefore, it is easy for the water to move upward towards the wellbore, breaking through the oil and forming a 'water cone.' Moreover, once the cone is formed it can take a very long time before it settles, given that only the weak gravity force is trying to move the cone down by moving the viscous oil into the cone. [...]". Crick WS2, ¶ 115.

characteristics of the Yuralpa Main Hollin are such that its production will necessarily be affected by water coning.⁸⁶⁷ Dr. Strickland explains:

“If the pressure in the reservoir is greater than the pressure at the perforations in the well bore, oil and water will move from the high-pressure region to the lower-pressure perforations. Water coning occurs when water moves towards a low-pressure area surrounding the well perforations. If the oil is viscous and not much lighter than water, as is the case in Yuralpa, water can break through the oil and swiftly move up into the perforations, resulting in a high percentage of water produced with the oil (a high “water cut,” which is measured as a percentage of total fluid production).⁸⁶⁸”

432. These explanations suggest that water coning is the direct result of the geology and characteristics of the field. The Tribunal accepts this explanation, which is shared by both Mr. Crick and Dr. Strickland. The Tribunal has noted RPS’s critique of Mr. Crick’s water coning theory,⁸⁶⁹ but finds that Mr. Crick and Dr. Strickland have sufficiently substantiated their views.
433. It is true, as RPS has pointed out, that there is almost no reference to water coning in the 2007 Yuralpa Simulation Study or in the other documents which analyzed the water encroachment in the Yuralpa field.⁸⁷⁰ However, while the Yuralpa Simulation Study does not use the term, Dr. Strickland testified that that Study clearly described the phenomenon of water coning.⁸⁷¹
434. In addition, several of the documents cited in paragraph 424 above show that the Consortium was considering infill drilling in the Yuralpa field (see in particular the Yuralpa Mapping Update,⁸⁷² the 2007 Sales Memorandum⁸⁷³ and the 2007 Yuralpa Simulation Study).⁸⁷⁴ If, as the Tribunal understands, infill drilling is linked to the

⁸⁶⁷ Strickland ER, ¶ 18.

⁸⁶⁸ *Id.*, ¶ 19.

⁸⁶⁹ In particular, RPS maintains that “[w]ell performance data indicates that water coning is not occurring in the reservoir to a degree which would affect production”, and that in the 9 wells which experienced drops in the percentage of water (water cut) produced (which could be an indication of coning), the reason for the drops in water were water shut-off workovers. RPS ER3, ¶¶ 431-432.

⁸⁷⁰ RPS ER3, ¶¶ 429-430.

⁸⁷¹ Tr. Quantum (Day 3) (ENG), 869:2-6 (Cross, Strickland) (“I can’t speak for the author of this—of this, but their model describes exactly the process that I call water coning in the presence of shale barriers, and I think it is exactly the mechanism that I attribute to the production of the field”).

⁸⁷² January 2007 Yuralpa Mapping Update, Slides 4, 16-19, 23, 29 (**Exh. E-555**).

⁸⁷³ 2007 Sales Memorandum, p. 45 (**Exh. E-214**).

⁸⁷⁴ Annex E to Crick WS1, pp. 2-3.

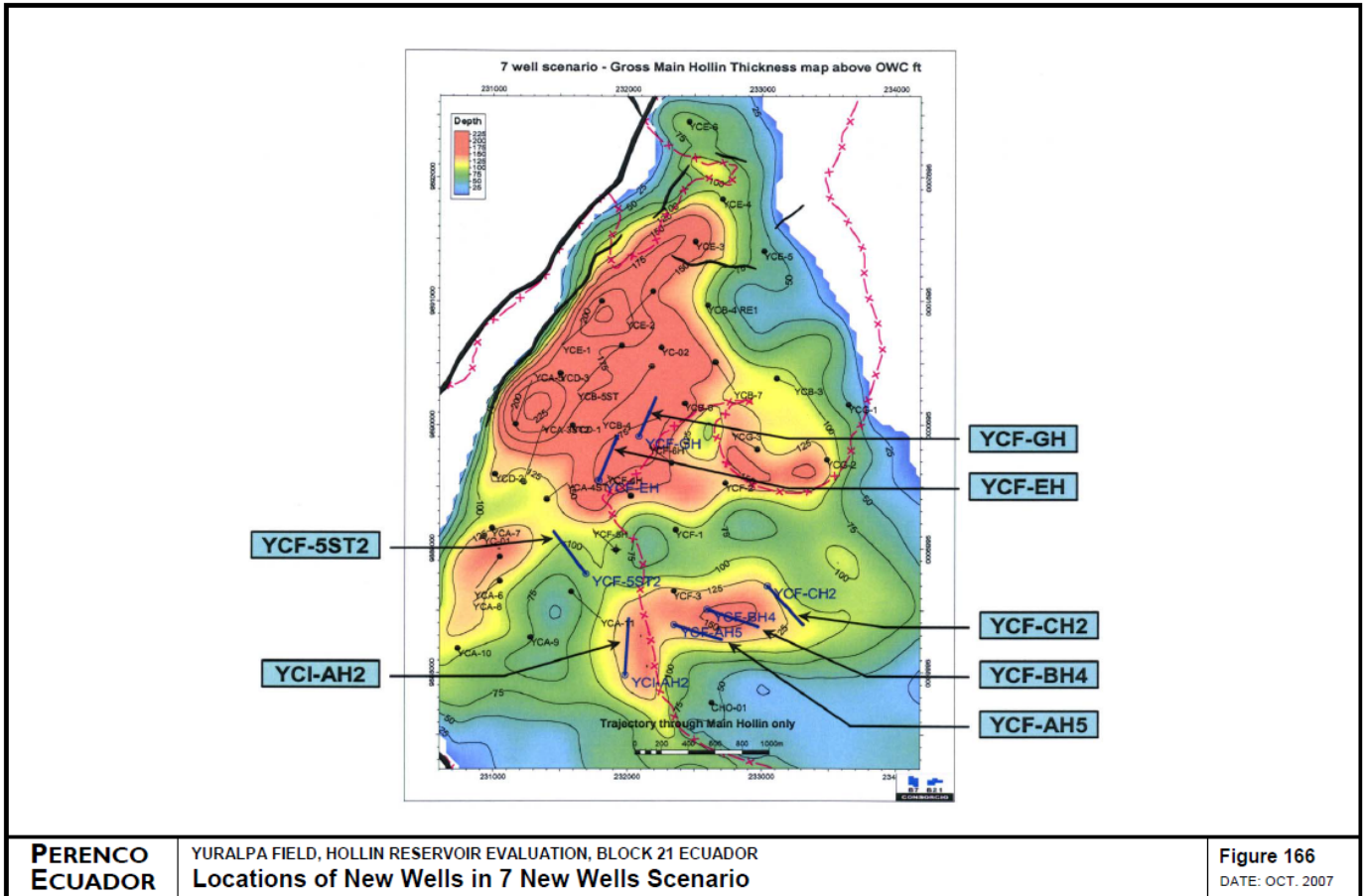
presence of water coning, the fact that the Consortium was considering infill drilling in Yuralpa suggests that the Consortium believed that water coning was at least part of the problem. The Tribunal is thus satisfied that, in principle, a drilling plan that considers infill drilling is reasonable in the Yuralpa field.

435. That being said, an aggressive infill drilling program in the center of the reservoir such as the one proposed by Mr. Crick finds little support in the Consortium's drilling plans. As noted in paragraph 424.v above, the seven wells proposed in the 2007 Yuralpa Simulation Study were to be drilled in two potential areas: "[o]ne is in the southeast part of the reservoir between wells YCF-3 and CHO-01; the other one is in the central area between wells YCD-1 and YCF-4".⁸⁷⁵ Four of these wells (wells YCF-AH5, YCF-BH4, YCF-CH2 and YCI-AH2) were to be drilled in the unswept southeast part of the field two wells (YCF-EH and YCF-GH) in the central area, and one well (YCF-5ST2) would replace YCF-5H.⁸⁷⁶ These locations are shown in Figure 166 to the Yuralpa Simulation Study, which is reproduced below. Six of these wells were to be drilled in areas of oil depth between 125 and 225 feet (marked in salmon and red colors), and only one in an area below 100 feet (shown in green). But only two of these proposed wells (YCF-GH or YCF-EH) could be deemed to correspond to the characteristics proposed by Mr. Crick (i.e., infill wells in the center of the reservoir).⁸⁷⁷

⁸⁷⁵ *Ibid.*

⁸⁷⁶ *Id.*, p. 37.

⁸⁷⁷ Mr. Crick refers more to "the 1900 acre area with an oil column greater than 90 feet" (Crick WS1, ¶ 98), which the Tribunal understands to refer to the large red to yellow area shown in the center of the reservoir. During the Hearing Mr. Crick confirmed that the 21 infill wells were to be in the center of the reservoir. Tr. Quantum (Day 2) (ENG), 415:10-11 (Cross, Crick).

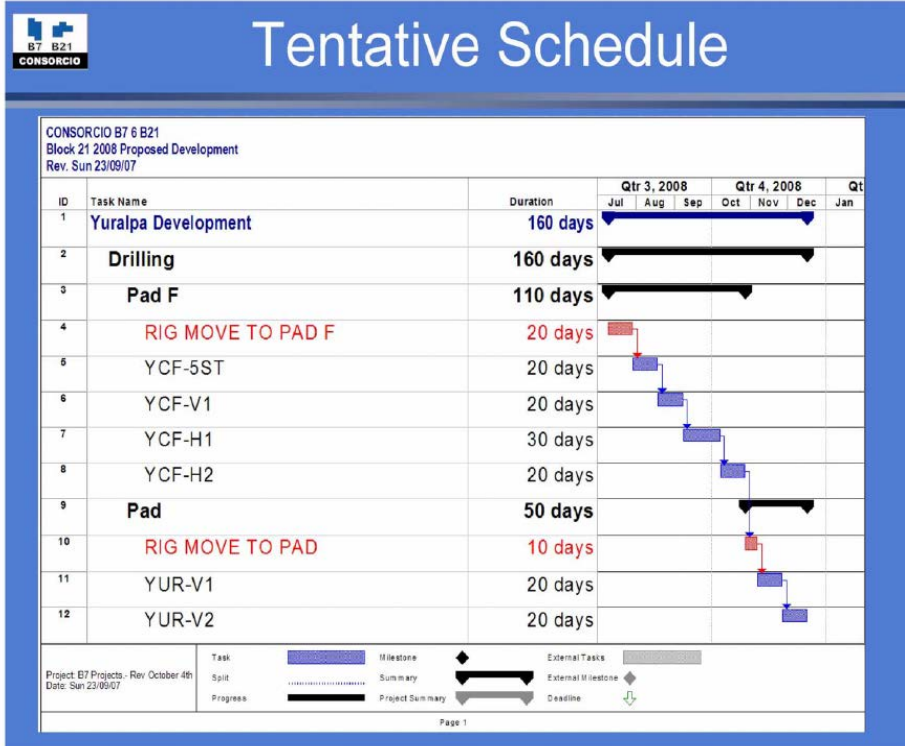


436. Similarly, as noted above the 2007 Budget Presentation considered a preliminary program of 4 to 8 wells.⁸⁷⁸ This program consisted of (i) drilling well YCF-5ST, one to two V wells and two to three H wells on Pad F, and (ii) two additional V wells, presumably in Pad D (i.e., a maximum of 8 wells).⁸⁷⁹ However, as shown in the slide below, only 6 wells were in fact scheduled in the last semester of 2008 (four in Pad F, and two in an unnamed “Pad” which the Tribunal understands to be Pad D):⁸⁸⁰

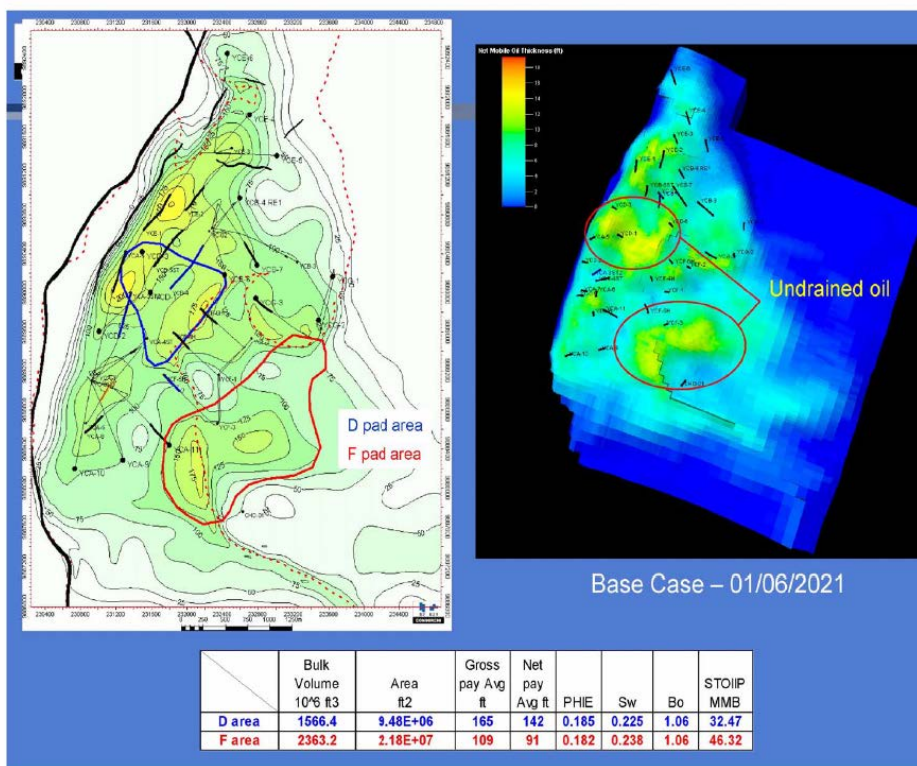
⁸⁷⁸ Consortium Budget Committee Meeting Presentation, September 26-27, 2007, Slide 164 (**Exh. C-470**).

⁸⁷⁹ *Id.*, Slide 164. See also: Tr. Quantum (Day 2) (ENG), 410:15-412:21 (Cross, Crick).

⁸⁸⁰ *Id.*, Slide 165. This schedule shows drilling in Pad F and in another pad simply identified as “Pad”. The Tribunal understands that this unnamed pad refers to Pad D, which is the other pad identified in the map at Slide 166.



437. As shown in the following map provided in the same presentation, Pad F is in the southeastern area of the field (circled in red), while Pad D is in the center of the field (circled in blue):⁸⁸¹



⁸⁸¹ Id., Slide 166.

438. Once again, the Consortium's plans do not match Mr. Crick's proposal, as most of the wells that the Consortium planned to drill were in the southeastern part of the field.⁸⁸²
439. This does not necessarily mean that the Consortium would not have considered drilling infill wells in the future. Indeed, as noted above, several of the Consortium documents referred to the possibility of infill drilling. In particular, the Yuralpa Simulation Study noted that reserves could be increased, inter alia, by "drilling new infill wells",⁸⁸³ for which more detailed geological work and simulations would need to be undertaken.⁸⁸⁴ But the record does not support Mr. Crick's drilling forecast of 21 infill wells.
440. By contrast, the documents cited above appear to support Mr. Crick's proposed three 2P wells outside the central part of the reservoir. While Mr. Crick has testified that it was the Consortium's policy not to drill in the fringe areas (i.e., the areas where the oil column was less than 90 feet deep),⁸⁸⁵ the Consortium was clearly planning to explore the deeper oil column identified in the southeastern area of the reservoir. While there is some contradiction between the Consortium's plans and Mr. Crick's proposal (Mr. Crick locates these wells in the fringe area and acknowledges the uncertainty of their production, while the Consortium appears to have been aiming for a deeper oil column), they both share the goal to test and drain the unswept areas of the reservoir outside the central oil column.
441. Despite the discrepancy between the Consortium's historical plans and Mr. Crick's proposal (which he has acknowledged),⁸⁸⁶ Mr. Crick has affirmed that his drilling program is reasonable in light of Petroamazonas' actual and proposed drilling. It is true that, since the expropriation, Petroamazonas has drilled 11 new wells in

⁸⁸² See: Tr. Quantum (Day 2) (ENG), 410:15-412:21 (Cross, Crick).

⁸⁸³ Annex E to Crick WS1, p. 2.

⁸⁸⁴ *Id.*, p. 3 ("In case new infill wells are to be drilled, more detailed geological work including core and FMI data should be undertaken in the potential drilling areas. Simulation results with new infill wells should be economically evaluated in order to select the optimal locations. The constantly updated simulation model should be the tool for defining the production policy of the Yuralpa field").

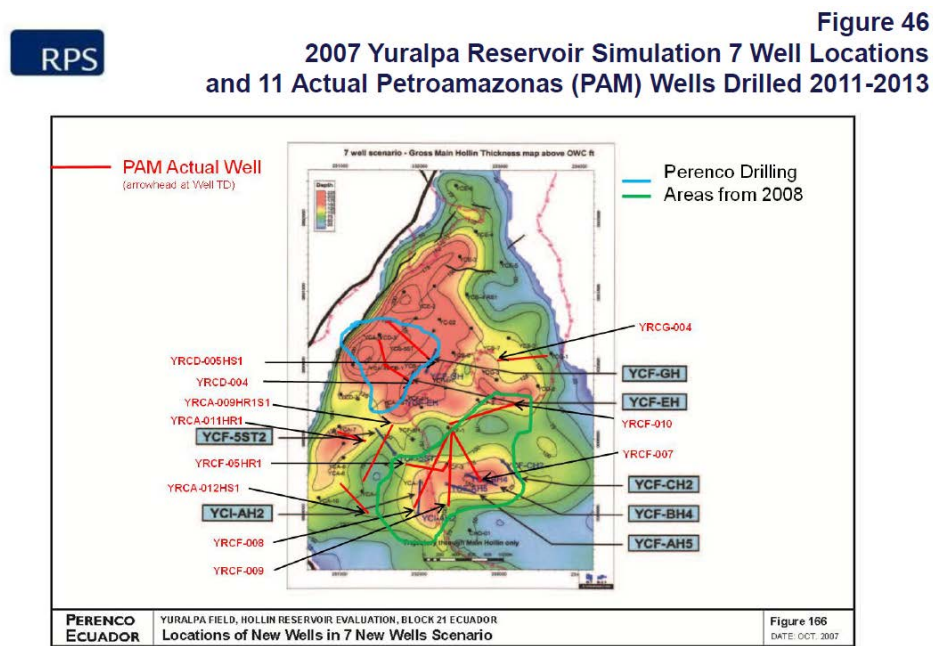
⁸⁸⁵ Crick WS1, ¶ 94. However, Mr. Crick also notes that the Consortium did drill in the fringe in some instances ("Perenco did not expect to develop the portion of the reservoir toward the edges where the total oil thickness is less than about 90 feet. This was a deliberate policy to avoid drilling wells that might produce very little oil. That said, some wells were drilled in this fringe, and although they are not amongst the best producers, they have cumulatively produced 3.04 million barrels of oil, and are still producing. Overall these remain very economic wells").

⁸⁸⁶ Tr. Quantum (Day 2) (ENG), 414:12-16 (Cross, Crick).

Yuralpa (8 if one does not count the re-drills)⁸⁸⁷ and appears to be planning to drill another 28 wells in that field,⁸⁸⁸ which makes a total of 39 new wells (or 36 if we ignore the 3 re-drills), compared to Mr. Crick's 24 new wells. However, the Tribunal agrees with Ecuador that Petroamazonas is not an entirely appropriate proxy for the Consortium in this regard.

442. Indeed, the wells that Petroamazonas has drilled or proposes to drill in the future are mostly of a different type or are in a different location from those proposed by Mr. Crick. Specifically:

- i. Of the 11 new wells drilled by Petroamazonas between 2011 and 2013, 7 were in the areas recommended in the 2007 Yuralpa Simulation Study, and an additional 4 were in areas which RPS considers to be infill wells.⁸⁸⁹ The locations of these wells is shown in the following figure submitted by RPS:⁸⁹⁰



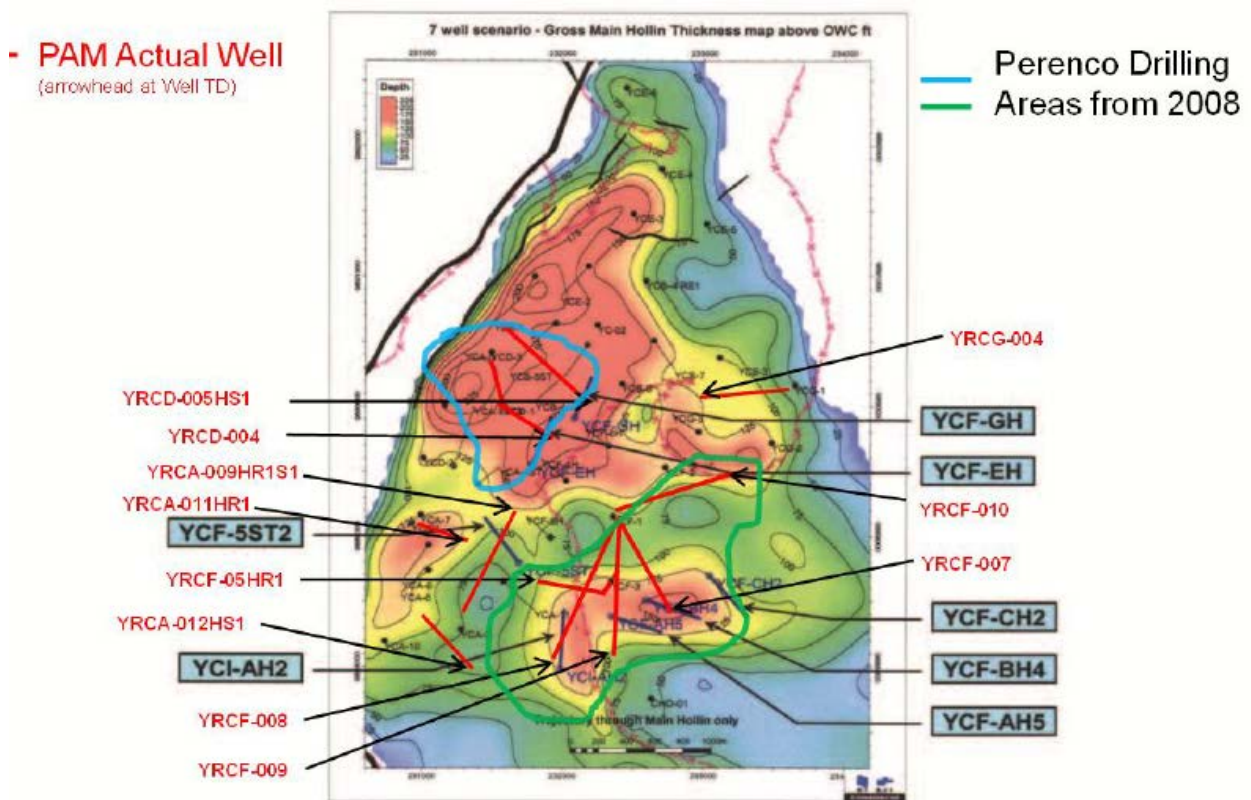
⁸⁸⁷ R-PHB, ¶ 323, relying on: RPS ER3, ¶ 280. Mr. Crick has also referred to 11 wells, specifically, to 8 new wells and 3 re-drills. (Crick WS2, ¶ 188). Although Mr. Crick explained at the Hearing that the re-drills do not yield new wells, but rather “you subtract one well and then add it back in a slightly different place, so the total number of wells is not changed by the redrill” (Tr. Quantum (Day 2) (ENG), 447:9-14 (Cross, Crick)), which would suggest that Petroamazonas has only drilled 8 new wells, Ecuador and RPS continue to speak of 11 new wells.

