



INTERNATIONAL CENTRE FOR SETTLEMENT OF INVESTMENT DISPUTES

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CERTIFICATE

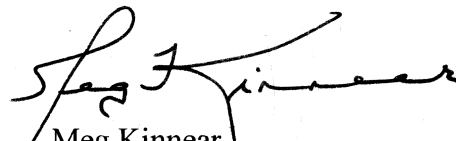
**EDF INTERNATIONAL S.A., SAUR INTERNATIONAL S.A. AND LEON PARTICIPACIONES
ARGENTINAS S.A.**

v.

ARGENTINE REPUBLIC

(ICSID CASE NO. ARB/03/23)

I hereby certify that the attached document is a true copy of the Arbitral Tribunal's Award dated June 11, 2012.


Meg Kinnear
Secretary-General

Washington, D.C., June 11, 2012

**International Centre for Settlement of Investment Disputes
Washington, D.C.**

**EDF International S.A.,
SAUR International S.A., and
León Participaciones Argentinas S.A.**
(Claimants)

v.

Argentine Republic
(Respondent)

ICSID Case No. ARB/03/23

AWARD

Arbitral Tribunal

Professor Gabrielle Kaufmann-Kohler
Professor Jesús Remón
Professor William W. Park, Presiding

Secretary of the Arbitral Tribunal

Ms. Anneliese Fleckenstein, Legal Counsel, ICSID

Washington, D.C., date of dispatch to the parties 11 June 2012

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Defined Terms

Argentine Economic Turmoil	The economic turmoil experienced by Argentina during late-2001 and early-2002
Argentina-France BIT (or Treaty)	The agreement between the Government of the French Republic and the Government of the Argentine Republic on the Encouragement and Reciprocal Protection of Investments, signed on 3 July 1991
Argentina-Luxembourg BIT	The agreement between the Government of the Argentine Republic and the Belgian/Luxembourg Economic Union on the Encouragement and Reciprocal Protection of Investments, signed on 28 June 1990
Bidding Terms	The bidding terms published on 23 February 1998
Comments on Quantum	The Parties comments of 15 November 2010 regarding the supplementary expert reports on quantum
Concession Agreement	Concession agreement between the Government of Mendoza and EDEMSA, signed on 15 July 1998
Convertibility Law	Collectively referring to Federal Law No. 23,928 and its implementing National Decree No. 2,128
Cost Adjustment Clause	Contract clause establishing the periodic adjustment of tariff rates to account for the inflation of electricity distribution costs
Currency Clause	Concession clause prescribing the calculation of costs in terms of U.S. dollars for purposes of assessing the ultimate tariff to be invoiced to consumers; Concession Anexo II, Subanexo 2
DAV	Distribution-added value
EDEMSA	Empresa Distribuidora de Energía de Mendoza S.A.
EDESTESA	Empresa Distribuidora de Electricidad de Este S.A.
EDF	Électricité de France
EDFI	EDF International S.A.
Emergency Tariff Measures	Articles 8 through 10 of Federal Law No. 25,561

EMSE	The formerly state-owned electricity distributor, Energía Mendoza Sociedad de Estado
EPRE	The independent regulatory agency known as Ente Provincial Regulador de la Electricidad
Extraordinary Review	Interim tariff schedule review pursuant to Article 48 of Mendoza Provincial Law No. 6,497
First Session	The first session held at the seat of the Centre in Washington, D.C. on 1 September 2004
First Session Timetable	The timetable adopted for the submission of pleadings and the presentation of oral arguments
GEMSA	Generación Eléctrica de Mendoza
ILC Articles	2001 International Law Commission's Draft Articles on Responsibility of States for Internationally Wrongful Acts
Info Memo	The information memorandum distributed by Chase Manhattan Bank and Salomon Smith Barney in February 1998
Initial Tariff Schedule	The initial fixed-term tariff schedule established under Article 25 and described in Subanexo 3 of the concession agreement entered between the Government of Mendoza and EDEMSA
ICSID Arbitration Rules	ICSID Rules of Procedure for Arbitration Proceedings
Institutional Rule	ICSID Rules of Procedure for the Institution of Conciliation and Arbitration Proceedings
JL&A Report	The report prepared by EPRE on the advice of Consultancy Jorge Lapeña y Asociados S.A.
LECG	Law & Economics Consulting Group (Claimants' Experts)
LECOPS	Letras de Cancelación de Obligaciones Provinciales or "Notes for the Cancellation of Provincial Obligations"
León	León Participaciones Argentinas S.A.
Letter of Understanding	Letter of 7 April 2005 between Province of Mendoza and EDEMSA concerning DAV increase