⁸⁸⁸ While Mr. Crick had identified these 28 new wells as proposed by Ryder Scott, counsel for Ecuador have stated that they appear to have been originally proposed by Petroamazonas and approved by Ryder Scott. See: Tr. Quantum (Day 3) (ENG), 873:15-874:19 (Cross, Strickland).

⁸⁸⁹ RPS ER3, ¶¶ 280, 478.

⁸⁹⁰ *Id.*, Figure 46.

443. The following image is a close up of the same map:



444. As explained by RPS, the locations drilled by Petroamazonas in Areas 1 and 2 are essentially the same locations recommended in the 2007 Yuralpa Simulation Study, two of them in Area 1 (to the southeast) and five in Area 2 (in the center).⁸⁹¹ According to RPS, the four additional wells were drilled as “replacement” wells, and to test infill drilling.⁸⁹² In RPS’s view, Petroamazonas’ actual drilling between 2011 and 2013 resulted in “relatively poor results”, which would have been considered a failure by the Consortium’s standards.⁸⁹³ Dr. Strickland disagrees.⁸⁹⁴ Be that as it may, Petroamazonas’ actual drilling does not support Mr. Crick’s plan of 21 infill wells.

⁸⁹¹ *Id.*, ¶ 479.

⁸⁹² *Ibid.*

⁸⁹³ RPS ER3, ¶¶ 480-481; RPS ER4, ¶¶ 267-269. RPS explains that “[o]nly one well of the 11 wells drilled, the D-5H, has a 2P EUR greater than 315,000 barrels of oil based on forecasts using production history through 31 March 2013. The average 2P EUR for all 11 wells is 240,000 barrels per well – this includes the 1,147,000 barrels for the D-5H. If the D-5H is excluded from the average, the remaining 10 wells are expected to recover an average of 150,000 barrels each” (RPS ER3, ¶ 480 and Table 3).

⁸⁹⁴ Tr. Quantum (Day 3) (ENG), 880:7-881:5 (Cross, Strickland).

445. In addition, as RPS has explained, all of the 28 new wells proposed by Petroamazonas and approved by Ryder Scott in Block 21 would be situated in the fringe areas.⁸⁹⁵ The difference between Petroamazonas' and Mr. Crick's drilling programs is illustrated in the following figure, which shows RPS's depiction of the Ryder Scott/Petroamazonas wells in red and Mr. Crick's proposed wells in black.⁸⁹⁶ RPS recognizes that Mr. Crick has not identified the exact location of its proposed wells,⁸⁹⁷ but considers that "Mr. Crick's description of the locations in the text of his first witness statement leaves little doubt as to the locations he envisions".⁸⁹⁸ As Mr. Crick described his twenty-one 1P wells as infill wells in the center of the reservoir (see paragraph 429 above), spaced approximately 40 acres apart, the Tribunal is satisfied that the figure below shows a reasonable approximation of the location of Mr. Crick's proposed wells.

⁸⁹⁵ RPS ER4, ¶ 282.

⁸⁹⁶ *Id.*, Figure 22.

⁸⁹⁷ RPS also criticized Mr. Crick's failure to identify the exact location of these prospective wells. It states that "[a]s per industry standards, it is always the case for any reserves reporting purposes that drilling locations for undeveloped reserves are specifically identified in the report to allow third parties to confirm the validity and test the 'reasonable certainty' of recovery of those undeveloped reserves. As per the SPE-PRMS Reserves definitions, Proved reserves in undeveloped locations can only be assigned if the 'locations are in undrilled areas of the reservoir that can be judged with reasonable certainty to be commercially productive.' Mr. Crick's failure to specifically identify these locations adds to the uncertainty of those reserves and Mr. Crick's 'water coning' theory". *Id.*, ¶ 277.

⁸⁹⁸ RPS ER3, ¶ 273, note 257.

447. The Consortium's past practice and Petroamazonas' current practice thus do not support the extent of Mr. Crick's drilling program. While the Tribunal accepts the existence of water coning and the appropriateness of drilling infill wells, the record does not support the drilling of 21 new infill wells in the center of the reservoir.
448. In conclusion, the Tribunal finds that Mr. Crick's program of 21 infill wells in the center of the reservoir is inconsistent with the Consortium's past practice and expectations. It must thus establish on the basis of the elements in the record how many wells it is sufficiently certain that the Consortium would have drilled during the remainder of the Block 21 PSC, and at what rate.
449. As noted above, the record suggests that, by September 2007 (before the enactment of Decree 662), the Consortium was only planning to drill a maximum of 8 new wells in Yuralpa, only 6 of which were scheduled, starting in the second half of 2008.⁹⁰⁰ In view of all of the factors analyzed above, the Tribunal considers it reasonable to conclude that the Consortium would have drilled the 6 scheduled wells, all in 1P locations.

(3) When would drilling have resumed, and at what rate?

450. Mr. Crick's production forecast assumes that, but for Ecuador's failure to absorb the effects of Law 42 at 99%, drilling would have resumed in Block 21 in January 2008. The record suggests that this drilling would actually have started in July 2008, not in January 2008 as Mr. Crick proposes.⁹⁰¹ That being said, as explained with respect to Block 7, the Tribunal will not quantify cash flows on the basis of new drilling that would have started before the expropriation. It will thus assume that any new drilling would have started in September 2009, after the expropriation.
451. The Tribunal has noted Ecuador's concern that the Updated Model does not contain a functionality allowing the Tribunal to adjust the start date of new drilling, as Fair Links suggested. According to Fair Links, this could have been useful because "changing the starting date of the drilling program would impact projected production: as the terms of the Participation Contracts are limited and relatively short (notably on Block 7), any change in the starting date of the drilling program in fact would alter the marginal return of each investment, potentially leading to a

⁹⁰⁰ See: paragraph 436 above.

⁹⁰¹ **Exh. C-470**, Slide 165. See: paragraph 436 above.

decision not to drill”.⁹⁰² Both experts discarded this possibility because they “cannot reasonably allocate changes in operating and investment costs that are associated to changes in the timing of drilling of new wells because implementing such a manual input in the Joint Model is technically complex and would require to involve technical and geological experts in order to avoid inconsistent outcomes”.⁹⁰³ Ecuador therefore proposes that, should the Tribunal consider implementing this functionality, it should seek the input of the geological and petroleum reservoir experts.⁹⁰⁴

452. The Tribunal agrees that such a functionality could have been useful. However, quantum issues have undergone several rounds and Ecuador could have requested this function in March 2015, when the Tribunal invited the experts to prepare the first Joint Valuation Model. At this late stage, Ecuador’s request must be balanced against the need for procedural efficiency.

453. In addition, it is well established that, once the existence of damage is established, the Tribunal has wide discretion to determine its quantum. The Tribunal is satisfied that using the current functionalities contained in the Updated Model allows it to quantify Burlington’s losses with reasonable certainty, even if it defers the starting date of new drilling to September 2009. Specifically, the Tribunal has considered that the deferral of the start of new drilling shifts the cash flows resulting from new wells forward approximately 1.5 years (from January 2008 to September 2009). Assuming that Burlington would have drilled 6 new wells in Block 21, and assuming that all wells produce equally, by the end of the PSC’s life these new wells would have accounted for 15% of all cash flows.⁹⁰⁵ If the Tribunal assumes that new wells were drilled 1.5 years later than has been calculated in the Updated Model, this deferral can be accounted for by reducing the cash flows in the last 1.5 years of the PSC’s life (i.e., from January 2020 to June 2021) by 15%. On the basis of the spreadsheet in the Updated Model where annual cash flows are calculated and, after applying the appropriate variables, the Tribunal has quantified the impact of new wells in Block 21 at USD 3,238,801. The Tribunal will therefore subtract this amount after computing the total cash flows with the Updated Model.

⁹⁰² Compass Lexecon and Fair Links Joint Memorandum of 20 September 2016, ¶ 12(c), ¶ 21.

⁹⁰³ *Ibid.*

⁹⁰⁴ Ecuador’s letter of 4 October 2016, p. 9.

⁹⁰⁵ At the time of the expropriation, there were 33 existing wells in Block 21. Adding 6 new wells gives a total of 39 wells, out of which the new wells account for 15%.

454. While the Tribunal is aware that this is an approximation,⁹⁰⁶ it considers that it reasonably addresses the inability of the Updated Model to account for a deferral in the drilling start date.
455. As for the drilling rate, the record supports the rate proposed by Mr. Crick. Indeed, the tentative schedule set out in the 2007 Budget Presentation shows that the Consortium was planning to drill new wells at a rate of one well every 20 days.⁹⁰⁷ As a result, the Tribunal accepts Mr. Crick's drilling rate.

(4) Production from incremental wells

456. With respect to incremental wells, Mr. Crick forecasted production using type-curve analysis. He took empirical data from existing wells to project the initial oil rate, and then applied the historical production decline rate (43% during the first 24 months of production and 9% thereafter). For the reasons given at paragraph 420 above, the Tribunal accepts Mr. Crick's methodology. The Tribunal notes in particular that Mr. Crick tested his results against three alternative methods, and Dr. Strickland independently reached very similar results.
457. The Tribunal has inserted its conclusions with respect to production for existing and incremental wells in the experts' Updated Model, and the results are included in the computation provided in Section 5.3.4 below.
458. However, because the Tribunal may only quantify foregone cash flows as of 30 August 2009, it will disregard cash flows computed by Compass Lexecon between January 2008 and August 2009.

(iii) *Ecuador's objections to the use of the Updated Model to forecast production*

459. Ecuador objects to the use of the Updated Model to calculate production, because it objects to Mr. Crick's drilling plans, which it considers unsupported and unsound, and because "given that RPS did not contemplate any new drilling, the 'Manual Input' option is constructed on the basis of the drilling plans put forth by Mr. Crick".⁹⁰⁸ According to Ecuador, this means that "in the Updated Model, any new wells that the Tribunal may be inclined to retain would be drilled according to the

⁹⁰⁶ Among other things, the Tribunal is aware that the amount it has calculated has not been discounted to account for the fact that it would only have been earned in 2020-2021.

⁹⁰⁷ **Exh. C-470**, Slide 165. See: paragraph 436 above.

⁹⁰⁸ Ecuador's letter of 4 October 2016, p. 7.

schedule, with the frequency and in the order proposed by Mr. Crick, and would produce the amounts of oil forecasted by Mr. Crick”.⁹⁰⁹

460. The Tribunal notes that it has dismissed Mr. Crick’s drilling projections, and has opted instead for drilling projections based on the Consortium’s historical practice and drilling plans in 2007-2008. Ecuador is correct, however, when it states that, for any new wells, the Updated Model will assume Mr. Crick’s drilling rate, order and production forecasts. Ecuador submits that this is problematic for four reasons.
461. First, Ecuador notes that the Updated Model does not allow the Tribunal to insert the rate at which new wells would have been drilled, as the Tribunal requested. It adds that, according to the experts, this instruction could not be reasonably implemented because it would have had an impact on costs or might entail unknown geological, operational or technical restrictions. Ecuador emphasizes that “[u]ltimately, the Tribunal has not been briefed by either Party on any rate allowing for the drilling of more than one well per month. If the Tribunal were minded to consider a drilling rate of less than one well per month, Ecuador proposes that the Tribunal request the input of the geological and petroleum reservoir experts to implement such a functionality in the Updated Model”.⁹¹⁰
462. It is true that the experts were not able to implement a functionality allowing the Tribunal could choose the drilling rate for new wells. The experts explained that changes in the drilling pace would have implications on the design of the drilling plans and alter investment costs, and consequently the marginal profitability associated with investment decisions. Consequently, changes in the drilling pace would lead to an iterative process which would require geological expertise to determine whether new wells would be profitable or technically feasible.⁹¹¹ That being said, the Tribunal has found that the drilling rate proposed by Mr. Crick (i.e. one well per month) is in line with the Consortium’s historical practice and is thus reasonable, and as a result this *caveat* (and Ecuador’s objection) has become moot.
463. Second, Ecuador notes that Fair Links considered including a functionality that would allow the Tribunal to adjust the time when new drilling would have started. Ecuador therefore proposes that, should the Tribunal consider implementing this functionality, it should seek the input of the geological and petroleum reservoir

⁹⁰⁹ *Ibid.*

⁹¹⁰ *Id.*, p. 8.

⁹¹¹ Compass Lexecon and Fair Links Joint Memorandum of 20 September 2016, ¶ 12(c).

experts.⁹¹² The Tribunal has already addressed this request in paragraphs 450 *et seq.* above.

464. Third, as in Ecuador's contention the Consortium was not entitled to a contract extension for Block 7, it considers that the drilling plan associated with Burlington's extension scenario is baseless. As the Tribunal has dismissed this claim (and, by the same token, the associated drilling plan), this objection is now moot.
465. Fourth, Ecuador contends that "the production of such wells, as estimated by Mr. Crick, is unduly optimistic, as it is based on unsound forecasting methodology".⁹¹³ Ecuador submits that, to remedy this defect, "the functionality proposed by Fair Links allowing for the adjustment of the productivity of the new wells should, at the very least, be incorporated into the 'Manual Input' option and considered by the Tribunal".⁹¹⁴ The Tribunal rejects this proposal as unnecessary: the Tribunal has found that Mr. Crick's production forecasts (both for existing and new wells, where appropriate) were reasonable and well-supported,⁹¹⁵ so even if this functionality had been available, the Tribunal would have chosen Mr. Crick's production forecasts.
466. On this basis, the Tribunal considers that its reliance on the Updated Model to calculate production is reasonable and well-supported.

5.2.2 Crude oil prices

467. The second element to determine revenues is the price at which the crude oil would have been sold. Each Party relies on the prices provided by its financial experts, having instructed them on the date of valuation to be used, namely the date of the award or closest proxy for Burlington and the date of the expropriation for Ecuador.
468. The experts agree that Block 7 produced Oriente crude oil, while Block 21 produced mostly Napo crude oil.⁹¹⁶ They also agree that, since there are no standard industry forecasts for Oriente or Napo prices, it is necessary to forecast their price with reference to a benchmark crude price, adjusted by an average historical price discount.⁹¹⁷ The main differences among the experts relate to (i) the benchmark

⁹¹² Ecuador's letter of 4 October 2016, p. 9.

⁹¹³ *Ibid.*

⁹¹⁴ *Id.*, p. 10.

⁹¹⁵ See: paragraphs 415, 420 and 456 above.

⁹¹⁶ Compass Lexecon ER1, ¶ 43; Fair Links ER2, ¶ 96.

⁹¹⁷ Compass Lexecon ER1, ¶ 43; Fair Links ER2, ¶ 97.

crude oil used as reference, (ii) the methodology to forecast future prices, and (iii) the use of projected versus actual prices.

469. For the benchmark crude oil used to project prices, Compass Lexecon favors North Sea Brent crude (“Brent”), while Fair Links uses West Texas Intermediate crude (“WTI”). Compass Lexecon’s rationale for preferring Brent is that, from 2010 onwards, WTI started selling at a large discount to Brent “primarily due to increased North American production and limited pipeline capacity”.⁹¹⁸ However, Compass Lexecon does not object to using WTI for forecasts made in 2009 (assuming a date of valuation in that year), because this was before the divergence between Brent and WTI.⁹¹⁹ Fair Links does not explain why it prefers WTI over Brent, but recognizes that Brent is “the other widely accepted crude oil reference”.⁹²⁰ While Fair Links acknowledges that WTI fell compared to Brent in late 2010, it considers it irrelevant because it has conducted its valuation as of 30 August 2009.⁹²¹
470. In terms of methodology, Compass Lexecon calculates a forecast for the price of Brent crude, and then applies a differential to the Brent forecast series based on the historical relationship between Brent and Oriente/Napo prices.⁹²² To forecast Brent prices, Compass Lexecon explains that it has not limited itself to futures contracts (as Fair Links has done), but has relied “on as many industry sources as possible (i.e., government agencies such as the EIA, industry analysts, industry consultants such as AJM and Sproule, and market data from futures contracts)”.⁹²³
471. Compass Lexecon explains that Oriente and Napo prices have consistently traded at a discount to Brent prices, because they are heavier and sourer than Brent and thus involve higher refining costs. To calculate this historical price differential, Compass Lexecon has preferred absolute price level differentials (i.e., the absolute difference in price between Brent and Oriente/Napo measured in US dollars) to price percentage differences (i.e., the log difference in price measured on a percentage basis), because the latter have been historically more volatile and because the former is more reliable being “supported by the idea that the heavy-light differential

⁹¹⁸ Compass Lexecon ER2, ¶ 51(b).

⁹¹⁹ *Ibid.*

⁹²⁰ Fair Links ER2, ¶ 98.

⁹²¹ Fair Links, ¶ 98, note 91.

⁹²² Compass Lexecon ER1, ¶¶ 43-47.

⁹²³ Compass Lexecon ER2, ¶ 52(c).

is primarily determined by fixed-cost components (namely refining capacity and technology)".⁹²⁴

472. In turn, Fair Links bases its projections on the price of WTI futures contracts as of August 2009. It explains that "[f]utures contracts can be considered as broadly accepted price indicators since they provide a reasonable understanding of what the market consensus on crude oil prices is at a given time".⁹²⁵ Indeed, Ecuador argues that prices of futures contracts "are the only indicator providing a summary of the expectations of every participant in the marketplace".⁹²⁶ Because "[f]utures contracts are usually considered to provide an accurate view of market price expectations for maximum periods of 5-6 years, given the inherently speculative predictions of prices over longer time periods",⁹²⁷ Fair Links uses the prices of crude oil futures listed six years forward to project prices between 2009 and 2015. Beyond August 2015, it applies a constant growth rate corresponding to the expected inflation rate as of 2009. It then adjusts both sets of forecasts by the average historical price difference between the WTI price and the Oriente/Napo price to account for difference in quality.⁹²⁸

473. The most important difference between the experts concerns the use of projected versus historical prices. Consistent with their instructions on the date of valuation, Fair Links makes its forecasts with information available on the date of the expropriation, while Compass Lexecon uses data available on the date of the nearest proxy to the award (15 September 2014 for its second report, and 31 March 2015 for the Model, and 31 August 2016 for the Updated Model).⁹²⁹ Ecuador criticizes Compass Lexecon because, by using actual price data, it is improperly relying on hindsight information instead of placing itself in the position of a willing buyer on 30 August 2009.⁹³⁰ For Fair Links, "[t]his approach does not reflect the Fair Market Value of Burlington's assets at the time of expropriation, i.e. August 2009 but an *ex post* understanding of an economic situation that could not have been

⁹²⁴ Compass Lexecon ER1, ¶ 47.

⁹²⁵ Fair Links ER2, ¶ 93.

⁹²⁶ Rejoinder, ¶¶ 675-676.

⁹²⁷ Fair Links ER2, ¶ 94.

⁹²⁸ *Id.*, ¶¶ 93-100.

⁹²⁹ Compass Lexecon and Fair Links Joint Memorandum of 20 September 2016, ¶ 24.

⁹³⁰ Rejoinder, ¶¶ 678-679.

anticipated back then”.⁹³¹ Fair Links notes that “taking into account subsequent events would tend to consider lost cash flows as the compensation standard rather than the Fair Market Value standard, which we understand is the compensation standard applicable in cases of expropriation under the Ecuador-US Bilateral Investment Treaty”.⁹³²

474. In any event, Fair Links notes that the use of actual oil prices following the recent drop in international crude prices would result in a much lower valuation than that advanced in Compass Lexecon’s reports. Indeed, Compass Lexecon’s adjusted price projections in its second report (based on July 2014 prices) were 6% lower than in its first report.⁹³³ According to Fair Links, the use of actual prices on the date of the award would further decrease the valuation of Burlington’s assets: if Compass Lexecon were to use December 2014 prices instead of July 2014 prices, the forecast prices over the 2015-2021 period would be US\$ 29.56/barrel less than those used in Compass Lexecon’s second report, thereby reducing the value quantified by Compass Lexecon by approximately US\$ 80 million.⁹³⁴
475. At the outset of its analysis, the Tribunal stresses that the experts’ forecasts are influenced by their instructions on the date of valuation, which depend in turn on the compensation standard that each Party chose to use.
476. As explained in Section VII.B.3 above, the standard of compensation in this case is the international law principle of full reparation. The Tribunal must thus award Burlington the value of its investment on the date of the award or a proxy for that date), not to award what a willing buyer would have paid for such investment on the date of the expropriation. As a result, it is appropriate to award Burlington the cash flows that it forewent as a result of the expropriation, adjusted to present value (through an actualization rate for past cash flows and a discount rate for future cash flows).
477. To value the asset on the date of the award, the Tribunal may use information available after the date of the expropriation. As explained in Section VII.B.3 above, the use of *ex post* information allows for a valuation that is closer to reality and less

⁹³¹ Fair Links ER2, ¶ 102.

⁹³² Fair Links ER3, ¶ 70.

⁹³³ Compass Lexecon ER2, ¶ 57.

⁹³⁴ Rejoinder, ¶ 680.

speculative than one that relies on projections based on information available on the date of the expropriation.

478. Fair Links points out that the use of actual information would mean that “the damage assessment will never be fixed until the Block 21 Contract comes to an end in 2021 as oil prices would need to be constantly updated so as to reflect the actual evolution of the lost cash flows”.⁹³⁵ This criticism misunderstands the model adopted by the Tribunal: past cash flows, i.e., cash flows that would have accrued from the expropriation to the date of the award, are calculated on the basis of actual information, while future cash flows, i.e., cash flows that would have accrued from the date of the award to the contract’s termination date) are projected on the basis of the latest information available on the date of the valuation. While this computation may not reflect perfectly the actual value of the cash flows had the contracts been performed until their term, it allows for a valuation that reflects reality as much as possible on the basis of information available when the award is made.
479. For this purpose, the Tribunal requested the experts in July 2016 to update the values used in their Model. The latest projections prepared by Compass Lexecon for the Updated Model reflects the drop in oil prices since 2014.
480. For the same reason, the Tribunal accepts that Brent crude is a better benchmark for the price of Oriente and Napo crude in the circumstances. As explained by Compass Lexecon and recognized by Fair Links, the price of WTI experienced a drop as of 2010 due to factors specific to the North American market and is therefore inappropriate as a benchmark after that date. Nor does Fair Links dispute that Brent is a widely used benchmark.
481. Finally, the Tribunal considers that Compass Lexecon’s forecast is more reliable because it is based on a variety of industry sources, not only on futures contracts. The Tribunal is not persuaded by Ecuador’s contention that futures contracts are “the only indicator providing a summary of the expectations of every participant in the marketplace”.⁹³⁶ As Compass Lexecon explains, by relying on a single source, Fair Links “ignores all other available forecasts (such as those from government agencies such as the EIA and industry consultants such as AJM and Sproule)”.⁹³⁷ In addition, because the Tribunal is carrying out an *ex post* valuation, it is more

⁹³⁵ Fair Links ER3, ¶ 71.

⁹³⁶ Rejoinder, ¶¶ 675-676.

⁹³⁷ Compass Lexecon ER2, ¶ 52.

appropriate to rely on both actual and forecast pricing of goods, including futures contracts, rather than solely on futures.

5.2.3 Operating expenditures (OPEX)

482. Burlington relies on its actual operating expenditures (“OPEX”), while Ecuador relies on OPEX proposed by Fair Links and RPS.
483. Compass Lexecon explains that OPEX include (a) direct and indirect costs of producing oil and (b) selling, general and administrative costs associated with managing the Blocks. Compass Lexecon forecasts OPEX on the basis of historical costs: it “project[s] all variable Opex on a per barrel basis, based on the cost per barrel amount for 2008 [...], the latest full-year available before expropriation”, and “forecast[s] the administrative costs associated with each Block on a fixed basis, based on the average administrative costs for 2006 through 2008”.⁹³⁸ It then adjusts variable and fixed OPEX for US PPI inflation.⁹³⁹
484. In addition, as a result of Mr. Crick’s expected production profile and associated costs of development for Block 21, Compass Lexecon “escalate[s] direct extraction costs and the cost of fluid, lubricants, and chemicals (a component of indirect extraction costs) by the evolution of the ratio of water to crude oil production”.⁹⁴⁰
485. Fair Links also distinguishes between fixed and variable OPEX, but uses RPS’s forecast for these costs, which is also based on historical figures. It then adjusts these costs for inflation using 2009 inflation rates estimated by the International Monetary Fund.⁹⁴¹
486. Although both approaches are similar, they show some differences and Fair Links criticizes Compass Lexecon’s valuation on three points:⁹⁴²
- i. Compass Lexecon overestimated its variable costs by counting twice the so-called “*Fondo ecodesarrollo región amazónica*”.

⁹³⁸ Compass Lexecon ER1, ¶ 49.

⁹³⁹ *Ibid.*

⁹⁴⁰ *Ibid.*

⁹⁴¹ Fair Links ER2, ¶¶ 109-110.

⁹⁴² Fair Links ER2, ¶ 109.

- ii. Compass Lexecon assesses variable costs on the basis of the Consortium's shares and inconsistently prorates fixed costs to Burlington's shares, i.e. 42.5% for Block 7 and 46.25% for Block 21, thus underestimating fixed costs.
 - iii. Compass Lexecon excludes the transportation costs deriving from the ship-or-pay commitments related to the OCP (*Oledoducto de Crudos Pesados*) pipeline from the Block 21 operating costs arguing that these are sunk costs as Burlington was contractually obliged to pay them until September 2018. According to Fair Links, "[e]conomic and practical reality dictates that any willing buyer would have had to take on these costs in order to secure its transportation rights", and accordingly considers that they should be taken into account in the valuation.⁹⁴³ Ecuador also argues that these costs should be included in the FMV computation, since Burlington did not provide any evidence that it committed to pay these costs until 2018, or that it indeed continued to pay such costs after leaving Ecuador.⁹⁴⁴
487. Compass Lexecon accepted Fair Links' critique on the first two points and adjusted its model accordingly.⁹⁴⁵ However, it rejected the third criticism in connection with the ship-or-pay charges associated with the OCP Pipeline. For Compass Lexecon, it is correct to exclude these costs from the DCF Model as Burlington had to incur them whether there was an expropriation or not.⁹⁴⁶ Fair Links disagrees and considers that not including the ship-or-pay costs is equivalent to saying that Burlington "can export its crude from the Amazon to the Pacific for free".⁹⁴⁷
488. The Tribunal agrees with Fair Links, which is why it instructed the experts to include OCP ship-or-pay costs in all scenarios considered in the Model.⁹⁴⁸
489. The Tribunal also notes that the level of OPEX is necessarily linked to a given production profile. In their overview of the Model, the Parties' experts observed this dependence in the following terms:

⁹⁴³ *Ibid.*

⁹⁴⁴ Rejoinder, ¶ 668.

⁹⁴⁵ Compass Lexecon ER2, ¶¶ 59-60.

⁹⁴⁶ *Id.*, ¶ 61.

⁹⁴⁷ Tr. Quantum (Day 4) (ENG), 1282:5-6 (Direct, de Feuarent).

⁹⁴⁸ PO29, ¶ 8(d).

- “21. In paragraphs 8b, 8d, and 8e of PO 29, the Tribunal requested options concerning the production profile, operating expenses (OPEX), and capital expenses (CAPEX). We note that these three variables (production, OPEX and CAPEX) can only be applied jointly, based on whichever production scenario is chosen (RPS or Mr. Crick) since each production profile has corresponding costs and capital expenditures associated with their drilling plans and water production assumptions. The corresponding costs (OPEX and CAPEX) are therefore linked in the Joint Model to the chosen production profiles so as to avoid any inconsistent and incoherent economic results.
22. The Joint Model therefore allows for the selection of Option 1) RPS production and its related costs; and Option 2) Mr. Crick production and its related costs; which can be selected in the Model Inputs section of the control panel labeled ‘Production & Costs’”.⁹⁴⁹

490. As the Tribunal has chosen a modified version of Mr. Crick’s production profile, the Tribunal will apply Compass Lexecon’s OPEX calculations, which it understands are automatically updated in the Updated Model to adjust to the production chosen.

5.2.4 Capital expenditures (CAPEX) and depreciation

491. Compass Lexecon distinguishes two categories of CAPEX: (a) those related to the maintenance of existing wells and infrastructure and (b) those related to the development of additional wells, as forecasted by Mr. Crick.⁹⁵⁰
492. With respect to (a), Compass Lexecon relies on historical CAPEX per gross barrel of production from 2007, adjusted for inflation.⁹⁵¹
493. With respect to (b), Compass Lexecon projects historical drilling costs at USD 5.29 million per well, times the number of incremental wells estimated by Mr. Crick (24 for Block 21, 21 for Block 7), for a total gross incremental CAPEX of USD 250.2 million over 26 months from November 2007 to December 2009.⁹⁵² Compass Lexecon also includes ancillary CAPEX related to additional process capacity, power upgrades and water handling and treatment facilities estimated by

⁹⁴⁹ Joint Model Overview of 24 April 2015, ¶¶ 21-22.

⁹⁵⁰ Compass Lexecon ER1, ¶ 50.

⁹⁵¹ *Ibid.*

⁹⁵² *Ibid.*

Mr. Crick for a total of USD 92.7 million (USD 45.2 million for Block 7 and USD 47.5 million for Block 21).⁹⁵³

494. Compass Lexecon depreciates investments on a production per unit basis (“capital costs are depreciated in a given period based on the amount of production in that period as a percentage of remaining production”).⁹⁵⁴
495. Fair Links agrees with the categories of CAPEX used by Compass Lexecon, as well as with the depreciation methodology, but assumes no further drilling (as does RPS). Consequently, Fair Links recognizes the need for CAPEX to maintain existing wells,⁹⁵⁵ but does not include any CAPEX for additional wells.⁹⁵⁶
496. The Tribunal notes the experts’ agreement on the categories of CAPEX to be considered, as well as on the general methodology. It also notes that, as explained in paragraph 489 above, the experts agree that the CAPEX are dependent on the production profile adopted.⁹⁵⁷ As the Tribunal has chosen a modified version of Mr. Crick’s production profile, it will apply Compass Lexecon’s CAPEX projections, which are automatically adjusted in the Updated Model to correspond to the production profile chosen.

5.2.5 Taxation

497. Both Parties’ experts apply a 25% income tax and a 15% labor tax to the Consortium’s taxable income (i.e. revenues net of both OPEX and depreciation), which results in an effective tax rate of 36.25%.⁹⁵⁸ Both experts’ valuations are thus presented net of taxes.
498. However, because Fair Links considers the impact of Law 42 before arriving at the taxable income, it also applies Law 42 taxes to the Consortium’s revenues, following a “two-step evaluation”: (i) it “first assesses[s] the extraordinary income derived from

⁹⁵³ *Id.*, ¶ 51.

⁹⁵⁴ *Id.*, ¶ 52.

⁹⁵⁵ Fair Links ER2, ¶ 112, and ER3, ¶ 112.

⁹⁵⁶ Fair Links ER3, ¶ 114.

⁹⁵⁷ Joint Valuation Model Overview of 24 April 2015, ¶¶ 21-22. Fair Links had noted that if Compass Lexecon’s CAPEX assumptions were applied in a scenario that reflected the impact of Law 42, the negative effect of the CAPEX would not be compensated by a higher production (Fair Links ER3, ¶ 103). See also: Rejoinder, ¶ 686.

⁹⁵⁸ Compass Lexecon ER1, ¶ 53, referring to: Block 7 PSC, Clause 11 (**Exh. C-1**) and Block 21 PSC, Clause 11 (**Exh. C-2**). The rate is calculated as follows: $1-(1-25%)*(1-15%) = 36.25%$. See also: Fair Links ER2, ¶ 121.

the difference between Oriente and Napo monthly prices adjusted for quality and the Reference Price adjusted for inflation”, and (ii) “then applie[s] the 99% State participation on the extraordinary income”.⁹⁵⁹

499. The Tribunal has already determined that the economic effects of Law 42 must be ignored. Because reparation is due assuming that Ecuador would have complied with the PSC’s and specifically with the tax absorption obligation, the 99% tax on extraordinary profits mandated by Law 42 must be disregarded. Had Ecuador complied with this obligation, the Consortium would have been compensated through the application of a correction factor that would have wiped out the effect of the Law 42 tax. As a result, the only taxes to be applied in the model are income and labor tax at a combined rate of 36.25%.

5.2.6 Sequence of variables in the DCF analysis

500. In addition to objecting to the assumptions used by Compass Lexecon in its DCF valuation, Ecuador argues that Compass Lexecon calculates the FMV by misrepresenting the impact of various variables. Referring to Figure 1 of Compass Lexecon’s Second Report,⁹⁶⁰ Ecuador alleges that Compass Lexecon “considers the value drivers underlying a DCF valuation in a sequence that is not in keeping with how a DCF is built”.⁹⁶¹ For Ecuador, Compass Lexecon considers taxation – Law 42 – before considering oil production and oil prices and thus does not show its full impact. Nor does Compass Lexecon show the full impact of applying an exaggerated 12.5% interest on cash flows until the date of the award; both Law 42 and interest should be considered “at the end of the sequence once revenue (production and price) are determined”.⁹⁶² Indeed, when these value drivers are analyzed in the correct order, so says Ecuador, “it becomes clear that the key differences in the Parties’ damages calculations are (i) the application of Law 42 (a USD 409 million impact) and (ii) Burlington’s use of an exaggerated 12.5% actualization rate to calculate pre-judgment interest (a USD 366 million impact)”.⁹⁶³

⁹⁵⁹ Fair Links ER2, ¶ 120.

⁹⁶⁰ Compass Lexecon ER2, p. 12.

⁹⁶¹ Rejoinder, ¶ 576.

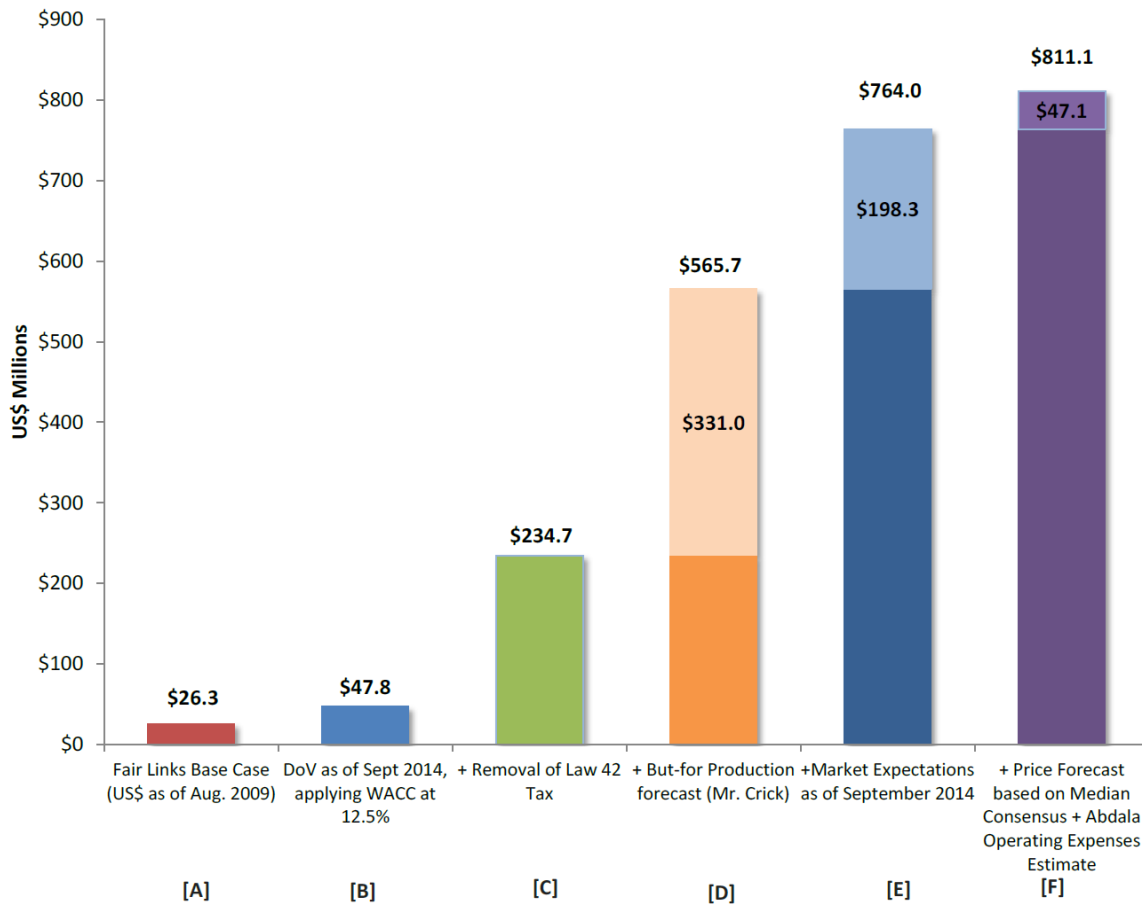
⁹⁶² *Ibid.*

⁹⁶³ *Id.*, ¶ 577, referring to: Fair Links ER2, ¶ 60.

By contrast, the other parameters (such as price, production, CAPEX, OPEX and discount rate) have a lesser impact.⁹⁶⁴

501. Reviewing Fair Links' comments,⁹⁶⁵ as well as Figure 1 of Compass Lexecon's Second Report, it appears that Ecuador's objections are not directed at Compass Lexecon's DCF valuation, but at the reconciliation analysis that the latter offers to compare its valuation to Fair Links'. Figure 1, which is shown below, does not reproduce the sequence in which Compass Lexecon performs its DCF valuation; it shows the sequence in which Compass Lexecon has attempted to reconcile its damages calculation with Fair Links':⁹⁶⁶

**Figure 1: Reconciliation of Value of Operating Assets
(Abdala v. Fair Links)**



Source: Compass Lexecon Second Valuation Model. (CLEX-49)

⁹⁶⁴ Rejoinder, ¶ 578.

⁹⁶⁵ Fair Links ER3, ¶¶ 51-66, 103.

⁹⁶⁶ Compass Lexecon ER2, p. 12.

502. From Fair Links' Third Report, it is evident that its objections relate to the sequence of the reconciliation, not of the DCF valuation. As Fair Links explains:

“In its second report, Compass Lexecon presents its reconciliation between our assessment of Burlington’s assets value of \$26.3 million (base case as of 30 August 2009) and its own assessment of \$811.1 million (as of 15 September 2014). Starting from the \$26.3 million value presented by Fair Links, Compass Lexecon adjusts this amount by successively incorporating in a specific order, which we consider inappropriate and even misleading, each parameter allegedly driving the difference between the experts. [...]

[...]

[...] Several major issues arise from the logic of Compass Lexecon’s analysis. In particular, the order of the parameters in the sequence proposed by Compass Lexecon misrepresents the impact of the differences between both experts”.⁹⁶⁷

503. In particular, Fair Links opines that “[b]y placing the various operational parameters (prices, production, operating costs) at the end of the sequence, Compass Lexecon misrepresents the financial impact of Law 42 and Related Measures”.⁹⁶⁸ This is because Compass Lexecon’s revenue and cost assumptions already reflect whether Law 42 is being considered or not (for instance, Compass Lexecon’s revenue assumptions include all extraordinary revenues, production figures consider the drilling of new wells, and CAPEX include the cost of new drilling).⁹⁶⁹ As a consequence, Fair Links proposes the following adjusted reconciliation:⁹⁷⁰

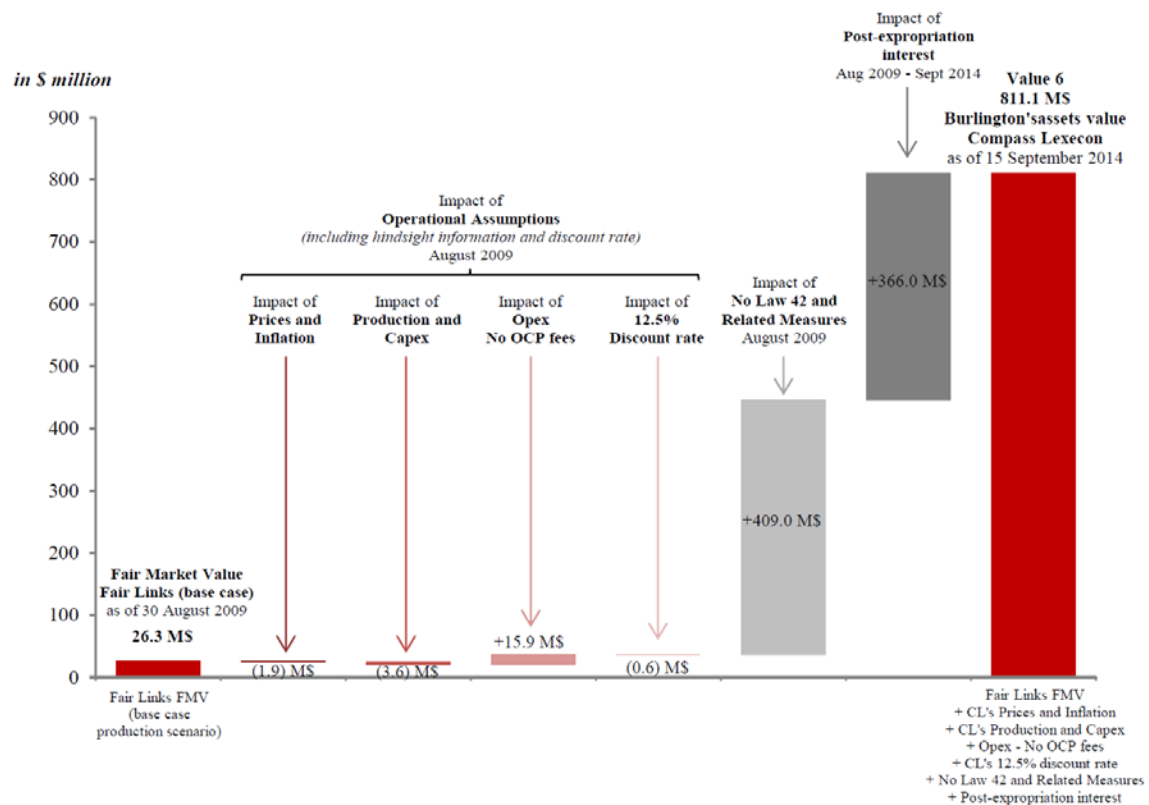
⁹⁶⁷ Fair Links ER3, ¶¶ 51-53.

⁹⁶⁸ *Id.*, ¶ 54.

⁹⁶⁹ *Ibid.*

⁹⁷⁰ Fair Links ER3, Figure 13, p. 44 (reflecting the last step in Fair Links’ reconciliation analysis).

Figure 13: Impact of post-expropriation rates on the value of Burlington's assets⁸¹



504. By contrast, there appears to be no material controversy on the sequence of the DCF computation. The Tribunal understands that both experts compute free cash flows according to the following sequence: first, they establish revenues (determined by production volumes and prices) and subtract costs (OPEX, CAPEX (where relevant), and depreciation) to obtain taxable income, to which they then apply a 36.25% combined income and labor tax. The only difference regarding the sequence is that Fair Links applies Law 42 taxes to revenues, while Compass Lexecon does not.
505. On this basis, the Tribunal is of the view that there is no dispute on the sequence of the DCF valuation, but merely disputed variables, in particular, the applicability of Law 42 taxes, that Fair Links, but not Compass Lexecon, applies to revenues, and the impact of this choice on other assumptions (such as new drilling and CAPEX). Be this as it may, any possible disagreement between the experts regarding the sequence in which the different variables are to be computed in their DCF valuation has been put to rest by the Model, which reflects the valuation model (including the sequence) agreed by both experts, subject to various assumptions.

5.3 Computation of past and future cash flows

506. As explained in Section VII.D.3.3 above, as the valuation is performed on 31 August 2016 as a proxy for the date of the award, the Tribunal must consider *past cash flows* (that would have accrued to Burlington from the date of the expropriation until the date of valuation as well as *future cash flows* (that would have accrued from the date of the valuation until the term of the PSC). Both sets of cash flows must be brought to present value: past cash flows must be brought forward through the application of an interest or actualization rate and future cash flows must be brought to present value through the application of a discount rate.
507. The Tribunal will address the discount rate applicable to future cash flows (4.3.2), and then the actualization rate applicable to past cash flows (4.3.3). Before turning to these points, it will address the situation of the pre-expropriation cash flows (4.3.1).

5.3.1 Pre-expropriation cash flows

508. As noted in paragraph 288.iv above, Compass Lexecon calculates production from December 2007, the date on which the Consortium stopped drilling, allegedly as a result of the enactment of Law 42 at 99% and Ecuador's failure to comply with its tax absorption obligations.
509. For the reasons set out in paragraph 413 above, the Tribunal will not take into account cash flows that would have accrued before the expropriation. As a result, it will disregard any cash flows computed by Compass Lexecon before 30 August 2009.⁹⁷¹

5.3.2 Discount rate applicable to future cash flows

510. The Parties are generally in agreement with respect to the discount rate to apply to future cash flows: Compass Lexecon proposes a discount rate of 12.5%,⁹⁷² while Fair Links endorses a 12% discount rate.⁹⁷³ According to Fair Links, the impact of

⁹⁷¹ The Tribunal notes that the Updated Model contains a functionality that allows the Tribunal to disregard these cash flows.

⁹⁷² Compass Lexecon ER2 ¶ 70. In its First Report, Compass Lexecon proposed a discount rate of 12.1% for a valuation date of 30 April 2013. Compass Lexecon ER1, ¶ 54.

⁹⁷³ Fair Links ER2, ¶ 130.

this difference on the value of Burlington's assets is USD 0.6 million,⁹⁷⁴ while Compass Lexecon calculates it as less than 1%.⁹⁷⁵

511. However, the experts disagree on the methodology to arrive at the discount rate; Compass Lexecon has calculated the Consortium's Weighted Average Cost of Capital (WACC) in accordance with the Capital Asset Pricing Model (CAPM), a well-accepted method for the valuation of discount rates.⁹⁷⁶ Fair Links, by contrast, opines that "the company's WACC should not be used in valuing an individual project due to its specific associated risk".⁹⁷⁷ According to Fair Links, "[t]his is key in the oil and gas industry where the higher expected return of successful projects offsets the sunk costs of unsuccessful exploration projects. This implies that the required discount rate (used to value a specific oil and gas asset) is not the business WACC, unless the risks associated to the specific asset are similar to those of the entire business".⁹⁷⁸ In particular, in order to accurately reflect the capital structure of an oil and gas asset, Fair Links explains that it is "essential to check the appropriateness of the standard industry WACC before using it to discount the future cash flows" of that asset.⁹⁷⁹ In order to determine "a discount rate that fairly reflects the return on Burlington's assets that could have been reasonably expected by an investor from Burlington's assets *but-for* expropriation", Fair Links considers the following data: (i) the 12% discount rate used to assess Burlington's assets at the time when Perenco intended to purchase them in 2006; (ii) the 13.42% average rate of return of 56 oil and gas projects in 15 different countries derived from an IHS CERA study conducted in 2012, and (iii) the 9%-15% range of discount rates generally used in the upstream oil and gas industry.⁹⁸⁰
512. The Tribunal takes note of Fair Links' objections to the use of the WACC as discount rate, but notes once more that the experts essentially agree with the use of a discount rate of 12% to 12.5% and that neither of them objects to using the discount rate proposed by the other. The Tribunal notes in particular that Fair Links accepts

⁹⁷⁴ Fair Links ER3, ¶ 122.

⁹⁷⁵ Compass Lexecon ER2, ¶ 73.

⁹⁷⁶ Compass Lexecon ER1, ¶ 54 and Appendix B.

⁹⁷⁷ Fair Links ER2, ¶ 126.

⁹⁷⁸ *Ibid.*

⁹⁷⁹ *Id.*, ¶¶ 127-128.

⁹⁸⁰ *Id.*, ¶¶ 129.

that this range is “about quite the right level”.⁹⁸¹ The Tribunal will therefore use Compass Lexecon’s proposed 12.5%, which corresponds to the WACC, a widely-used parameter for discounting cash flows. It observes that Compass Lexecon’s proposed rate is higher than Fair Links’, thereby reducing future cash flows.

513. Following this rationale, the Tribunal instructed the experts to use a 12.5% discount rate in their Model,⁹⁸² which the experts did.⁹⁸³

5.3.3 Actualization rate applicable to past cash flows

514. By contrast, the Parties fundamentally diverge on the actualization or interest rate to be applied to past cash flows (what Burlington also refers to as “pre-award interest”).⁹⁸⁴ The Parties agree that the same principles apply to interest accruing on the amount awarded from the date of the award until payment (post-award interest).⁹⁸⁵ Therefore, the arguments and findings set out below apply as well to that element of Burlington’s claim.

a. Burlington’s position

515. Burlington contends that compensation for delayed payment (i.e., interest) is an integral component of full reparation under customary international law. According to Burlington, a State’s duty to make full reparation arises immediately after the unlawful act has caused harm. If that payment is delayed, the claimant loses the opportunity to use the funds for productive ends, and thus payment must be subject to interest. For Burlington, the interest rate must be equivalent to the opportunity cost to it of having been deprived of the funds in question, and in Burlington’s submission this opportunity cost is equivalent to its WACC.⁹⁸⁶ Burlington asserts that it “was deprived of the periodic dividends (profits) generated by the Blocks, and was instead, *de facto*, forced to reinvest those funds into the fields (i.e., its dividends

⁹⁸¹ Tr. Quantum (Day 4) (ENG), 1275:12-13 (Direct, de Feuardent).

⁹⁸² PO29, ¶ 8(h).

⁹⁸³ Joint Valuation Model, ¶ 30(b).

⁹⁸⁴ See, for instance: Mem. ¶ 136 (“In the circumstances of this case, Burlington is entitled to two forms of interest: pre-award interest, covering losses accruing up to the date of the Tribunal’s final Award; and post-award interest on the full amount of damages awarded by the Tribunal until the date of payment. Pre-award interest is applied to losses that have been quantified prior to the Award date (i.e., prior to the date of valuation), in order to reflect the time value of money and to “actualize” the value of those losses. Post-award interest, on the other hand, is applied to the entire sum of damages awarded by the Tribunal to ensure that Burlington is not harmed further by delay in the payment of the Award”).

⁹⁸⁵ Reply, ¶ 240; Rejoinder, ¶ 605.

⁹⁸⁶ Mem., ¶¶ 134-144; Reply, ¶¶ 227-241.

could not be “cashed-out” of the Blocks).⁹⁸⁷ As a result, say Burlington and its expert, “the interest rate on the foregone dividends must be equivalent to the return that Burlington reasonably expected to earn from its investment in the Blocks—i.e., the projects’ cost of capital (WACC).⁹⁸⁸ Burlington submits that this approach has been endorsed by both scholars⁹⁸⁹ and tribunals.⁹⁹⁰

516. Compass Lexecon explains in this respect that “to grant Burlington full compensation for its losses, damages accruing prior to the date of valuation need to be actualized to the date of valuation at a risk-adjusted rate that compensates [Burlington] for the opportunity cost of capital of doing business in the industry. This is because in the absence of Ecuador’s measures, Burlington would still be in business as of the date of award”.⁹⁹¹ In Compass Lexecon’s view, the appropriate actualization rate is the WACC, which is the same rate that is used to discount future cash flows, in this case 12.5%, because “it reflects the return expected by an investor when investing in assets with a similar risk profile”.⁹⁹²

517. Burlington and its expert object to Ecuador’s use of LIBOR plus two percent as an actualization rate on three grounds:

- i. First, it asserts that “if the ‘post-expropriation interest’ rate is to serve as a measure of the cost of debt for a firm or industry, it should be applied on a pre-tax basis, not on an after-tax basis”, “because the risk embedded in any debt agreement is reflected in the pre-tax interest rate”.⁹⁹³

⁹⁸⁷ Reply, ¶ 230.

⁹⁸⁸ *Ibid.*

⁹⁸⁹ Burlington relies, *inter alia*, on: T. J. S  n  chal and J. Y. Gotanda, *Interest as Damages*, 47 *Columbia J. of Transnational Law* 491 (2009) at 516-17, 524 (**Exh. CL-375**).

⁹⁹⁰ *Vivendi v. Argentina II*, Award of 20 August 2007, ¶¶ 9.2.3 and 9.2.8 (**Exh. CL-123**); *France Telecom v. Lebanon* (UNCITRAL), Award of 31 January 2005, ¶ 209 (**Exh. CL-274**); *Alpha Projektholding GMBH v. Ukraine*, ICSID Case No. ARB/07/16, Award of 8 November 2010, ¶¶ 514, 518 (**Exh. CL-167**); *Phillips Petroleum Company Venezuela Limited & ConocoPhillips Petrozuata B.V. v. Petr  leos de Venezuela, S.A.*, ICC Case No.16848/JRF/CA (C-16849/JRF) (“*ConocoPhillips v. PDVSA*”), Award of 17 September 2012, ¶¶ 294-307 (**Exh. CL-275**); *SAUR International S.A. v. Argentine Republic*, ICSID Case No. ARB/04/4 (“*SAUR v. Argentina*”), Award of 22 May 2014, ¶ 429 (**Exh. CL-372**).

⁹⁹¹ Compass Lexecon ER2, ¶ 80.

⁹⁹² *Ibid.* See also: Compass Lexecon ER1, ¶ 54.

⁹⁹³ Compass Lexecon ER2, ¶ 84.

- ii. Second, it states that LIBOR “is no longer a representative measure of short term borrowing costs since there has been evidence of manipulation of the Libor”.⁹⁹⁴
- iii. Finally, Compass Lexecon “disagree[s] with the notion that, to determine the full compensation as of a date of the award, one must treat Burlington as if it was relieved from industry risk at the time of Ecuador’s expropriation”.⁹⁹⁵ While Compass Lexecon acknowledges that this is valid for the actual scenario, it maintains that it is not so in the but for scenario, because “[a]bsent Ecuador’s measures, it must be assumed that Burlington would have kept operating in Ecuador”.⁹⁹⁶ Compass Lexecon therefore rejects the application of a risk-free pre-award interest rate endorsed by Ecuador, noting that the paper by Fisher and Romaine on which Ecuador relies has been criticized for ignoring the defendant’s cost of borrowing.⁹⁹⁷

518. Alternatively, Compass Lexecon proposes to apply the “coerced loan theory”, under which “the State’s failure or delay in paying compensation for expropriated assets is recognized as effectively a free loan to the State”, which Ecuador must then repay with interest on the date of the award.⁹⁹⁸ This interest should be the one that Ecuador would pay any other lender, namely “at a rate equivalent to Ecuador’s external cost of debt financing from private lenders”.⁹⁹⁹ On this basis, Compass Lexecon proposes to apply Ecuador’s long-term cost of debt, whose 1-year average is 7.9%.¹⁰⁰⁰ According to Compass Lexecon, if Ecuador should pay less than its cost of debt, “it would be as if Ecuador had obtained a below market rate loan from Burlington at the time of expropriation”, and “would thereby benefit economically from what the Tribunal has found to have been an unlawful expropriation”.¹⁰⁰¹ Compass Lexecon emphasizes that the coerced loan theory undercompensates

⁹⁹⁴ *Id.*, ¶ 85.

⁹⁹⁵ *Id.*, ¶ 86.

⁹⁹⁶ *Ibid.*

⁹⁹⁷ Compass Lexecon ER2, ¶ 87, referring to: F. M. Fisher & R. C. Romaine, “Janis Joplin’s Yearbook and the Theory of Damages”, *Journal of Accounting, Auditing & Finance*, Volume 5, No. 1 (Winter 1990), pp. 147-148 (**Exh. CLEX-65**) and R. L. Weil, M. J. Wagner, C. W. Hughes and P. B. Frank. *Litigation Services Handbook: The Role of the Financial Expert*, (4th ed., New York: J. Wiley & Sons, 2007), Chapter 9, pp. 6-7 (**Exh. CLEX-55**).

⁹⁹⁸ Compass Lexecon ER2, ¶ 90.

⁹⁹⁹ *Ibid.*

¹⁰⁰⁰ *Ibid.*

¹⁰⁰¹ *Id.*, ¶ 91.

Burlington, but if an alternative actualization rate were used, it would have to be “at least equal to or greater than Ecuador’s cost of lending¹⁰⁰² during the corresponding update period”.¹⁰⁰³

519. For Burlington, an award of interest should accrue on a compound basis.¹⁰⁰⁴ Burlington notes that many investment tribunals have found that this is the best way to give effect to the principle of full reparation, and that compound interest reflects economic reality in modern times.¹⁰⁰⁵ According to Burlington, Ecuador recognizes the appropriateness of compounding, as it seeks compound interest on its claims against Burlington.¹⁰⁰⁶ Burlington thus requests that “[a]ll interest awarded to Burlington should thus be subject to reasonable compounding”, noting that “[t]he appropriate periodicity of the compounding is annual, since the WACC is calculated on the basis of annual expected returns”.¹⁰⁰⁷

520. Contrary to Ecuador’s contentions, Burlington argues that Ecuadorian law is irrelevant to the question of compounding in this case. Burlington stresses that “[t]his is an international law dispute in which Burlington seeks compensation for the violation of its rights under international law”, and “[t]he law governing damages [is] customary international law”.¹⁰⁰⁸

b. Ecuador’s position

521. For Ecuador, “even if the Arbitral Tribunal were inclined to award compensation to Burlington, it should not depart from customary international law and Ecuadorian law (where applicable) and should, at the very least, apply the standard of compensation

¹⁰⁰² The Tribunal understands that the expert means cost of borrowing.

¹⁰⁰³ Compass Lexecon ER2, ¶ 93.

¹⁰⁰⁴ Mem., ¶¶ 143-144; Reply, ¶¶ 242-247.

¹⁰⁰⁵ Mem., ¶ 143 and Reply, ¶¶ 242-243, citing: *Occidental v. Ecuador II*, Award of 5 October 2012, ¶¶ 834, 840 (**Exh. CL-240**); *Unglaube v. Costa Rica*, Award of 16 May 2012, ¶ 325 (**Exh. CL-243**); *Quasar v. Russia*, Award of 20 July 2012, ¶¶ 226, 228 (**Exh. CL-276**); *Azurix v. Argentina*, Award of 14 July 2006, ¶ 440 (**Exh. CL-121**); *Continental Casualty Company v. Argentine Republic*, ICSID Case No. ARB/03/9 (“*Continental Casualty v. Argentina*”), Award of 5 September 2008, ¶¶ 308–313 (**Exh. CL-270**); *National Grid P.L.C. v. Argentine Republic* (UNCITRAL) (“*National Grid v. Argentina*”), Award of 3 November 2008, ¶ 294 (**Exh. CL-251**); *Impregilo S.p.A. v. Argentine Republic*, ICSID Case No. ARB/07/17 (“*Impregilo v. Argentina*”), Award of 21 June 2011, ¶ 382 (**Exh. CL-250**); *El Paso Energy International Company v. The Argentine Republic*, ICSID Case No. ARB/03/15 (“*El Paso v. Argentina*”), Award of 31 October 2011, ¶ 746 (**Exh. CL-249**).

¹⁰⁰⁶ Mem., ¶ 143, citing: Ecuador’s Counter-Memorial on Liability, ¶ 813 and Ecuador’s Supplemental Memorial on Counterclaims, ¶ 339.

¹⁰⁰⁷ Mem., ¶ 144, citing: Compass Lexecon ER1, ¶ 30.

¹⁰⁰⁸ Reply, ¶ 244.

set out in the Treaty for expropriation. Per international and Ecuadorian law, the appropriate post-expropriation interest rate should be equivalent to LIBOR plus a reasonable commercial spread of 2%”.¹⁰⁰⁹

522. Ecuador contends that using the WACC as interest rate, as opposed to using it as discount rate, leads to overcompensation.¹⁰¹⁰ According to Ecuador, Burlington adopts a higher discount rate than Ecuador to discount future cash flows for purely strategic reasons, since it wishes to apply that same rate to its past lost profits where the impact is much greater.¹⁰¹¹ Indeed, with an interest rate of 12.5% on past lost profits, Burlington adds USD 366 million (out of USD 632.6 million) in interest, representing 58% of the total past lost profits claim.¹⁰¹² As a result, Burlington’s lost profits claim is “mostly a claim for pre-judgment interest at the exaggerated rate of 12.5%”.¹⁰¹³
523. Ecuador further argues that the use of the WACC as an actualization rate (or post-expropriation interest rate, as Fair Links calls it) is particularly inappropriate because the WACC includes a premium or “reward” for risk, when Burlington no longer bore any risk having ceased operations.¹⁰¹⁴ As Fair Links stresses, the damage related to the expropriation would be actualized “with a full industrial risk” between the date of the expropriation and the date of valuation, when in fact (i) Burlington “was relieved from the industrial risk related to the assets in August 2009”, and (ii) “[i]n any case (and Compass Lexecon is surprisingly silent about that), the Participation Contract of Block 7 (the most important and profitable Block operated by the Consortium in Ecuador) and the related risk were to come to an end in August 2010”.¹⁰¹⁵
524. Ecuador further specifies that the WACC could only be used as an actualization rate for lost profits accruing before 30 August 2009, for a time when Burlington was exposed to industry risk in Ecuador (assuming, *quod non*, that Burlington could

¹⁰⁰⁹ CM, ¶ 541.

¹⁰¹⁰ Rejoinder, ¶¶ 594, 600-602.

¹⁰¹¹ *Id.*, ¶ 599.

¹⁰¹² *Id.*, ¶ 600.

¹⁰¹³ *Id.*, ¶ 601.

¹⁰¹⁴ *Id.*, ¶ 594, referring to: Fair Links ER3, ¶ 54.

¹⁰¹⁵ Fair Links ER3, ¶ 129.

claim for any pre-expropriation lost profits). Thereafter, only an interest rate consistent with the Treaty should be applied.¹⁰¹⁶

525. In this respect, Ecuador submits that Article III(1) of the Treaty requires the application of a commercially reasonable pre- (and post-) award interest rate.¹⁰¹⁷ According to Ecuador, “[t]he ordinary meaning of ‘*interest at a commercially reasonable rate*’ is one that is available to companies in the market and remunerates the time value of money”.¹⁰¹⁸ In Burlington’s case, this requires a rate that “reasonably reflects the after-tax cost of debt commercially available to U.S. oil and gas companies for dollar borrowings”.¹⁰¹⁹ Relying on Fair Links’ understanding of industry practice, Ecuador submits that the appropriate interest rate is LIBOR plus two percent, with an average yield of 2.33%.¹⁰²⁰
526. Ecuador contends that the use of LIBOR plus an appropriate margin has been cited as an example of a commercially reasonable rate in other BITs signed by the United States.¹⁰²¹ In addition, several investment tribunals have applied LIBOR plus two percent as an interest rate for purposes of treaties based on the U.S. Model BIT,¹⁰²²

¹⁰¹⁶ Rejoinder, ¶ 600.

¹⁰¹⁷ *Id.*, ¶¶ 602, 603-628.

¹⁰¹⁸ *Id.*, ¶ 612 (emphasis in original).

¹⁰¹⁹ *Ibid.*

¹⁰²⁰ *Id.*, ¶¶ 612-628. The Tribunal notes that Fair Links proposes the use of LIBOR + 2 for 3-month borrowing. See: Fair Links ER2, **Exh. 9**.

¹⁰²¹ Rejoinder, ¶ 614, referring to: Article III, Treaty between the United States of America and Ukraine concerning the Encouragement and Reciprocal Protection of Investment (1994) (**Exh. EL-394**). Ecuador notes that the provisions are substantially the same of: Article III, Treaty between the Government of the United States of America and the Government of the Republic of Lithuania for the Encouragement and Reciprocal Protection of Investment (1998) (**Exh. EL-395**); Article VII(1), Treaty between the United States of America and the Republic of Poland concerning Business and Economic Relations (1990) (**Exh. EL-396**).

¹⁰²² Ecuador cites: *Joseph Charles Lemire v. Ukraine*, ICSID Case No. ARB/06/18 (“*Lemire v. Ukraine*”), Award of 28 March 2011, ¶¶ 352 and 356 (**Exh. EL-279**); *PSEG Global, Inc., The North American Coal Corporation, and Konya Ingin Elektrik Üretim ve Ticaret Limited Sirketi v. Republic of Turkey*, ICSID Case No. ARB/02/5 (“*PSEG v. Turkey*”), Award of 19 January 2007, ¶¶ 345-348 (**Exh. CL-96**); *Sempra v. Argentina*, Award of 28 September 2007, ¶ 486 (**Exh. CL-80**); *Enron v. Argentina*, Award of 22 May 2007, ¶ 452 (**Exh. CL-81**); *Continental Casualty v. Argentina*, Award of 5 September 2008, ¶ 314 (**Exh. EL-74**); *El Paso v. Argentina*, Award of 31 October 2011, ¶ 745 (**Exh. CL-249**); *National Grid v. Argentina*, Award of 3 November 2008, ¶ 294 (**Exh. CL-251**).

as have other tribunals based on other treaties.¹⁰²³ Commentators have recognized that LIBOR plus two percent is a commonly-used interest rate.¹⁰²⁴

527. Ecuador rejects Compass Lexecon’s objections to the use of LIBOR plus two percent for the following reasons:

- i. First, Ecuador contends that “computing post-expropriation interest on a pre-tax basis is inconsistent with the determination of the other damage components on an after-tax basis and at odds with the full compensation principle”, because “[n]o matter how Burlington would have used the funds received as compensation to generate revenues, it would have had to pay taxes”.¹⁰²⁵ As explained by Fair Links, by computing interest on a pre-tax basis, “Compass Lexecon chooses to ignore one of the basic rules of business valuation according to which an asset appraised on an after-tax basis is to be consistently discounted through an after-tax actualisation rate”.¹⁰²⁶
- ii. Second, Fair Links explains that, regardless of the LIBOR “scandal”, LIBOR remains a valid interest rate.¹⁰²⁷
- iii. Third, “were post-expropriation interest to reflect the industrial risk borne by Burlington in a ‘but for’ scenario (represented by a 12.5% WACC according to Compass Lexecon), compensation would be determined on the basis of a theoretical risk, instead of the actual risk borne by Burlington”.¹⁰²⁸

528. As a result, Ecuador argues that Burlington’s 12.5% pre-judgment interest rate must be discarded,¹⁰²⁹ as must its alternative case of a 7.9% borrowing rate.¹⁰³⁰ If the Tribunal were to reject the use of LIBOR plus two percent, Ecuador proposes as an alternative that the Tribunal should apply one of the other commercially reasonable rates applicable to the oil and gas industry proposed by Fair Links, i.e. (i)

¹⁰²³ Ecuador cites: *Railroad Development Corporation v. Republic of Guatemala*, ICSID Case No. ARB/07/23, Award of 29 June 2012 (“*RDC v. Guatemala*”), ¶¶ 278-279 (**Exh. EL-293**); *Rumeli v. Kazakhstan*, Award of 29 July 2008, ¶ 769 (**Exh. CL-158**).

¹⁰²⁴ S. Ripinsky and K. Williams, *Damages in International Investment Law* (British Institute of International and Comparative Law, 2008), p. 370 (**Exh. EL-398**).

¹⁰²⁵ Rejoinder, ¶ 624.

¹⁰²⁶ Fair Links ER3, ¶ 143.

¹⁰²⁷ *Ibid.*

¹⁰²⁸ Rejoinder, ¶ 626.

¹⁰²⁹ *Id.*, ¶¶ 602, 629-645.

¹⁰³⁰ *Id.*, ¶¶ 602, 646-659.

ConocoPhillips' after-tax cost of debt calculated over the 2009-2013 financial years (estimated at 2.11%), or (ii) the US prime rate (3.25%), which, to Ecuador, is equivalent to the "cost incurred by a claimant party to borrow an amount equivalent to the potential compensation of which they were deprived on the US financial markets".¹⁰³¹

529. As regards compound *versus* simple interest, Ecuador submits that both customary international law and Ecuadorian law require that any award of interest should accrue on a simple interest basis.¹⁰³² Ecuador argues that this is the position reflected in the commentaries to the ILC Articles,¹⁰³³ as well as the position adopted by several arbitral tribunals.¹⁰³⁴ Ecuador denies that there is a trend towards the application of compound interest, and submits that compound interest should only be awarded when it is appropriate in the circumstances, which is not the case here.¹⁰³⁵
530. In addition, Ecuador notes that Ecuadorian law prohibits compound interest,¹⁰³⁶ noting that the tribunal in *Duke Energy v. Ecuador* held that the prohibition of compound interest in Ecuadorian law had to be enforced despite the fact that the resolution of the dispute hinged on international law.¹⁰³⁷ Finally, Ecuador clarifies that, in accordance with Ecuadorian law, it is limiting its claim for interest on the amounts sought under its counterclaims to simple interest.¹⁰³⁸

¹⁰³¹ *Id.*, ¶ 628.

¹⁰³² CM, ¶¶ 559-563; Rejoinder, ¶¶ 911- 917.

¹⁰³³ CM, ¶ 560, citing: the ILC Articles, Part Two, p. 108, point (8) (**Exh. EL-249**).

¹⁰³⁴ CM, ¶ 561, citing: *CME v. Czech Republic*, Award of 14 March 2003, ¶ 644 (**Exh. CL-174**); *Desert Line Projects LLC v. Republic of Yemen*, ICSID Case No. ARB/05/17 ("*Desert Line v. Yemen*"), Award of 6 February 2008, ¶¶ 294-295 (**Exh. EL-294**); and *Autopista Concesionada de Venezuela, C.A. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/00/5 ("*Aucoven v. Venezuela*"), Award of 23 September 2003, ¶ 396 (**Exh. EL-295**).

¹⁰³⁵ Rejoinder, ¶¶ 912-913, citing: T. Hart, *Study of Damages in International Center for the Settlement of Investment Disputes Cases*, Credibility International, 1st Ed., June 2014, pp. 18-19 (**Exh. EL-417**); *Compañía del Desarrollo de Santa Elena, S.A. v. The Republic of Costa Rica*, ICSID Case No. ARB/96/1 ("*Santa Elena v. Costa Rica*"), Award of 17 February 2000, ¶¶ 103-104 (**Exh. CL-175**); *CME v. Czech Republic*, Final Award of 14 March 2003, ¶ 647 (**Exh. CL-174**); and *Franck Charles Arif v. Republic of Moldova*, ICSID Case No. ARB/11/23 ("*Arif v. Moldova*"), Award of 8 April 2013, ¶¶ 616-620 (**Exh. EL-416**).

¹⁰³⁶ CM, ¶ 562, citing: Article 308 of the Ecuadorian Constitution, Articles 1575 and 2113 of the Ecuadorian Civil Code, and Article 561 of the Ecuadorian Commercial code.

¹⁰³⁷ CM, ¶ 561, citing: *Duke v. Ecuador*, Award of 18 August 2008, ¶ 457 (**Exh. EL-46**).

¹⁰³⁸ CM, ¶ 563.

c. Analysis

531. As it has already anticipated, a majority of the Tribunal agrees with Burlington that past cash flows must be brought to present value through the application of an actualization or interest rate. This is a consequence of the principle of full reparation: in order to make Burlington whole, cash flows that would have accrued between the date of the expropriation and the date of valuation must be actualized on the date of the valuation in order to reflect the time value of money.
532. That being said, the Tribunal agrees with Ecuador that the WACC is not necessarily the appropriate actualization rate for this purpose. The WACC contains an element of cost of capital that allows cash flows to reflect the time value of money, but it also includes a reward for all the risks involved in doing business. The WACC is thus appropriate to discount *future* cash flows, because these flows are adjusted to reflect the time value of money (i.e., that 100 dollars in the future are worth less today) and to reflect the risks of doing business due to the fact that the operator's profit-making capacity is not certain.
533. By contrast, using the WACC as an actualization rate for *past* cash flows could overcompensate Burlington. While the WACC contains an element of cost of capital that would allow past cash flows to reflect the time value of money (i.e., that 100 dollars in the past are worth more today), it also contains an element of reward for risk that is inappropriate here because Burlington no longer bears the risk of operation. As Fisher and Romaine conclude in the paper quoted below, a claimant is entitled to interest compensating for the time value of money, but not for risk:

“The violation took place at a single point of time, time 0. It involved the destruction of an asset whose value at that time is clearly known as Y. Hence, had damages been assessed at time 0, an award of Y would have made the plaintiff whole. Unfortunately, however, the processes of justice take time, and the award is to be made at time $t > 0$. How (if at all) should the plaintiff be compensated for this fact?

At first glance, it may seem that the plaintiff is entitled to interest at its opportunity cost of capital, r . After all, had the plaintiff received Y at time 0, it would have invested the funds, receiving presumably its average rate of return. Hence, by time t , the plaintiff would have had Ye^{rt} , so this is the amount that would make it whole. Another version of this argument would compensate the plaintiff at the rate it reasonably expected to earn on the destroyed asset.

The fallacy here (in either version) has to do with risk. The plaintiff's opportunity cost of capital includes a return that compensates the plaintiff for the average risk it bears. But, in depriving the plaintiff of an

asset worth Y at time 0, the defendant also relieved it of the risks associated with investment in that asset. The plaintiff is thus entitled to interest compensating it for the time value of money, but it is not also entitled to compensation for the risks it did not bear. Hence prejudgment interest should be awarded at the risk-free interest rate, $r^* < r$.¹⁰³⁹

534. This was also the approach taken by Perenco's expert, Prof. Kalt also of Compass Lexecon, in connection with Perenco's claim for past cash flows against Ecuador. After explaining that future cash flows must be discounted at the WACC, Dr. Kalt refers to the actualization of past cash flows as follows:

"[P]ast amounts (such as revenue from additional wells that Perenco would have drilled) that would have accrued to Perenco prior to the date of valuation but for Ecuador's unlawful actions must also be accounted for and brought forward to December 1, 2014 in order to reflect the time value of money between when those damages were incurred and the date of valuation. If Perenco is to be kept economically whole, the amount of the final damages awarded should reflect the foregone value of not having access to that money for the period between when the amounts accrue and the evaluation date.

Unlike the discount rate used to discount the stream of future cash flows discussed above, which must be high enough to compensate for the level of non-diversifiable project-related risk, the rate used to compensate Perenco for the time value of these monies is lower. This reflects the fact that, while Perenco is forgoing the time value of money on any damages award while waiting for such an award, the award amount is not being invested by Perenco in any risky endeavour that would require compensation for risk. Accordingly, the interest factor to be applied to the historical period up to the date of actual payment of damages to Perenco is a relatively low and risk-free rate of interest".¹⁰⁴⁰

535. The Tribunal considers that this is the correct approach here. The Tribunal will thus apply a reasonable risk-free commercial rate. Ecuador has proposed LIBOR plus two percent for three month borrowings, and the Tribunal agrees. The Tribunal also notes that this has been the rate used by many investment tribunals in recent years.¹⁰⁴¹

¹⁰³⁹ F. M. Fisher and R. C. Romaine, "Janis Joplin's Yearbook and the Theory of Damages", *Journal of Accounting Auditing & Finance*, Volume 5, No. 1 (Winter 1990), p. 146 (**Exh. EL-291**).

¹⁰⁴⁰ Expert Report on Quantum of Joseph P. Kalt dated 19 December 2014, in the case of *Perenco Ecuador Limited v. The Republic of Ecuador*, ICSID Case No. ARB/08/6, ¶¶ 126-127, (**Exh. EL-399**).

¹⁰⁴¹ See, for instance: *Lemire v. Ukraine*, Award of 28 March 2011, ¶¶ 352 and 356 (**Exh. EL-279**); *PSEG Global, v. Turkey*, Award of 19 January 2007, ¶¶ 345-348 (**Exh. CL-96**); *Sempra v. Argentina*, Award of 28 September 2007, ¶ 486 (**Exh. CL-80**); *Enron v. Argentina*,

536. Having selected the applicable rate, the Tribunal must decide whether interest must be compounded or not. For that, it must first determine the law governing this issue, namely whether it is Ecuadorian or international law. At paragraphs 177 to 179 of the Decision on Liability and as reiterated in paragraph 44 above, the Tribunal has concluded that it will apply (i) first and foremost the BIT and, if need be, (ii) Ecuadorian law and those rules of international law “as may be applicable”. It further clarified that it is for the Tribunal to determine whether an issue is subject to national or international law, being understood that a party may not rely on its internal law to avoid an obligation under international law.
537. In the Tribunal’s view, it is not appropriate to apply national law to the issue of compound interest. The application of national law may be appropriate for contract claims, but not for a claim of a breach of the BIT such as the present claim. The responsibility of a State arising from an unlawful expropriation is governed by international law, triggering the State’s obligation to make full reparation for the injury caused, including compensation for the time value of money. As a result, whether interest should be simple or compounded is a matter to be addressed under international law.¹⁰⁴²
538. The cases cited by the Parties support this conclusion. In three of the cases cited by Ecuador, *Desert Line v. Yemen*, *Aucoven v. Venezuela* and *Duke Energy v. Ecuador*, the application of interest related to damages arising from contract claims. As a result, both in *Aucoven* and *Duke Energy*, the tribunals found that it was appropriate to apply national law to the question of compound interest, and thus favored the award of simple interest.¹⁰⁴³ In *Duke Energy*, the tribunal specifically noted that “compound interest may be awarded for expropriation but not for contract

Award of 22 May 2007, ¶ 452 (**Exh. CL-81**); *Continental Casualty v. Argentina*, Award of 5 September 2008, ¶ 314 (**Exh. EL-74**); *El Paso v. Argentina*, Award of 31 October 2011, ¶ 745 (**Exh. CL-249**); *National Grid v. Argentina Republic*, Award of 3 November 2008, ¶ 294 (**Exh. CL-251**); *RDC v. Guatemala*, Award of 29 June 2012, ¶¶ 278-279 (**Exh. EL-293**); *Rumeli v. Kazakhstan*, Award of 29 July 2008, ¶ 769 (**Exh. CL-158**).

¹⁰⁴² See also, for instance: *Quiborax v. Bolivia*, Award of 16 September 2015, ¶ 520.

¹⁰⁴³ *Aucoven v. Venezuela*, Award of 23 September 2003, ¶¶ 105, 394-395 (**Exh. EL-295**) and *Duke v. Ecuador*, Award of 18 August 2008, ¶ 457 (**Exh. CL-41**). In *Desert Line*, the tribunal provided no reason for its decision to award simple interest. See: *Desert Line v. Yemen*, ICSID Case No. ARB/05/17, Award of 6 February 2008, ¶¶ 294-295 (**Exh. EL-294**).

claims”.¹⁰⁴⁴ Other arbitral tribunals have also distinguished between disputes arising from treaty breaches and those arising from contract breaches.¹⁰⁴⁵

539. The Tribunal will thus apply international law to determine whether interest must be simple or compounded. In the Tribunal’s view, this question must be answered by reference to the standard of compensation. As this standard is the customary international law principle of full reparation, the interest awarded should aim to fully repair the time value of money lost by the fact that Burlington was deprived of cash flows due to it. Compound interest, which has become the standard to remunerate the use of money in modern finance, comes closer to achieving this purpose than simple interest. Indeed, being deprived of the use of the money to which it was entitled, a creditor may have to borrow funds or may forego investments, for which it would pay or earn compound interest. As noted in *Continental Casualty*:

“[C]ompound interest reflects economic reality in modern times, and the hesitation may be directed more at extreme rates [...] rather than compound interest in principle. The time value of money in free market economies is measured in compound interest; simple interest cannot be relied upon to produce full reparation for a claimant’s loss occasioned by delay in payment; and under many national laws recently enacted, an arbitration tribunal is now expressly empowered to award compound interest”.¹⁰⁴⁶

540. Ecuador has pointed out that, according to the Commentary to ILC Article 38, “[t]he general view of courts and tribunals has been against the award of compound interest”.¹⁰⁴⁷ Given the recent developments in international investment law, the Tribunal cannot agree. As noted in *Occidental II*, while “[t]he traditional norm was to award simple interest [...] this practice has changed and, in fact, most recent awards provide for compound interest”.¹⁰⁴⁸ Indeed, a significant number of arbitral tribunals have adopted the view that compound interest achieves full reparation better than simple interest.¹⁰⁴⁹ This Tribunal is of the same view, and will thus award compound interest.

¹⁰⁴⁴ *Duke Energy v. Ecuador*, Award of 18 August 2008, ¶ 432 (**Exh. CL-41**).

¹⁰⁴⁵ See, for instance: *Santa Elena v. Costa Rica*, Award of 17 February 2000, ¶ 97 (**Exh. CL-175**).

¹⁰⁴⁶ *Continental Casualty v. Argentina*, ¶ 309, Award of 5 September 2008 (**Exh. CL-270**).

¹⁰⁴⁷ Commentary to ILC Article 38, ¶ 8.

¹⁰⁴⁸ *Occidental v. Ecuador II*, Award of 5 October 2012, ¶ 840 (**Exh. CL-240**).

¹⁰⁴⁹ See, for instance: *Continental Casualty v. Argentina*, Award of 5 September 2008, ¶ 313 (**Exh. CL-270**) (finding that “full reparation to Continental should include compound interest on the compensation due from but unpaid by Argentina”), and *Occidental v. Ecuador II*,

541. Burlington has submitted that compounding should be carried out on a yearly basis, which the Tribunal considers reasonable.
542. For the reasons stated above, past cash flows (i.e., cash flows accrued from the date of the expropriation to the date of valuation., i.e. 31 August 2016) will be actualized at a rate of LIBOR plus two percent from the date on which they should have accrued and until 31 August 2016, compounded on an annual basis. This actualization rate has been applied by the Tribunal to all past cash flows through the Updated Model. It is thus already included in the damage amount computed through the model.

5.3.4 Computation of lost cash flows

543. Having applied the assumptions set out above to the Updated Model, Burlington's lost profits are quantified at USD 383,041,068 on a 31 August 2016 date of valuation. As anticipated in Section VII.D.5.2.1 above, to account for the deferral of new drilling in Block 21, the Tribunal will subtract the part of the cash flows that can be attributed to new wells in the last 1.5 years of operation of Block 21, i.e. from January 2020 to June 2021. The Tribunal has calculated that 15% of these cash flows could have been attributed to new wells, for a total of USD 3,238,801. As a result, the Tribunal quantifies Burlington's lost profits at **USD 379,802,267**.

6. Burlington's claim that the Award be protected against taxation

544. Burlington notes that it has calculated its damages net of Ecuadorian tax. As a result, "any taxation by Ecuador of the Award would result in Burlington being effectively taxed twice for the same income".¹⁰⁵⁰ Citing *ConocoPhillips v. PDVSA*, Burlington argues that this would undermine the principle of full reparation.¹⁰⁵¹
545. As a result, Burlington requests the Tribunal to declare that:
- i. "The Award is net of all applicable Ecuadorian taxes";

Award of 5 October 2012, ¶ 840 (**Exh. CL-240**) (holding that awarding compound interest "accords with the *Chorzów* principle as an award of compound interest will usually reflect the actual damages suffered"). See also: *El Paso v. Argentina*, Award of 31 October 2011, ¶ 745; *Vivendi v. Argentina II*, Award of 20 August 2007, ¶ 9.2.6; *Wena v. Egypt*, Award of 8 December 2000, ¶ 129.

¹⁰⁵⁰ Mem., ¶ 145.

¹⁰⁵¹ *Ibid.*, citing: *Phillips Petroleum Company Venezuela Limited & ConocoPhillips Petrozuata B.V. v. Petróleos de Venezuela, S.A.*, ICC Case No.16848/JRF/CA (C-16849/JRF), Award of 17 September 2012, ¶ 313 (**Exh. CL-275**).

- ii. “Ecuador may not tax or attempt to tax the Award”; and
- iii. “Burlington has no further taxation obligations to Ecuador”.¹⁰⁵²

546. Ecuador does not engage with this claim, but it appears to accept that Burlington’s damages are calculated net of taxes (indeed, both Parties’ experts’ calculate net cash flows after the application of Ecuadorian income tax and labor participation tax).¹⁰⁵³

547. It is undisputed that the cash flows have been computed net of income and labor participation tax. As a result, the Tribunal agrees that the amounts awarded to Burlington in this Award are net of income and labor participation taxes, and that Ecuador may not impose or attempt to impose these taxes on the Award. By contrast, the Tribunal is unable on the record before it to make a general declaration about “all taxes”, as Burlington has not sufficiently substantiated this request.

E. MUST COMPENSATION BE REDUCED TO ACCOUNT FOR BURLINGTON’S ALLEGED CONTRIBUTION TO ITS OWN LOSSES?

548. The Tribunal will now address Ecuador’s defense that any recovery by Burlington must reflect Burlington’s contribution to its own losses, starting with Ecuador’s position.

1. Ecuador’s position

1.1 As a matter of law, compensation must reflect the injured party’s contribution to its own losses

549. Ecuador contends that, as a matter of law, compensation must be excluded (or, at the very least, significantly reduced) if the alleged victim contributed to its loss.¹⁰⁵⁴ Relying on Article 39 of the ILC Articles, Ecuador maintains that “any compensation for an internationally wrongful act must reflect any intentional, reckless or negligent conduct of the injured party that contributed to the losses in question”.¹⁰⁵⁵ Ecuador notes that the principle of contributory negligence is recognized by the majority of

¹⁰⁵² Mem., ¶ 146.

¹⁰⁵³ Compass Lexecon ER1, ¶ 53; CM, ¶ 494; Fair Links ER2, ¶ 121.

¹⁰⁵⁴ CM, ¶¶ 503-508.

¹⁰⁵⁵ CM, ¶ 503, referring to: ILC Article 39.

legal systems (including Ecuador)¹⁰⁵⁶ and has been endorsed by arbitral tribunals¹⁰⁵⁷ and scholars.¹⁰⁵⁸

550. According to Ecuador, an investor's conduct may "fatally sever[] the chain of causation",¹⁰⁵⁹ in which case compensation should be excluded. Even where the causal chain is not broken, the fact that the victim by its behavior contributed to the harm it suffers must lead to a reduction of the compensation awarded.

551. Ecuador contends that Burlington's attempts to narrow the effect of the principle of contributory negligence must be rejected. Admitting *arguendo* that Ecuador has unlawfully expropriated Burlington's investment, this does not preclude a finding of contributory negligence.¹⁰⁶⁰ Nor is this principle limited to cases in which the claimant's behavior was unlawful or prohibited; it also applies when it was merely imprudent. Finally, all 11 cases cited by Ecuador support the proposition that contributory negligence must be factored in the calculation of compensation.¹⁰⁶¹

¹⁰⁵⁶ CM, ¶ 506, referring to: Article 2230 of the Ecuadorian Civil Code

¹⁰⁵⁷ CM, ¶ 506, referring to: *MTD v. Chile*, Award of 25 May 2004 (**Exh. CL-92**); *Azurix v. Argentina Republic*, Award of 14 July 2006 (**Exh. EL-25**); *RosInvestCo UK Ltd. v. The Russian Federation*, SCC Case No. V079/2005, Award of 12 September 2010 (**Exh. CL-168**); *Alex Genin, Eastern Credit Limited, Inc. and A.S. Baltoil v. The Republic of Estonia*, ICSID Case No. ARB/99/2 ("Genin v. Estonia"), Award of 25 June 2000 (**Exh. CL-130**); *Goetz v. Burundi*, Award of 21 June 2012 (**Exh. EL-282**); *Occidental v. Ecuador II*, Award of 5 October 2012 (**Exh. CL-240**); *Micula v. Romania*, Award of 11 December 2013 (**Exh. EL-248**); *Gemplus v. Mexico*, Award of 16 June 2010 (**Exh. EL-243**); *CME v. Czech Republic*, Partial Award of 13 September 2001 (**Exh. CL-93**); *Enron v. Argentina*, Award of 22 May 2007 (**Exh. CL-81**); *Anatolie Stati, Gabriel Stati, Ascom Group S.A. and Terra Raf Trans Trading Ltd v. Republic of Kazakhstan*, SCC Case No. V116/2010, Award of 19 December 2013, ¶ 1331 (**Exh. EL-258**).

¹⁰⁵⁸ CM, ¶ 206, referring, among others, to: A. Moutier-Lopet, "Contribution to the Injury" in *The Law of International Responsibility*, Oxford Commentaries on International Law (2010), pp. 642-643, (**Exh. EL-283**); I. Marboe, *Calculation of Compensation and Damages in International Investment Law* (Oxford: Oxford University Press, 2009), pp. 120-121 (**Exh. EL-284**); S. Ripinsky and K. Williams, *Damages in International Investment Law*, British Institute of International and Comparative Law (2008) (extracts), pp. 314-319 (**Exh. EL-244**); S. Ripinsky, "Assessing Damages in Investment Disputes: Practice in Search of Perfect", 5 *Journal of World Investment & Trade* (2009), pp. 19-21 (**Exh. EL-285**); T.W. Wälde and B. Sabahi, "Compensation, Damages and Valuation in International Investment Law", TDM, Vol. 4, Issue 6, November 2007, p. 38 (**Exh. EL-286**); B. Bollecker-Stern, *Le préjudice dans la théorie de la responsabilité Internationale* (Paris: Pedone, 1973), p. 310 (**Exh. EL-287**).

¹⁰⁵⁹ CM, ¶ 508, citing: *Micula v. Romania*, Award of 11 December 2013, ¶ 1154.

¹⁰⁶⁰ Rejoinder, ¶¶ 823, 844-845.

¹⁰⁶¹ *Id.*, ¶¶ 826-830.

1.2 As a matter of fact, Burlington materially contributed to its own losses

552. Ecuador alleges that Burlington’s behavior broke the chain of causation or at least significantly contributed to the losses.¹⁰⁶² It argues that “Burlington took a number of willful, reckless, or negligent steps that exposed it to a serious risk that Ecuador would intervene in Blocks 7 and 21, setting aside whether or not such intervention was appropriate under the circumstances (which it was)”.¹⁰⁶³ Specifically, Ecuador asserts that, if Burlington had paid its mandatory Law 42 dues and not suspended operations¹⁰⁶⁴ (Section 1.2.1 below), or not impeded the Consortium’s negotiations with Ecuador¹⁰⁶⁵ (Section 1.2.2 below), Ecuador would not have been forced to take over Blocks 7 and 21. In any event, if the Tribunal finds that it has jurisdiction over Burlington’s claim for past Law 42 dues, Burlington’s behavior during the *coactiva* proceedings prevents compensation for the market value of the oil seized (Section 1.2.3 below).

1.2.1 Burlington contributed to its own losses by ceasing to pay Law 42 dues and suspending operations

553. Ecuador argues that the Tribunal “cannot overlook the cause-effect relationship between Burlington’s failure to pay its Law 42 dues, the *coactiva* process, the abandonment of the Blocks and the declaration of *caducidad*. Had Burlington paid its Law 42 dues, the Consortium would have continued to operate the Blocks and the present Arbitral Tribunal, the jurisdiction of which is limited to alleged Treaty breaches, would not be considering Burlington’s compensation”.¹⁰⁶⁶ When Burlington ceased paying the Law 42 dues, “it manufactured a crisis which [...] was entirely unnecessary”.¹⁰⁶⁷ Burlington knew or should have known that ceasing to pay Law 42 dues would force Ecuador to commence *coactiva* proceedings against it. It should also have known that the “inevitable consequence” of deciding to suspend operations would be State intervention, given the State’s constitutional duty to ensure the continuity of oil operations and the risk of damage that the suspension

¹⁰⁶² CM, ¶¶ 510-534.

¹⁰⁶³ *Id.*, ¶ 511.

¹⁰⁶⁴ *Id.*, ¶¶ 513-528.

¹⁰⁶⁵ *Id.*, ¶¶ 529-533.

¹⁰⁶⁶ *Id.*, ¶ 514.

¹⁰⁶⁷ *Id.*, ¶ 519.

entailed.¹⁰⁶⁸ Ecuador was thus left with no choice but to intervene. Even if the Tribunal does not reconsider its decision that the intervention constituted an expropriation, “it should at the very least take into account the recently disclosed evidence to hold that Burlington’s behavior was a contributory cause of its loss”.¹⁰⁶⁹

554. Contrary to its contentions, Burlington had no justification to cease paying the Law 42 dues. First, the Tribunal refused to find that Law 42 was expropriatory and that the expropriation had been carried out in a manner that was unfair, inequitable, arbitrary or in contravention of Ecuador’s obligations. As a result, Ecuador’s application of Law 42 to Burlington was not an internationally wrongful act. Even if it had been a contractually wrongful act, Burlington could not rely on it because the Tribunal has no jurisdiction over contract claims. In any event, Ecuador’s contractual breach did not substantially deprive the contract of value.¹⁰⁷⁰
555. Second, the payment of taxes is a mandatory legal obligation. Like the claimants in *Micula*, Burlington exposed itself to the consequences of failing to comply with a legal obligation.¹⁰⁷¹
556. Third, Burlington cannot argue that its failure to pay the Law 42 dues was justified by the Tribunal’s recommendation of provisional measures in PO1, which is dated 1 June 2009, when Burlington stopped its payments one year earlier. In any event, the Tribunal’s recommendation in PO1 is not binding on Ecuador. Moreover, that order was rendered on the Tribunal’s *prima facie* acquaintance with the case, and was superseded by the Decision on Liability, which held that neither Law 42 nor the *coactiva* measures were expropriatory.¹⁰⁷²
557. Fourth, the Consortium was negligent in not submitting to Ecuador an economic analysis demonstrating that Law 42 had affected the economy of the PSCs. While the Tribunal refused to find that the Consortium’s “pledge” to submit these figures was a condition precedent, it remains that the Consortium breached this pledge and acted negligently.¹⁰⁷³

¹⁰⁶⁸ *Id.*, ¶ 525.

¹⁰⁶⁹ *Ibid.*

¹⁰⁷⁰ *Id.*, ¶¶ 514-518; Rejoinder, ¶¶ 835-838, 849-862.

¹⁰⁷¹ CM, ¶ 526; Rejoinder, ¶ 839.

¹⁰⁷² Rejoinder, ¶¶ 839-840.

¹⁰⁷³ *Id.*, ¶¶ 846-848.

558. Ecuador also denies that Burlington's decision to suspend operations in the Blocks was justified.¹⁰⁷⁴ Ecuador has invited the Tribunal to reconsider its findings on these facts in its Motion for Reconsideration, but "[e]ven accepting, *quod non*, that Ecuador's intervention in Blocks 7 and 21 constituted an expropriation, the manner in which the Consortium proceeded to first threaten to and then suspend its operations, and the fact that it did not resume operations after having been invited by Ecuador to do so clearly contributed to its losses".¹⁰⁷⁵ Even if Burlington had the right to suspend operations (which Ecuador denies), Burlington had the obligation to exercise that right prudently, which it failed to do. Relying on RPS's expert opinion, Ecuador contends that "Burlington's threatened suspension created four significant types of risk for Blocks 7 and 21: (i) reservoir damage; (ii) mechanical damage; (iii) environmental damage; and (iv) economic loss".¹⁰⁷⁶ The newly disclosed Suspension Plan shows that Burlington was aware of these risks and of the risk that Ecuador would intervene. Burlington nonetheless proceeded with the suspension and failed to resume operations in "reckless disregard" of these risks.¹⁰⁷⁷ This decision was "fully disproportionate in the circumstances" because it meant "putting the entire operation underlying the [PSCs] at risk". It was also taken "in blatant disregard of the Consortium's obligation to first seek the Tribunal's permission to suspend operations".¹⁰⁷⁸ The only explanation for Burlington's decision to abandon the Blocks was that it was part of Burlington's "cynical self-expropriation, exit strategy".¹⁰⁷⁹
559. On this basis, Ecuador submits that the Tribunal should deny Burlington recovery altogether or at the very least substantially reduce any compensation to which it might be entitled. Ecuador argues that Burlington's conduct is "far more reprehensible" than the behavior that other tribunals have considered. As in *Micula*, the Tribunal should hold that Burlington's failure to comply with its tax obligations excludes Ecuador's liability. Alternatively, it should hold that such failure was a bad

¹⁰⁷⁴ *Id.*, ¶¶ 849-862.

¹⁰⁷⁵ *Id.*, ¶ 849.

¹⁰⁷⁶ *Id.*, ¶ 851, citing: RPS ER1, ¶ 30.

¹⁰⁷⁷ Rejoinder, ¶ 853.

¹⁰⁷⁸ *Id.*, ¶ 854.

¹⁰⁷⁹ *Id.*, ¶ 861, citing: email from A. Martinez to M. Fonseca of 24 June 2009 (**Exh. E-200**).

or imprudent business decision as in *Enron*, *MTD*, *Azurix*, *RosInvestCo*, *Anatolie Stati*, and *Goetz*.¹⁰⁸⁰

1.2.2 Burlington contributed to its own losses by boycotting negotiations with the State

560. For Ecuador, consistent with practice and international law, Burlington had a good faith duty to negotiate with the State when oil prices increased. This duty arises from the principle of good faith and trade usages, which Burlington itself invokes in connection with the extension of Block 7. Burlington cannot argue that there is a global practice to renegotiate contracts to extend their term (*quod non*) and deny at the same time that there is a practice to renegotiate contracts in light of changed circumstances. Similarly, Burlington had a duty not to withdraw from the negotiations.¹⁰⁸¹
561. In violation of this duty, Burlington boycotted the negotiations and prevented Perenco from agreeing fairer terms with the State. But for Burlington's boycott, the Consortium would have continued operating the Blocks and would have entered into service contracts for Blocks 7 and 21 with Ecuador, "and this case would be over".¹⁰⁸² Rather than negotiating in good faith, says Ecuador, Burlington remained focused on its self-expropriation exit strategy. It in particular refused to sign the Draft Transitory Agreements negotiated by Perenco and threatened Perenco against entering them. Burlington also wrongfully terminated negotiations after Perenco had executed the March and October Transitory Agreements. While the former contained reservations of rights, the latter did not and were duly executed.¹⁰⁸³
562. In boycotting the negotiations with the State, the Respondent submits, citing *MTD*, that Burlington failed to "safeguard its own interest".¹⁰⁸⁴ With reference to *Enron*,

¹⁰⁸⁰ Rejoinder, ¶¶ 863-870.

¹⁰⁸¹ CM, ¶ 529 and Rejoinder, ¶¶ 875-881, 888-891, citing: Fair Links ER1, ¶ 6, *Inceysa Vallisoletana S.L. v. Republic of El Salvador*, ICSID Case No. ARB/03/26 ("*Inceysa v. El Salvador*"), Award of 2 August 2006, ¶ 231 (**Exh. EL-131**); *Suez, Sociedad General de Aguas de Barcelona, S.A. and Vivendi Universal, S.A. v. Argentine Republic*, ICSID Case No. ARB/03/19 ("*Suez v. Argentina*"), Separate Opinion of Arbitrator Pedro Nikken attached to the Decision on Liability of 30 July 2010, ¶¶ 47-48 (**Exh. EL-113**); United Nations Commission on Transnational Corporations: Draft U.N. Code of Conduct of Transnational Corporations, 23 I.L.M. 626 (1984), ¶ 11 (**Exh. EL-132**); Pérez Loose ER, ¶¶ 201-216.

¹⁰⁸² Rejoinder, ¶ 834.

¹⁰⁸³ CM, ¶¶ 530-532, referring to: **Exhs. E-558; E-559; E-138; E-139; E-141; E-142; C-46**; Rejoinder, ¶¶ 883-894.

¹⁰⁸⁴ CM, ¶ 533 and Rejoinder, ¶ 893 referring to: *MTD v. Chile*, Decision on Annulment of 21 March 2007, ¶ 101 (**Exh. CL-87**).

Ecuador adds that such conduct was also unreasonable and contrary to industry standards.¹⁰⁸⁵

1.2.3 Burlington contributed to its own losses due to its behavior during the *coactiva* proceedings

563. In any event, if the Tribunal considers that it has jurisdiction over Burlington's claim for "historical damages", which the Tribunal understands to refer to the claim for past Law 42 dues and seizures, Ecuador submits that compensation for such claim should be reduced to take into account Burlington's threats to take legal action against any company that purchased the oil auctioned in the *coactiva* process.¹⁰⁸⁶ The Tribunal has already found that only Burlington can be blamed for the failure of other bidders to participate in the auctions and that, as a result, "the compounded effects of the *coactiva* measures, over and above the effects of Law 42 at 99%, are not attributable to Ecuador".¹⁰⁸⁷ Consequently, Burlington can only claim the value at which the oil was actually sold, as opposed to its market value.¹⁰⁸⁸
564. Burlington's argument that Ecuador ignores the principles of a "but for analysis" is patently wrong: even if the Tribunal had jurisdiction over Burlington's contract claims or finds these claims admissible, the compounded effects of the *coactiva* proceedings were not caused by the expropriation, as they relate to debts that accrued before the expropriation took place.¹⁰⁸⁹

2. Burlington's position

565. Burlington denies that it contributed to its own losses and submits that it was entitled to insist on its rights throughout the course of the dispute giving rise to this arbitration.
566. While Burlington recognizes that compensation may be reduced if a victim contributed to its own loss, it argues that Ecuador misapplies the principle of contributory fault. According to the Claimant, "[t]here is no authority for Ecuador's extraordinary view that compensation should be reduced to punish Burlington for

¹⁰⁸⁵ Rejoinder, ¶ 894, citing: *Enron v. Argentina*, Award of 22 May 2007, ¶ 373 (**Exh. CL-81**).

¹⁰⁸⁶ CM, ¶¶ 535-539; Rejoinder, ¶¶ 896-903.

¹⁰⁸⁷ CM, ¶ 538, citing: DoL ¶ 477.

¹⁰⁸⁸ CM, ¶ 539.

¹⁰⁸⁹ Rejoinder, ¶¶ 897-903.

lawful conduct in defense of its *lawful* rights against Ecuador’s *unlawful* conduct”.¹⁰⁹⁰
None of the 11 cases cited by Ecuador supports this contention.¹⁰⁹¹

567. On the facts, Burlington denies having engaged in any wrongful conduct that could justify a reduction of the compensation owed to it. Burlington’s decisions to pay Law 42 amounts into a segregated account (i) and suspend operations (ii) were fully justified, and Burlington behaved reasonably and in good faith during its negotiations with Ecuador (iii).
568. In respect of (i), Burlington rejects the argument that it “manufacture[d] a crisis”. It was Ecuador who failed to comply with the PSCs, violated the Tribunal’s order, and ultimately its own law.¹⁰⁹² In particular, it was Ecuador’s refusal to establish an escrow account for the payment of Law 42 taxes and to discontinue the *coactiva* proceedings in violation of the Tribunal’s order that escalated the dispute.
569. In connection with (ii), while Ecuador recognizes Burlington’s right to suspend production, it wrongly argues that Burlington failed to exercise that right prudently.¹⁰⁹³ The Tribunal already held that Burlington could suspend operations for up to 30 days regardless of just cause and that there would have been just cause if Burlington had suspended for a longer period.¹⁰⁹⁴ In addition, stresses Burlington, the Tribunal was not “persuaded that the suspension posed such a significant risk of damage as to justify Ecuador’s immediate intervention”.¹⁰⁹⁵ Indeed, Burlington has established that there was no material risk of harm “in suspending operations in the manner in which the Consortium intended”.¹⁰⁹⁶ In any event, Ecuador’s argument that “Burlington should be held contributorily negligent because the good faith, justified exercise of its rights provoked a breach of domestic and international law by Ecuador” is absurd and unsupported by authority.¹⁰⁹⁷

¹⁰⁹⁰ Reply, ¶ 259.

¹⁰⁹¹ *Id.*, ¶ 250. Burlington alleges that, of the 11 cases, 4 discussed contributory fault but rejected it; 3 reduced damages because the investor had left itself legally unprotected against certain risks or had overpaid for its investment; 3 involved illegal conduct by the investor; and 1 dismissed all claims because of the investor’s wrongful conduct.

¹⁰⁹² *Id.*, ¶ 251.

¹⁰⁹³ *Id.*, ¶ 254.

¹⁰⁹⁴ *Id.*, ¶ 255, referring to: DoL, ¶¶ 513, 517.

¹⁰⁹⁵ Reply, ¶ 255, referring to: DoL, ¶ 519.

¹⁰⁹⁶ Reply, ¶ 255.

¹⁰⁹⁷ *Id.*, ¶ 256.

570. With respect to (iii), the Claimant opposes Ecuador’s theory that Burlington contributed to its losses by boycotting negotiations. Contrary to what Ecuador contends, it had no obligation to renegotiate due to increasing oil prices. The Tribunal already held that the PSCs exposed Burlington to “full upside price risk”.¹⁰⁹⁸ Accordingly, “[i]t was not Burlington’s obligation to renegotiate the PSCs, but rather Ecuador’s obligation to apply a correction factor to the PSCs to absorb the effects of Law 42”.¹⁰⁹⁹ In any event, Burlington did not boycott negotiations with the Government. Mr. Martinez confirmed that Burlington had negotiated in good faith attending all meetings to the extent permitted.¹¹⁰⁰ Ultimately, it was simply unable to accept Ecuador’s proposals “because they were unreasonable and required Burlington to relinquish its rights under the PSCs without even knowing what rights it would obtain in return”.¹¹⁰¹
571. Finally, Burlington argues that its claim for historical damages should be awarded in full. Ecuador ignores the principles underlying a “but for” analysis: had Ecuador complied with its obligations under the contracts and international law, no *coactiva* auctions would have taken place and the Consortium would have sold its oil in the normal course of business at market price. Burlington must thus be compensated for that lost production at market price.¹¹⁰²

3. Analysis

572. It is undisputed that a claimant’s conduct may justify an exclusion or reduction of damages if it has contributed to the injury. Article 39 of the ILC Articles expressly provides:

“Article 39. Contribution to the injury

In the determination of reparation, account shall be taken of the contribution to the injury by wilful or negligent action or omission of the injured State or any person or entity in relation to whom reparation is sought.”

573. The Commentary to Article 39 goes on to explain that this provision “deals with the situation where damage has been caused by an internationally wrongful act of a

¹⁰⁹⁸ *Id.*, ¶ 258, referring to: DoL, ¶ 281.

¹⁰⁹⁹ Reply, ¶ 259.

¹¹⁰⁰ *Id.*, ¶ 260, referring to: Tr. Liability (Day 2) (ENG), 366:6-368:5, 369:22-370:3 (Direct, Martinez).

¹¹⁰¹ Reply, ¶ 260, referring to: Martinez WS5, ¶ 32.

¹¹⁰² Reply, ¶ 261.

State, which is accordingly responsible for the damage in accordance with articles 1 and 28, but where the injured State, or the individual victim of the breach, has materially contributed to the damage by some wilful or negligent act or omission”.¹¹⁰³ This provision also “recognizes that the conduct of the injured State, or of any person or entity in relation to whom reparation is sought, should be taken into account in assessing the form and extent of reparation”.¹¹⁰⁴ This is consistent with “the principle that full reparation is due for the injury – but nothing more – arising in consequence of the internationally wrongful act”, as well as with “fairness as between the responsible State and the victim of the breach”.¹¹⁰⁵

574. These provisions must be read in conjunction with ILC Article 31(1), according to which “[t]he responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act”. The Commentary to Article 31 clarifies that “unless some part of the injury can be shown to be severable in causal terms from that attributed to the responsible State, the latter is held responsible for all the consequences, not being too remote, of its wrongful conduct”.¹¹⁰⁶
575. According to Ecuador, Burlington’s conduct prior to the expropriation (specifically, its decision to stop paying Law 42 taxes, its threat of legal action against buyers in the *coactiva* auctions, its decision to suspend the operations, and its alleged “boycotting” of the negotiations with Ecuador) justifies the exclusion or reduction in damages.
576. The question is whether by engaging in the conduct that Ecuador complains of, Burlington contributed to the injury it suffered. The Tribunal notes in this respect that “[n]ot every action or omission which contributes to the damage suffered is relevant for this purpose. Rather, article 39 allows to be taken into account only those actions or omissions which can be considered as wilful or negligent, i.e. which manifest a lack of due care on the part of the victim of the breach for his or her own property or rights.¹¹⁰⁷ In addition, this willful or negligent act or omission must have “materially contributed to the damage”.¹¹⁰⁸

¹¹⁰³ ILC Articles with Commentaries, Commentary to Article 39, point (1).

¹¹⁰⁴ *Id.*, point (2).

¹¹⁰⁵ *Ibid.*

¹¹⁰⁶ ILC Articles with Commentaries, Commentary to Article 31, point (13).

¹¹⁰⁷ ILC Articles with Commentaries, Commentary to Article 39, point (5).

¹¹⁰⁸ *Id.*, point (1).

577. Ecuador first argues that Burlington’s failure to pay Law 42 taxes was the triggering factor for the chain of events that culminated with the expropriation of the Blocks. A majority of the Tribunal cannot agree. The triggering factor was the enactment of Law 42 and Ecuador’s failure to abide by its contractual tax absorption obligations.
578. It was in response to Ecuador’s contractual breaches that, from October 2008, Burlington stopped paying Law 42 taxes and instead deposited the relevant amounts in a segregated account. It is true that any person subject to the fiscal power of a state must pay its taxes,¹¹⁰⁹ unless they are declared unlawful or an agreement is entered into in this respect. Such an agreement was suggested in PO1, where the Tribunal recommended that the Parties should “confer and make their best efforts to agree on the opening of an escrow account at an internationally recognized financial institution [...]”,¹¹¹⁰ failing which they should report back to the Tribunal for a different ruling.¹¹¹¹ But the Parties did not agree.
579. More importantly, Burlington’s failure to pay Law 42 taxes cannot be said to have contributed to its injury. The injury suffered by Burlington and quantified in this Award is the loss of its investment and more particularly of its future profit-making potential. This damage was directly and decisively caused by Ecuador’s permanent physical takeover of the Blocks; Burlington’s conduct did not contribute to the magnitude of the loss or sever the chain of causation between the wrongful conduct and the injury.
580. Even if Burlington’s non-payment were considered to be one of the factors in the chain of events that eventually culminated in the takeover of the Blocks, it is neither the triggering factor (which as noted above was the enactment of Law 42 and Ecuador’s failure to abide by its tax absorption obligations), nor the decisive factor. In this respect, the Tribunal has asked itself the following question: had Burlington paid its taxes but not agreed to a service contract, can it be concluded with reasonable certainty that the expropriation would not have occurred? On the basis of the record and especially of the findings in the Decision on Liability,¹¹¹² this question cannot be answered in the affirmative. Accordingly, a majority of the

¹¹⁰⁹ *Micula v. Romania*, Award of 11 December 2013, ¶ 1151 (**Exh. EL-248**).

¹¹¹⁰ PO1, ¶ IV.1

¹¹¹¹ PO1, ¶ IV.6 (“If the Parties cannot agree on the opening of an escrow account within 60 days from notification of this Order, they shall report to the Arbitral Tribunal setting forth the status of their negotiations and the content of and reasons for their disagreements after which the Arbitral Tribunal will rule on the outstanding issues”).

¹¹¹² See, in particular: DoL, ¶¶ 311-315; 412-419.

Tribunal confirms that Burlington's failure to pay Law 42 taxes did not contribute to the injury it suffered through the takeover of the Blocks. Arbitrator Stern disagrees with this analysis.¹¹¹³

581. The next question is whether Burlington's threat that it would suspend operations contributed to its injury. Ecuador argues that Burlington's threat to suspend the proceedings violated PO1, where the Tribunal ordered Burlington not to make good on this threat.¹¹¹⁴ However, PO1 also ordered Ecuador to stop the *coactiva* proceedings, which Ecuador did not do,¹¹¹⁵ and to refrain from any action inducing Burlington to suspend operations.¹¹¹⁶ PO1 was revoked by PO2 in October 2009, but the Tribunal "specified that the Parties remain under a duty not to further aggravate the dispute".¹¹¹⁷ Ultimately, both Parties violated the Tribunal's recommendations, with the result that a reference to PO1 is unhelpful. In any event, Burlington's announcement that it would suspend operations came after Ecuador had significantly aggravated the dispute through the *coactiva* proceedings.

582. Nor can it be said that Burlington contributed to the injury by refusing to sign the Transitory Agreements. Under the test set out in ILC Article 39, the question is whether Burlington's conduct can be characterized as a manifest lack of due care for its own property rights which materially contributed to the damage caused. Burlington's refusal to sign the Transitory Agreements or otherwise come to an agreement with Ecuador cannot be characterized as a manifest breach of due care for its property rights. To the contrary, Burlington was trying to protect its contractual rights. As Mr. Moyes stated during the Hearing:

"Looking at the Burlington letters . . . I see a company under duress . . . And my understanding of the process of negotiation was Law 42 taxes you pay; you enter into a Transitory Agreement with the Government which is neither complete, it is not final; you continue

¹¹¹³ Arbitrator Stern disagrees with the analysis of the majority on the contributory negligence of Burlington, as she is convinced that the behavior of Burlington refusing to pay its taxes played a major role in the chain of events leading to the expropriation. In other words, Arbitrator Stern believes that, if Burlington had paid its taxes, as it was obliged to do in order to respect the State's fiscal sovereignty, nothing would have happened.

¹¹¹⁴ PO1, ¶ IV.8 ("The Parties shall refrain from any conduct that may lead to an aggravation of the dispute until the Award or the reconsideration of this order. In particular, Burlington Oriente shall refrain from making good on its threat to abandon the project and Ecuador shall refrain from any action that may induce Burlington Oriente to do so").

¹¹¹⁵ PO1, ¶ IV.7 ("The Respondents shall discontinue the proceedings pending against the Claimant under the *coactiva* process and shall not initiate new *coactive* actions").

¹¹¹⁶ PO1, ¶ IV.8.

¹¹¹⁷ PO2, ¶ 29.

paying taxes that you have a dispute about; and you waive your rights under the Participation Agreement to the tax-absorption clauses and to any other benefits within that Agreement. That is not a good negotiating position to put yourself into. That is not what I would recommend the client do”.¹¹¹⁸

583. While the Tribunal agrees that there is a duty to negotiate when there has been a significant change of circumstances, this duty does not force the parties to reach an agreement against their consent. Even if Burlington’s “hardball” approach was one of the factors that induced Ecuador to take over the Blocks, it would be perverse to find that Burlington’s decision to protect its valid and existing contract rights contributed to their being taken by force.
584. Finally, Ecuador argues that Burlington’s threat of legal action against buyers in the *coactiva* auctions contributed to its having earned less for the forced sale of oil. As the Tribunal has dismissed Burlington’s claim for past Law 42 dues taken or seized, it does not need to address this argument.
585. For the reasons set out above, a majority of the Tribunal rejects Ecuador’s argument that Burlington contributed to its own losses.

F. POST-AWARD INTEREST

586. It is undisputed that Burlington has a right to post-award interest. As noted in Section VII.D.5.3.3 above, the Parties agree that post-award interest shall accrue at the same rate and periodicity as pre-award interest.
587. Because the Tribunal has used 31 August 2016 as valuation date, interest shall accrue to the Award on damages from the following day, i.e. 1 September 2016.
588. Accordingly, the Tribunal awards interest on the total amount of damages awarded, compounded annually, at the rate of LIBOR plus two percent for 3-month borrowings, which shall accrue from 1 September 2016, i.e. the day following the date of valuation, until the date of payment.

¹¹¹⁸ Tr. Quantum (Day 3) (ENG), 991:2-992:1 (Tribunal, Moyes).

VIII. COSTS

589. The Tribunal will first provide a summary of each Party's position on costs incurred in connection with both claims and counterclaims (Sections A and B), before turning to its analysis (Section C).

A. BURLINGTON'S POSITION

590. Burlington requests "full indemnification for the costs it reasonably incurred in pursuing compensation for its losses".¹¹¹⁹ According to Burlington, "an award of indemnity costs (i) is necessary to give effect to the governing principle of full reparation, and (ii) is further justified in light of Ecuador's conduct in these proceedings".¹¹²⁰

591. First, Burlington argues that the principle of full reparation requires that it be awarded its costs in full. Because compensation must wipe out the consequences of Ecuador's unlawful acts and restore Burlington to the position it would have been in had Ecuador not breached the Treaty, "Ecuador's obligation [...] requires not only the payment of damages representing the value of the assets Ecuador unlawfully expropriated; it also requires reimbursement of the costs Burlington legitimately incurred in pursuing that compensation".¹¹²¹ As a result, "[a]ny award that fails to compensate a successful litigant for the reasonable costs it incurred in pursuing its claim is not an award of full reparation, but something falling short of that international law standard".¹¹²²

592. For this reason, so says Burlington, "[t]he increasing trend in investment arbitration is [...] for costs to follow the event".¹¹²³ Contrary to Ecuador's contentions, this is not limited to exceptional circumstances, such as evidence of misconduct. According to Burlington, the "contemporary approach" is to shift costs to the losing party.¹¹²⁴

¹¹¹⁹ C-Submission on Costs, ¶ 1.

¹¹²⁰ *Ibid.*

¹¹²¹ *Id.*, ¶¶ 3-5, citing: *ADC v. Hungary*, Award of 2 October 2006, ¶ 533 (**Exh. CL-101**); *Hrvatska Elektroprivada d.d. v. Republic of Slovenia*, ICSID Case No. ARB/05/24 ("*Hrvatska v. Slovenia*"), Award of 17 December 2015, ¶ 599 (**Exh. CL-392**); *SPP v. Egypt*, Award of 20 May 1992, ¶ 207 (**Exh. CL-376**).

¹¹²² C-Submission on Costs, ¶ 7.

¹¹²³ *Ibid.* See also: Reply, ¶ 354.

¹¹²⁴ Reply, ¶ 354, citing: *Libananco Holdings Co. Ltd. v. Republic of Turkey*, ICSID Case No. ARB/06/8 ("*Libananco v. Turkey*"), Award of 2 September 2011, ¶ 563 (**Exh. CL-287**); *Yukos v. Russia*, Final Award of 18 July 2014, ¶ 1887 (**Exh. CL-384**); *EDF (Services) Limited v.*

593. For Burlington, there can be no question that it is the successful party in this arbitration. Although each side prevailed on some arguments and lost on others, it was Burlington who prevailed on the two determinative questions that constitute the core of the dispute between the Parties, namely (a) whether the Tribunal had jurisdiction over this dispute and (b) whether Ecuador violated the Treaty. To allocate costs on an argument-by-argument basis would ignore the fact that Burlington was forced to spend considerable time and money to recover the compensation for the unlawful expropriation of its investment.¹¹²⁵ According to Burlington, “[t]he test is not whether all of Burlington’s arguments were accepted, but whether, once it has been established that Ecuador’s conduct giving rise to this arbitration was unlawful and triggered an obligation of full reparation, Burlington’s claims and its associated costs were the natural consequence of Ecuador’s unlawful conduct”.¹¹²⁶ Burlington submits that “full reparation requires full indemnification of those costs – costs that would never have been incurred by Burlington in the absence of Ecuador’s unlawful conduct”.¹¹²⁷
594. Second, Burlington argues that a full costs award is further justified by Ecuador’s conduct in these proceedings. For Burlington, “Ecuador’s conduct has exacerbated and delayed these proceedings at every stage, and has significantly increased the costs incurred by Burlington”.¹¹²⁸ In particular, Burlington argues that:
- i. Ecuador violated the Tribunal’s order for provisional measures, which in Burlington’s submission was binding, thus aggravating the dispute, foreclosing the primary relief requested by Burlington (specific performance of the PSCs) and showing contempt for the Tribunal.¹¹²⁹ Burlington argues in particular that “had [Ecuador] complied with the Tribunal’s provisional measures order, a

Romania, ICSID Case No. ARB/05/13 (“*EDF v. Romania*”), Award of 8 October 2009, ¶¶ 325-29 (**Exh. EL-59**); *Conviaf Callao S.A. and CCI – Compañía de Concesiones de Infraestructura S.A. v. Republic of Peru*, ICSID Case No. ARB/10/2 (“*Conviaf v. Peru*”), Award of 21 May 2013, ¶¶ 680-81 (**Exh. CL-344**); *Rumeli v. Kazakhstan*, Award of 29 July 2008, ¶ 819 (**Exh. CL-158**); *Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic*, ICSID Case ARB/97/4 (“*CSOB v. Slovakia*”), Award of 29 December 2004, ¶ 372 (**Exh. CL-347**); *Gold Reserve Inc. v. Venezuela*, ICSID Case No. ARB(AF)/09/1 (“*Gold Reserve v. Venezuela*”), Award of 22 September 2014, ¶¶ 860, 862 (**Exh. CL-350**).

¹¹²⁵ C-Submission on Costs, ¶¶ 8-10; Reply, ¶ 353.

¹¹²⁶ C-Submission on Costs, ¶ 11.

¹¹²⁷ *Ibid.*

¹¹²⁸ *Id.*, ¶ 13.

¹¹²⁹ *Id.*, ¶ 14.

significant proportion (at the very least) of these proceedings would have been avoided”.¹¹³⁰

- ii. Ecuador’s request to trifurcate these proceedings into separate jurisdiction, merits and quantum phases added unnecessary expense and delay.¹¹³¹
- iii. In addition, Ecuador “asserted manufactured counterclaims, solely in an attempt to offset the damages it would owe for having breached Burlington’s international law rights”, which gave rise to an additional phase of the proceedings involving over 1,400 pages of briefs, 7 days of hearings and a 5-day site visit to a remote location in Ecuador, which was “further prolonged by Ecuador’s insistence on repeatedly re-pleading its case on the basis of alternate legal, technical and quantum theories”.¹¹³²
- iv. Ecuador sought a sixth phase of the arbitration through its “baseless motion for ‘reconsideration’”, requesting bifurcation twice. Although these attempts to bifurcate were unsuccessful, they nonetheless caused a “protracted and costly debate between the parties”.¹¹³³

595. Further, Burlington denies that the interim decision of the *Perenco* tribunal on Ecuador’s environmental counterclaim in the *Perenco* arbitration (the “*Perenco* Interim Decision”)¹¹³⁴ entitles Ecuador to the costs related to its counterclaims in this arbitration. No tribunal has ever awarded costs on the basis of another tribunal’s interim decision. Even if the *Perenco* Interim Decision were relevant to this Tribunal’s cost award (*quod non*), “that decision does not find in favor of Ecuador on any of its counterclaims, and it certainly does not support a costs award in favor of Ecuador in this case”.¹¹³⁵ Burlington emphasizes that the *Perenco* tribunal reserved its final finding on liability over the counterclaims, and noted that “the remaining issues are most unlikely to lead to an award of damages anywhere near the amount claimed by Ecuador”.¹¹³⁶ Burlington also argues that the *Perenco* tribunal agreed

¹¹³⁰ *Id.*, ¶ 15.

¹¹³¹ *Id.*, ¶ 16.

¹¹³² *Id.*, ¶ 17.

¹¹³³ *Id.*, ¶ 18.

¹¹³⁴ *Perenco Ecuador Limited v. The Republic of Ecuador*, ICSID Case No. ARB/08/06, Interim Decision on the Environmental Counterclaim of 11 August 2015 (the “*Perenco* Interim Decision”).

¹¹³⁵ C-Reply Submission on Costs, ¶ 4.

¹¹³⁶ *Perenco* Interim Decision, ¶ 593.

with many of Burlington’s arguments in this arbitration, “including that (1) Ecuadorian regulations (and not background values) set the standard for legal harm; (2) Ecuadorian regulations and practice allow for permanent disposal of drilling mud and cuttings in on-site mud pits; (3) strict liability does not apply prior to October 2008; (4) delineation is the industry standard method to determine the extent of contamination; (5) IEMS’s models are unreliable and cannot be used to establish the extent of contamination; and (6) local remediation costs are applicable”.¹¹³⁷ As a result, Burlington contends that there are “no grounds for Ecuador’s assertion that it was successful on its counterclaims in the *Perenco* case, and even less justification for seeking costs in this case on that unfounded basis”.¹¹³⁸ If anything, Burlington submits that the *Perenco* Interim Decision “confirms that Ecuador’s counterclaim – except for the limited US\$ 1.09 million that Burlington concedes is due to Consortium operations – is a largely manufactured claim designed to offset Burlington’s expropriation damages [...]”.¹¹³⁹

596. For these reasons, Burlington requests “indemnification in full, pursuant to Rule 28(2) of the ICSID Arbitration Rules and Article 61(2) of the ICSID Convention, of costs incurred in this arbitration, in addition to compound interest assessed at a reasonable commercial rate from the date of the award to the date of payment”.¹¹⁴⁰
597. Burlington alleges that it has incurred in total fees and expenses amounting to USD 48,171,235.14 in these proceedings, broken down as follows:¹¹⁴¹
- i. Fees (including for legal fees, experts and other services) related to the merits (the Tribunal understands this to mean fees incurred in connection with the principal claims, including jurisdiction): USD 23,986,145.89;
 - ii. Expenses related to the merits: USD 2,453,258.53;
 - iii. Fees (including for legal fees, experts and other services) related to the counterclaims: USD 16,892,289.00;
 - iv. Expenses related to the counterclaims: USD 2,239,541.72; and

¹¹³⁷ C-Reply Submission on Costs, ¶ 5.

¹¹³⁸ *Id.*, ¶ 11.

¹¹³⁹ *Id.*, ¶ 13.

¹¹⁴⁰ C-Submission on Costs, ¶ 19.

¹¹⁴¹ C-Reply Submission on Costs, note 10, and Annex A, “Revised Summary of Fees and Expenses in US Dollars”.

- v. Advances to ICSID: although in its Submission on Costs Burlington indicates that it has advanced USD 2,600,000, the Tribunal notes that, as of the date of this Award, Burlington has advanced USD 3,250,000.

598. Burlington argues that the costs listed above are reasonable in light of the length and complexity of the proceedings. Burlington notes that “[t]his arbitration involved five separate phases – provisional measures, jurisdiction, merits, counterclaims, quantum and reconsideration – each of which required extensive pleadings and hearings”, which required a combined total of 30 major briefs totaling over 3,000 pages on highly complex and technical issues (not counting numerous submissions on procedural matters), accompanied by 18 witness statements and 15 expert reports, and involving five hearings and one site visit.¹¹⁴²

599. In light of the above, Burlington requests the Tribunal to:

“[...]

(e) ORDER Ecuador to pay all of the costs and expenses of this arbitration, including Burlington’s legal and expert fees;

(f) ORDER Ecuador to pay compound interest on the sum awarded in (e), above, until the date of effective and complete payment, at such a rate and for such a period of compounding as the Tribunal considers just and appropriate in the circumstances; and

(g) AWARD such further and other relief as the Tribunal considers appropriate”.¹¹⁴³

B. ECUADOR’S POSITION

600. Ecuador’s submissions on costs distinguish the costs pertaining to the principal claims (1), those pertaining to Petroecuador (2), and those pertaining to the counterclaims (3).

1. Costs related to the principal claims

601. With respect to the costs incurred for the principal claims, Ecuador’s primary position is that it should recover all of these costs because “Ecuador is the clearly successful party” in respect of these claims.¹¹⁴⁴ Ecuador submits that, “in the event the Tribunal reconsiders its unlawful expropriation holding, or finds that Burlington’s

¹¹⁴² C-Submission on Costs, ¶ 20.

¹¹⁴³ C-PHB, ¶ 249.

¹¹⁴⁴ R-Submission on Costs, ¶ 2.

behavior contributed to its loss to such an extent as to negate or significantly reduce compensation, Burlington's unmeritorious case falls away and Ecuador will have fully prevailed in this matter".¹¹⁴⁵ As a result, applying Burlington's own standard, it is entitled to recover all of its costs related to the principal claims. Ecuador claims in this respect a total of USD 13,429,238.96 in legal and expert fees and expenses,¹¹⁴⁶ and 100% of the costs of the arbitration (i.e. the Tribunal's fees and expense and ICSID's administrative expenses), as apportioned by the Tribunal to the principal claims,¹¹⁴⁷ plus simple interest on any costs awarded at the "commercially reasonable rate of LIBOR + 2%, or alternatively at another commercially reasonable rate, from the date of this Award until payment".¹¹⁴⁸

602. Alternatively, Ecuador contends that even if the Tribunal were to reject Ecuador's Motion for Reconsideration and its argument that Burlington contributed to its own losses, there is no clear successful party in these proceedings because each side will have prevailed on certain issues. With one exception (Ecuador's intervention in the Blocks), all of Burlington's claims were found to be either inadmissible, outside of the Tribunal's jurisdiction or simply meritless.¹¹⁴⁹ In addition, Ecuador contends that the Tribunal found the expropriation to be unlawful only because of Ecuador's failure to pay or offer compensation, and Burlington has inflated the amount of compensation during these proceedings. As a result the Tribunal should apply the "pay your own way" rule, so that Ecuador should bear only its own legal and expert fees and expenses, and half of the costs of the arbitration.¹¹⁵⁰ According to Ecuador, this has been the practice of ICSID tribunals,¹¹⁵¹ who have departed from it only in

¹¹⁴⁵ *Id.*, ¶ 7.

¹¹⁴⁶ As further broken down in Annex 2 of Ecuador's Submission on Costs.

¹¹⁴⁷ Ecuador's position with respect to the advances paid by the Parties to ICSID is that, as these advances are meant to cover the Tribunal's fees and expenses and ICSID's administrative expenses, the Tribunal is in a better position to apportion them than the Parties. As a result, Ecuador only specifies the percentage that it seeks to recover in each proceeding. R-Submission on Costs, ¶ 4. The Tribunal notes that the total amount advanced by Ecuador to ICSID is USD 2,950,000.

¹¹⁴⁸ R-Submission on Costs, ¶ 8.

¹¹⁴⁹ *Id.*, ¶¶ 2, 9; CM, ¶¶ 585-589.

¹¹⁵⁰ R-Submission on Costs, ¶¶ 2, 10.

¹¹⁵¹ *Id.*, ¶ 10; CM, ¶¶ 569-574; Reply, ¶ 354, referring to: *Enron v. Argentina*, Award of 22 May 2007, ¶ 453 (**Exh. CL-81**); *Sempra v. Argentina*, Award of 28 September 2007, ¶ 487.5 (**Exh. CL-80**); *Sociedad Anónima Eduardo Vieira v. Republic of Chile*, ICSID Case No. ARB/04/7 ("*Vieira v. Chile*"), Award of 21 August 2007, ¶ 305 (**Exh. EL-297**); *Metalpar v. Argentine Republic*, ICSID Case No. ARB/03/5 ("*Metalpar v. Argentina*"), Award of 6 June 2008, ¶¶ 234-235 (**Exh. EL-298**); *Helnan International Hotels A/S v. Arab Republic of Egypt*, ICSID Case No. ARB/05/19 ("*Helnan v. Egypt*"), Award of 3 July 2008, ¶¶ 173-174 (**Exh. EL-**

exceptional circumstances.¹¹⁵² Ecuador notes in particular that tribunals have applied the “pay your own way” rule in circumstances similar to those of this case, in cases where claimants have only partially prevailed on jurisdiction and the merits,¹¹⁵³ where the State was liable for some treaty violations but not others,¹¹⁵⁴ and even when the claimants have won all their claims, but recovered a monetary compensation much lower than the amount claimed.¹¹⁵⁵ For Ecuador, this would be no different to applying Burlington’s “modern rule in favor of cost shifting” onto the losing party.¹¹⁵⁶ Only in rare circumstances have tribunals shifted 100% of the costs, and in Ecuador’s submission the circumstances of this case do not justify such a shift.¹¹⁵⁷

603. Accordingly, Ecuador submits that “as the clearly successful party”, it “is entitled to recover 100% of its costs incurred in connection with the principal claims, plus simple interest at LIBOR + 2%, or alternatively at another commercially reasonable rate, from the date of the Award until payment. Alternatively, each Party should ‘pay its own way’ and Ecuador should bear no more than its own legal and expert fees and expenses and one-half of the costs of the arbitration (i.e., Tribunal fees and

299); *Gustav F W Hamester v. Ghana*, ICSID Case No. ARB/07/24 (“*Hamester v. Ghana*”), Award of 18 June 2010, ¶ 361 (**Exh. EL-150**); *Liman Caspian Oil BV v. Kazakhstan*, ICSID Case No. ARB/07/14 (“*Caspian v. Kazakhstan*”), Excerpts of Award of 22 June 2010, ¶¶ 466-468 (**Exh. EL-300**); *AES Summit Generation Limited and AES-Tisza Erömu Kft v. The Republic of Hungary*, ICSID Case No. ARB/07/22 (“*AES v. Hungary*”), Award of 23 September 2010, ¶ 15.3.3 (**Exh. EL-168**); *Impregilo v. Argentina*, Award of 21 June 2011, ¶ 385 (**Exh. CL-250**); *Arif v. Moldova*, Award of 8 April 2013, ¶¶ 631-632 (**Exh. EL-416**).

¹¹⁵² R-Submission on Costs, ¶ 10, referring to: *Alasdair Ross Anderson v. Costa Rica*, ICSID Case No. ARB(AF)/07/3 (“*Anderson v. Costa Rica*”), Award of 19 May 2010, ¶ 64 (**Exh. EL-301**).

¹¹⁵³ R-Submission on Costs, referring to: *Enron v. Argentina*, Award of Award of 22 May 2007, ¶ 453 (**Exh. CL-81**); *Sempra v. Argentina*, Award of 28 September 2007, ¶ 487.5 (**Exh. CL-80**); *EDF International S.A., SAUR International S.A. and León Participaciones Argentinas S.A. v. Argentine Republic*, ICSID Case No. ARB/03/23 (“*EDF v. Argentina*”), Award of 11 June 2012, ¶ 1345 (**Exh. EL-303**); *Impregilo v. Argentina*, Award of 21 June 2011, ¶ 385 (**Exh. CL-250**); *CME v. Czech Republic*, Final Award of 14 March 2003, ¶¶ 648-649 (**Exh. CL-174**); *Rurelec v. Bolivia*, Award of 31 January 2014, ¶ 619 (**Exh. EL-260**); *Arif v. Moldova*, ICSID Case No. ARB/11/23, Award of 8 April 2013, ¶¶ 631-632 (**Exh. EL-416**).

¹¹⁵⁴ R-Submission on Costs, ¶ 10.

¹¹⁵⁵ *Id.*, referring to: *CME v. Czech Republic*, Final Award of 14 March 2003, ¶¶ 648-649 (**Exh. CL-174**).

¹¹⁵⁶ R-Submission on Costs, ¶ 11.

¹¹⁵⁷ *Ibid.*, referring to: *Rumeli v. Kazakhstan*, Award of 29 July 2008, ¶ 819 (**Exh. CL-158**); *Aucoven v. Venezuela*, Award of 23 September 2003, ¶¶ 424-425 (**Exh. EL-295**); *SAUR v. Argentina*, Award of 22 May 2014, ¶¶ 403-415 (**Exh. CL-372**); *CSOB v. Slovak Republic*, Award of 29 December 2004, ¶ 372 (**Exh. CL-347**); *Gold Reserve v. Venezuela*, Award of 22 September 2014, ¶¶ 860 and 862 (**Exh. CL-350**).

expenses and ICSID administrative expenses) as apportioned by the Tribunal to the principal claims".¹¹⁵⁸

2. Costs incurred by Petroecuador

604. Ecuador submits that, in any event, Petroecuador (who is represented by the Procuraduría General del Estado for these purposes) is entitled to recover all of its costs, "as it fully prevailed over Burlington when Burlington withdrew its claims against Petroecuador".¹¹⁵⁹ In PO2, the Tribunal confirmed that (i) as of 6 November 2009, Petroecuador ceased to be a party to this dispute; (ii) the withdrawal of the Contract Claims would have an effect on the apportionment of the costs in this proceeding; and (iii) it would deal with the consequences of the withdrawal of the Contract Claims on the costs of the arbitration at a later stage, presumably in the final award.¹¹⁶⁰

605. Ecuador submits that "[i]n light of the withdrawal of Burlington's claims, Petroecuador is – without question – the successful party vis-à-vis Burlington".¹¹⁶¹ Petroecuador thus claims a total of USD 48,589.72 for the legal fees and expenses it incurred in its defense against Burlington's claims,¹¹⁶² plus simple interest at LIBOR plus two percent, or alternatively at any other commercially reasonable rate, from the date of the Award until payment.¹¹⁶³

3. Costs related to the counterclaims

606. Ecuador submits that it is entitled to recover all of the costs pertaining to the counterclaims as it is the prevailing party on those claims.

607. With respect to the environmental counterclaim, Ecuador submits that Ecuador's position has been vindicated by the *Perenco* Interim Decision, which according to Ecuador's makes clear that the Consortium is liable for contamination.¹¹⁶⁴ Ecuador

¹¹⁵⁸ R-Submission on Costs, ¶ 13.

¹¹⁵⁹ R-Submission on Costs, ¶ 2.

¹¹⁶⁰ *Id.*, ¶ 14, referring to: PO2, ¶ 23 and p. 14.

¹¹⁶¹ R-Submission on Costs, ¶ 15.

¹¹⁶² A summary of these fees and expenses is provided at Annex 3 of Ecuador's Submission on Costs.

¹¹⁶³ R-Submission on Costs, ¶ 15.

¹¹⁶⁴ *Id.*, ¶ 3, referring to: *Perenco* Interim Decision, ¶¶ 447, 582. See also: R-Submission on Costs, ¶¶ 16, 23.

notes in particular that the *Perenco* tribunal found that “there is some contamination in the Blocks for which it is likely that [the Consortium] will be held liable”.¹¹⁶⁵

608. In any event, Ecuador contends that it is entitled to recover all of these costs because “Burlington’s obstructionist behavior and its willful concealment of contamination has forced Ecuador and the Tribunal to incur significant and unnecessary costs”, and Burlington “deliberately prolonged these proceedings” in order to hide its liability.¹¹⁶⁶ For Ecuador, Burlington’s obstructionist behavior is evident from the following examples:

- i. Burlington has advanced a formalistic reading of the applicable legislation, according to which only designated protected zones are considered sensitive ecosystems. According to Ecuador, this position is absurd and has protracted the debate between the Parties.¹¹⁶⁷
- ii. Burlington disputed the presence of contamination on the basis that it was not visible, when its own witness, Mr. Saltos, testified that environmental incidents had taken place but that traces of contamination were not visible. This forced Ecuador (through IEMS) to undertake a costly and extensive investigation to measure the extent of the contamination in the Blocks.¹¹⁶⁸
- iii. Burlington portrayed the Consortium as a “model operator”, forcing Ecuador to carry out detailed and costly site assessments to determine the real environmental condition of the Blocks. These site assessments disproved Burlington’s assertion that all significant incidents had been dealt with in a timely fashion and disclosed to the authorities.¹¹⁶⁹ After reviewing similar evidence, the *Perenco* tribunal concluded that the Consortium’s “claims of strong environmental law compliance are not made out”, and that “there is some evidence that [the Consortium] was less than forthcoming in some instances”.¹¹⁷⁰

¹¹⁶⁵ R-Submission on Costs, ¶ 16, citing: *Perenco* Interim Decision, ¶ 582.

¹¹⁶⁶ R-Submission on Costs, ¶ 3.

¹¹⁶⁷ *Id.*, ¶ 17.

¹¹⁶⁸ *Id.*, ¶ 18.

¹¹⁶⁹ *Id.*, ¶ 19.

¹¹⁷⁰ *Id.*, ¶ 20, citing: *Perenco* Interim Decision, ¶ 447.

iv. Burlington relied on GSI, whose “utter disregard and manipulation of data”, “inappropriate sampling methodologies” and “inadequate delineation based on insufficient and unreliable data” required additional effort and costs from Ecuador and its experts.¹¹⁷¹ Ecuador argues that its criticism of GSI has been vindicated by the *Perenco* tribunal.¹¹⁷²

609. In light of the above, Ecuador contends that Burlington and its expert have been compelled to acknowledge that the Consortium’s operations caused contamination within the Blocks. Ecuador notes in particular that “Burlington has recognized that 37,555 m³ require remediation in 17 sites”, and as a result “it may no longer pretend that the Consortium has not caused significant negative impact to the Blocks”.¹¹⁷³

610. As a result, Ecuador submits that it is entitled to all costs related to the counterclaims, regardless of the volume of contamination.¹¹⁷⁴ For Ecuador, because Burlington’s obstructionist behavior “unnecessarily and unacceptably” forced Ecuador and the Tribunal to incur increased costs in the counterclaims phase, Burlington should now pay for this.¹¹⁷⁵

611. Contrary to Burlington’s contentions, Ecuador submits that the *Perenco* Interim Decision is relevant for purposes of allocating costs in this arbitration for at least three reasons:

i. Should the Tribunal accept Ecuador’s counterclaim in its entirety, Ecuador would be the “clearly successful party” and would be entitled to recover all of its costs. The Tribunal could take the *Perenco* Interim Decision into account in coming to this decision.¹¹⁷⁶

ii. Should the Tribunal accept Ecuador’s counterclaim only partially but decide that there is no clearly successful party, Ecuador contends that the *Perenco* Interim Decision provides a basis for a full order on costs against Burlington, regardless of the volume of contamination for which Burlington is held liable or the ultimate costs of remediation awarded by the Tribunal. For Ecuador, the *Perenco*

¹¹⁷¹ R-Submission on Costs, ¶ 21.

¹¹⁷² *Id.*, ¶ 21, referring generally to: the *Perenco* Interim Decision.

¹¹⁷³ R-Submission on Costs, ¶ 22.

¹¹⁷⁴ *Id.*, ¶ 16.

¹¹⁷⁵ *Id.*, ¶ 23.

¹¹⁷⁶ R-Reply on Costs, ¶ 3.

tribunal's findings confirm that Burlington did not comply with environmental standards and concealed the contamination in the Blocks. Were the Tribunal not to award costs to Ecuador on this basis, "this would send a message to the international community that an investor can pollute the lands of a Host State, hide such pollution, avoid remediating it, and yet not bear any costs for such egregious conduct".¹¹⁷⁷

- iii. Even if the Tribunal should reject Ecuador's counterclaim in its entirety, the *Perenco* Interim Decision demonstrates that Ecuador's counterclaim was justified and reasonable, and as such provides grounds for the Tribunal to conclude that Ecuador should bear no more than its own legal and expert fees and costs and half of the costs of the arbitration allocated by the Tribunal to the counterclaims proceedings.¹¹⁷⁸

612. Ecuador also submits that it is entitled to its legal and expert fees and costs related to the infrastructure counterclaim. Ecuador contends that it is "clearly the successful party" with respect to this claim,¹¹⁷⁹ as it has "thoroughly demonstrated that the Consortium did not follow the best standards and practices in the oil industry, establishing through contemporaneous evidence that the equipment and infrastructure were in a sub-standard state because the Consortium did not have any preventative or predictive maintenance plans and simply operated under a 'run-to-failure' strategy".¹¹⁸⁰ By contrast, Ecuador alleges that Burlington has not provided any contemporaneous evidence of the Consortium's alleged maintenance practices, and its other defenses fail.¹¹⁸¹

613. In the alternative, should the Tribunal find that there is no clearly successful party, Ecuador submits that Burlington should be ordered to pay all costs incurred by Ecuador in connection with the infrastructure counterclaim, because "Burlington's blatant denial of the poor state of the infrastructure – notwithstanding clear evidence of wide-scale breaches of the Consortium's obligations under the Participation

¹¹⁷⁷ *Id.*, ¶ 4.

¹¹⁷⁸ *Id.*, ¶ 5.

¹¹⁷⁹ R-Submission on Costs, ¶ 27.

¹¹⁸⁰ *Id.*, ¶ 25.

¹¹⁸¹ *Id.*, ¶ 26.

Contracts and Ecuadorian law – unnecessarily increased the complexity of these proceedings and, with it, the costs Ecuador has had to bear”.¹¹⁸²

614. Ecuador claims for all of its costs in connection with the counterclaims, including USD 12,439,746.75 incurred in legal and expert fees and expenses,¹¹⁸³ as well 100% of the Tribunal’s fees and expenses and ICSID administrative costs apportioned by the Tribunal to the counterclaims, plus simple interest at LIBOR plus two percent, or alternatively at another commercially reasonable rate, from the date of the Award until payment.¹¹⁸⁴
615. Finally, in its Reply Ecuador makes certain comments on three authorities filed by Burlington with its Reply, specifically, *Olguín v. Republic of Paraguay*,¹¹⁸⁵ *Renée Rose Levy and Gremcitel S.A. v. Republic of Peru*,¹¹⁸⁶ and *Hrvatska Elektroprivada d.d. v. The Republic of Slovenia*.¹¹⁸⁷ Ecuador states that it agrees with the principles expressed in *Olguín* and *Levy*, namely that a claimant’s procedural conduct may require it to contribute to the costs of the proceedings despite it having been successful in its claims,¹¹⁸⁸ and that “a finding of abuse of process justifies an award of costs against the unsuccessful party”.¹¹⁸⁹ That being said, Ecuador “disagrees that these principles have any bearing in its regard, however, and strongly disputes Burlington’s characterization of Ecuador’s behavior in this proceedings”.¹¹⁹⁰ By contrast, Ecuador denies that the principle for which Burlington cites *Hrvastka*

¹¹⁸² *Id.*, ¶ 27.

¹¹⁸³ Ecuador’s costs in connection with the counterclaims are summarized in Annex 4 of its Submission on Costs.

¹¹⁸⁴ R-Submission on Costs, ¶ 29. Ecuador clarifies that, although in its PHB on Counterclaims (at ¶ 1019) it requested interest on costs “at an adequate commercial interest rate”, in its submission this means the same as interest at a “commercially reasonable rate”. *Ibid.*

¹¹⁸⁵ *Olguín v. Republic of Paraguay*, ICSID Case No. ARB/98/5 (“*Olguín v. Paraguay*”), Award of 26 July 2001 (**Exh. CL-390**).

¹¹⁸⁶ *Renée Rose Levy and Gremcitel S.A. v. Republic of Peru*, ICSID Case No. ARB/11/17 (“*Levy v. Peru*”), Award of 9 January 2015 (**Exh. CL-391**).

¹¹⁸⁷ *Hrvatska v. Slovenia*, ICSID Case No. ARB/05/24, Award of 17 December 2015 (**Exh. CL-392**).

¹¹⁸⁸ *Olguín v. Paraguay*, Award of 26 July 2001, ¶ 85 (**Exh. CL-390**).

¹¹⁸⁹ *Levy v. Peru*, Award of 9 January 2015, ¶ 201 (**Exh. CL-391**).

¹¹⁹⁰ R-Reply on Costs, ¶ 9.

(namely, that costs follow the event) applies in international law. According to Ecuador, authorities already in the record contradict this position.¹¹⁹¹

616. In light of the above, Ecuador requests that the Tribunal:

- “a) order Burlington to pay all the costs and expenses incurred by Ecuador in connection with the principal claims, including Ecuador’s legal and expert fees and expenses quantified at **US\$ 13 429 238.96**, as well as 100% of the Tribunal’s fees and expenses and ICSID’s administrative expenses as apportioned by the Tribunal to the principal claims, with simple interest at the commercially reasonable interest rate of LIBOR + 2%, or alternatively at another commercially reasonable rate, from the date of the Award until payment;
- b) alternatively, order each side to bear its own legal and expert fees and expenses and one-half of the costs of the arbitration in connection with the principal claims;
- c) in any event, order Burlington to pay Petroecuador’s legal fees and expenses incurred in connection with the principal claims, quantified at **US\$ 48 589.72**, with simple interest at the commercially reasonable interest rate of LIBOR + 2%, or alternatively at another commercially reasonable rate, from the date of the Award until payment;
- d) order Burlington to pay all the costs and expenses incurred by Ecuador in connection with the counterclaims, including Ecuador’s legal and expert fees and expenses quantified at **US\$ 12 439 746.75**, as well as 100% of the Tribunal’s fees and expenses and ICSID’s administrative expenses apportioned by the Tribunal to the counterclaims, with simple interest at the commercially reasonable interest rate of LIBOR + 2%, or alternatively at another commercially reasonable rate, from the date of the Award until payment; and
- e) award such other relief as the Tribunal considers appropriate”.¹¹⁹²

¹¹⁹¹ *Id.*, ¶ 10, citing: *Parkerings-Compagniet AS v. Republic of Lithuania*, ICSID Case No. ARB/05/8 (“*Parkerings v. Lithuania*”), Award of 11 September 2007, ¶ 462 (**Exh. CL-119**) and *EDF v. Romania*, Award of 8 October 2009, ¶ 322 (**Exh. EL-59**).

¹¹⁹² R-Submission on Costs, ¶ 30.

C. ANALYSIS

1. Applicable standards

617. The Tribunal has broad discretion to allocate the costs of the arbitration between the Parties, including legal fees and expenses, as it deems appropriate pursuant to Article 61(2) of the ICSID Convention, which provides:

“In the case of arbitration proceedings the Tribunal shall, except as the parties otherwise agree, assess the expenses incurred by the parties in connection with the proceedings, and shall decide how and by whom those expenses, the fees and expenses of the members of the Tribunal and the charges for the use of the facilities of the Centre shall be paid. Such decision shall form part of the award”.

618. The Parties have not disputed this discretion.

619. In the exercise of this discretion, investment tribunals have tended to apply one of two main approaches to the allocation of costs. Some tribunals have been guided by the principle of “costs follow the event” and have thus awarded all or part of the costs to the prevailing party.¹¹⁹³ Other tribunals have split the costs of the arbitration between the parties and ordered each party to bear its own costs.¹¹⁹⁴ Some tribunals effectively apply a mix of the two approaches, starting from one and mitigating its results with the other, or considering a series of factors to be taken into account to award costs.¹¹⁹⁵

620. In the Tribunal’s view, the apportionment of costs requires an analysis of all of the circumstances of the case, including to what extent a party has contributed to the costs of the arbitration and whether that contribution was reasonable and justified.¹¹⁹⁶ This analysis should start by considering whether a party has prevailed

¹¹⁹³ See, for instance: *Plama Consortium Limited v. Republic of Bulgaria*, ICSID Case No. ARB/03/24 (“*Plama v. Bulgaria*”), Award of 27 August 2008, ¶ 316 (**Exh. EL-306**); *EDF v. Romania*, Award of 8 October 2009, ¶ 327 (**Exh. EL-59**); *ADC v. Hungary*, Award of 2 October 2006, ¶ 533; *Lemire v. Ukraine*, Award of 28 March 2011, ¶ 380 (**Exh. EL-279**); *Libananco v. Turkey*, Award of 2 September 2011, ¶¶ 563-565 (**Exh. CL-287**).

¹¹⁹⁴ See, for instance: *Enron v. Argentina*, Award of 22 May 2007, ¶ 453 (**Exh. CL-81**); *Sempra v. Argentina*, Award of 28 September 2007, ¶ 487.5 (**Exh. CL-80**); *Vieira v. Chile*, Award of 21 August 2007, ¶ 305 (**Exh. EL-297**); *Anderson v. Costa Rica*, Award of 19 May 2010, ¶ 62 (**Exh. EL-301**); *AES v. Hungary*, Award of 23 September 2010, ¶ 15.3.3 (**Exh. EL-168**).

¹¹⁹⁵ See, for instance: *Parkerings v. Lithuania*, Award of 11 September 2007, ¶ 462 (**Exh. CL-119**) (holding that “the question of costs is within the discretion of the Tribunal with regard, on the one hand, to the outcome of the proceedings and, on the other hand, to other relevant factors”). See also: *Funnkotter v. Zimbabwe*, Award of 22 April 2009, ¶ 147 (**Exh. CL-150**).

¹¹⁹⁶ See, for instance: *Electrabel S.A. v. Republic of Hungary*, ICSID Case No. ARB/07/19, Award of 25 November 2015, ¶¶ 232-235 (apportioning costs after “taking all the circumstances of th[e] case into account”); *Helnan v. Egypt*, Award of 3 July 2008, ¶¶ 173-

on its claims, and if it has prevailed only in part, whether the rejected claims were reasonable or frivolous.¹¹⁹⁷ It should also take into account the procedural conduct of the parties, and in particular whether such conduct delayed the proceedings or increased costs unnecessarily. The Tribunal notes that both Parties appear to be in agreement with these main principles: each Party considers itself to be the prevailing party, and as such seeks the recovery of all of its costs. In addition, each Party considers that the other party's conduct justifies a full award of costs in its favor.

621. In the Tribunal's view, after a consideration of all the relevant circumstances, the principles above may be adjusted to take into account that the respondent is a sovereign State. In particular, it considers that, even if a tribunal finds that a State has breached its international obligations vis-à-vis an investor, consideration must be given to the State's motives and good faith. In particular, where the actions of a State have been guided by its good faith understanding of the public interest and the State could reasonably doubt that it was breaching its international obligations, the Tribunal may consider it appropriate to apportion costs in a manner that alleviates the burden on the respondent State. These considerations apply to situations in which the State is the respondent, not the claimant.
622. The Tribunal will be guided by these principles when apportioning costs. The Tribunal will first address the costs incurred by Petroecuador (2), and will then address the bulk of the Parties' costs pertaining to the claims and counterclaims (3).

2. Costs incurred by Petroecuador

623. Ecuador submits that, as a result of the withdrawal of claims by the Contract Claimants (also referred to as the Burlington Subsidiaries), Petroecuador is the prevailing party with respect to those claims and must recover all of its costs, amounting to USD 48,589.72.

174 (also apportioning costs after having "taken into considerations all the circumstances of th[e] case") (**Exh. EL-299**).

¹¹⁹⁷ See: C. H. Schreuer et al., *The ICSID Convention: A Commentary* (Cambridge: Cambridge University Press, 2nd edition, 2009), p. 1233 ("Even the cases in which tribunals declined to award costs indicate a growing awareness of the principle that the losing party should bear the consequences in terms of costs also") (**Exh. EL-370**).

624. In PO2, the Tribunal stated that it was “aware that the withdrawal of the Contract Claims will have an effect on the apportionment of the costs in this proceeding, and will deal with that issue at a later stage, presumably in the Final Award”.¹¹⁹⁸
625. Applying the principles outlined in the preceding sections, the Tribunal considers that Burlington must bear Petroecuador’s costs in full. Petroecuador was only a party to these proceedings because the Contract Claimants had brought the Contract Claims¹¹⁹⁹ against it. As a result of the withdrawal of the Contract Claims,¹²⁰⁰ Petroecuador ceased to be a party in these proceedings.¹²⁰¹ While the Contract Claimants also ceased to be parties in these proceedings for the same reasons¹²⁰² and can no longer be ordered to cover Petroecuador’s costs, the Tribunal deems it appropriate for Burlington, as the Contract Claimants’ controlling shareholder, to bear this burden.
626. Ecuador has requested simple interest at LIBOR plus two percent on awarded costs, from the date of the Award until payment. For the reasons set out in Section VII.D.5.3.3 above, the Tribunal considers that LIBOR plus two percent for three month borrowings is an appropriate interest rate. Also for the reasons set out in that section, the Tribunal is of the opinion that this amount must be compounded annually. In this case, because costs are fixed on the date of the Award and do not depend on the date of valuation of the compensation due to Burlington, interest will accrue from the date of the Award, as requested, until the date of payment.

3. Costs pertaining to the claims and counterclaims

627. Both Parties seek recovery of all of their costs pertaining to the claims and counterclaims. Alternatively, Ecuador requests that it be required to bear only its own legal and expert fees and expenses, and half of the costs of the arbitration (ICSID and Tribunal fees and costs).
628. In the circumstances of this case, the Tribunal considers it appropriate to order the Ecuador to bear 65% of the costs of the arbitration (Burlington bearing 35%), and for each Party to bear its own legal costs and expenses, for the following reasons.

¹¹⁹⁸ PO2, ¶ 23. See also: *Id.*, p. 14, ¶ III.3.

¹¹⁹⁹ As defined in the Claimants’ Request for Arbitration ¶¶ 2 and 13(c), and CM, Section IV.

¹²⁰⁰ Claimants’ letter of 18 September 2009, p. 3. See also: Claimants’ letter of 10 October 2009, p.1; PO2, ¶ 10; ¶¶ 11-18, and DoJ, ¶ 80.

¹²⁰¹ PO2, ¶ 19 and p. 14, ¶ III.1; DoJ, ¶ 80.

¹²⁰² PO2, ¶ 19 and p. 14, ¶ III.1.

629. First, Burlington prevailed on its claims, in the sense that the Tribunal upheld its jurisdiction and found that Ecuador had breached the Treaty. That said, the Tribunal also found that it lacked jurisdiction over many of Burlington's claims, found other claims inadmissible, and held that several of Burlington's claims were meritless. Similarly, the Tribunal rejected two out of three of Burlington's damages claims and some of its legal and financial assumptions, with the result that the compensation awarded to Burlington is 25% of the amount claimed.
630. On the other hand, while Ecuador also prevailed on part of its counterclaims, the amount awarded to Ecuador is an extremely small percentage of the amount claimed. Contrary to Ecuador's contention, the Tribunal does not consider that the *Perenco* Interim Decision provides grounds for a full award of costs to Ecuador on the counterclaims, regardless of the extent of contamination. The Tribunal is not bound by the *Perenco* tribunal's findings of fact or holdings of law. Although as previously noted the majority believes that it must pay due consideration to earlier decisions of international tribunals,¹²⁰³ the *Perenco* tribunal's decision does not form part of a series of established cases to which this Tribunal should defer. In any event, as Burlington correctly points out, the *Perenco* tribunal has not yet ruled on the Consortium's final liability, and its decision provides support for some of Burlington's arguments.
631. More importantly, the Tribunal considers that its decision on the apportionment of costs must be made on the basis of the circumstances of these proceedings alone. On the basis of the record before it, the Tribunal has found that, while the Consortium did not always comply with the applicable environmental standards, the actual contamination attributable to the Consortium was nowhere near as extensive as Ecuador alleged, nor were the remediation costs as high as Ecuador claimed.
632. Second, while the Tribunal agrees with Burlington that Ecuador's procedural conduct increased the length and cost of the proceedings, the Tribunal finds that Ecuador's procedural requests were generally reasonable under the circumstances. Ecuador's request for a trifurcation of the proceedings into separate jurisdiction, merits and quantum phases was not unreasonable in light of the complexity of the claims, which at that time also included claims of the Burlington Subsidiaries. Further, given the lack of clarity in the ICSID Convention and Arbitration Rules as to whether a tribunal may reconsider a pre-award decision, it cannot be held

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See: paragraph 44 above. See also: DoJ, ¶ 100; DoL, ¶ 187.

illegitimate for Ecuador to have filed a Motion for Reconsideration. Ultimately, that motion was heard jointly with the quantum phase and did not require a separate phase. And while the delay and expense caused by the counterclaims phase may be considered to have been disproportionate to the amount awarded, such disproportion is somewhat mitigated by the public interest that underlies Ecuador's environmental counterclaim, namely the protection of the Amazon rainforest, which represents a major stake in the survival of mankind.

633. Having assessed all of these elements, and in the exercise of its discretion in matters of cost allocation, the Tribunal deems it reasonable for Ecuador to bear 65% the costs of the arbitration (ICSID and Tribunal fees and expenses), and for Burlington to bear 35% of those costs.
634. By contrast, the Tribunal finds it appropriate for each Party to bear its own legal and expert costs. In addition to the reasons given above, the Tribunal notes that Burlington's costs, in particular with respect to the claims, are significantly greater than Ecuador's. Differences in disputing parties' costs are to be expected, as they essentially depend on the litigation choices that a party may make to advance its case. The disparity of the levels of costs between the Parties here is an additional reason for which the Tribunal finds it appropriate for each Party to bear its own legal and expert fees and expenses.

IX. OPERATIVE PART

635. For the reasons set forth above, the Arbitral Tribunal:
- A. Denies Ecuador's Motion for Reconsideration of the Decision on Liability;
 - B. Denies Ecuador's objections to jurisdiction and admissibility advanced in this phase;
 - C. On quantum:
 - 1. Orders Ecuador to pay to Burlington the amount of USD 379,802,267 together with interest, compounded annually, at LIBOR for three month borrowings plus two percent, which shall accrue from 1 September 2016, until payment;

2. Declares that the Award is net of income and labor participation taxes and that Ecuador may not impose or attempt to impose income and labor participation taxes on the Award;

D. On costs:

1. Burlington shall bear the entirety of Petroecuador's costs in the arbitration and is therefore ordered to pay Petroecuador the amount of USD 48,589.72, together with interest, compounded annually, at LIBOR for three month borrowings plus two percent, which shall accrue from the date of this Award until payment;
2. Ecuador shall bear 65% of the costs of the arbitration as determined by ICSID's final financial statement, and Burlington shall bear 35% of those costs;
3. Each Party shall bear its own legal and expert costs;

E. Dismisses all other claims.

[signed]

Mr. Stephen Drymer
Arbitrator
Date:
15 January 2017

[signed]

Prof. Brigitte Stern
Arbitrator
Date:
20 January 2017

[signed]

Prof. Gabrielle Kaufmann-Kohler
President of Tribunal
Date:
20 January 2017