MBG	Molina, Bello & González (Respondent's Experts)
ME&PW	Ministry of the Environment and Public Works
MEM	Electricity Wholesale Market
MFN Clause	The most-favored-nation clause found in Article 4 of the Argentina-France BIT
National Emergency Law	Federal Law No. 25,561
Network-Use Fee	Fee for use of the network applicable to large electricity users
Nihuil IV Contract	The contract for the construction, operation and maintenance of a hydroelectric power plant known as NIHUIL IV
Ordinary Review	The scheme in which successive tariff schedule reviews would be conducted pursuant to Article 47 of Provincial Law No. 6,497
PETROMS	Notes issued by the Mendoza government's treasury
Pre-Emergency Measures affecting the Concession	Regulatory measures adopted prior to the national and provincial measures adopted prior to the national and provincial emergency laws of 2002
Provincial	Province of Mendoza, unless otherwise stated
Provincial Electricity Law	Mendoza Provincial Law No. 6,497
Provincial Emergency Law	Mendoza Provincial Law No. 6,976
PTC Fund	The Provincial Tariff Compensation Fund established under Articles 74 and 75 of Provincial Law No. 6,497
Regulatory Framework	Collectively referring to Provincial Laws No. 6,497 and No. 6,498
Renegotiation Commission	Renegotiation Commission of the Public Utilities Agreements

Renegotiation Process	Renegotiation of the EDEMSA Concession Agreement
Request of 16 June	Claimants' request for arbitration of 16 June 2003
SAURI	SAUR International S.A.
Scattered Market	The scattered electricity market comprising of users that are located in distant regions
SPA	Share Purchase Agreement, dated 30 June 2004, between EDFI and IADESA
T-1	Tariff No. 1 under Anexo II, Subanexo 1, Chapter 1 of the Concession Agreement
T-2	Tariff No. 2 under Anexo II, Subanexo 1, Chapter 1 of the Concession Agreement
Tariff Schedule	The tariff schedule set forth under Anexo II, Subanexo 1 of the Concession Agreement between the Government of Mendoza and EDEMSA
Transformation Law	Provincial Law No. 6,498
U.S. CPI	U.S. consumer price index published by the U.S. Bureau of Labor Statistics
U.S. PPI	U.S. producer index published by the U.S. Bureau of Labor Statistics
UTN Report	Study on the Concession Agreement conducted by EPRE's independent expert, Universidad Tecnológica Nacional – Regional Tucumán
Vienna Convention	1969 Vienna Convention on the Law of Treaties
2002 Monetary Measures	Articles 3 through 5 of Federal Law No. 25,561
2002 Public Hearing	The public hearing held by EPRE on 13 December 2002

Key Written and Oral Pleadings

Initial

- Request of 16 June (16 June 2003)
- Amended Request (4 August 2003)

Jurisdiction

- Respondent's Memorial on Objections to Jurisdiction (15 July 2005)
- Claimants' Counter Memorial on Jurisdiction (3 October 2005)
- Respondent's Reply on Jurisdiction (17 November 2005)
- Claimants' Rejoinder on Jurisdiction (13 January 2006)
- Hearing on Jurisdiction (8 March 2006)
- Claimants' Post-Hearing Brief on Jurisdiction (20 March 2006)
- Respondent's Observations to Claimants' Post-Hearing Brief on Jurisdiction (6 April 2006)

Merits

- Claimants' Memorial on the Merits (2 May 2005)
- Respondent's Counter-Memorial on the Merits (26 January 2009)
- Claimants' Reply on the Merits (30 April 2009)
- Respondent's Rejoinder on the Merits (27 July 2009)
- Hearings on the Merits (1-3 October 2009; 2-7 November 2009)
- Claimants' Post Hearing Brief on the Merits (14 December 2009)
- Respondent's Post-Hearing Brief on the Merits (14 December 2009)
- Claimant's Reply Post Hearing Brief on the Merits (8 January 2010)
- Respondent's Reply Post Hearing Brief on the Merits (8 January 2010)

Quantum

- Claimants' LECG Report (28 April 2005)
- Respondent's MBG Report (9 January 2008)
- Claimants' LECG Supplemental Report (30 April 2009)
- Respondent's MBG Supplemental Report (20 July 2009)
- Claimants' Supplementary Expert Report on Quantum (24 September 2010)
- Respondent's Supplementary Expert Report on Quantum (24 September 2010)
- Respondent's Report on the Valuations Performed by LECG (10 November 2010)
- Claimants' Supplementary Report on Quantum: Comments to Argentina's Valuation Experts' Report (15 November 2010)

- Claimants' Comments on Quantum (15 November 2010)
- Respondent's Comments on Quantum (15 November 2010)
- Expert Report of Mr. Reos (10 November 2010)
- Expert Reports of Messrs. Garcia and Guidi (11 November 2010)
- Hearing on Quantum (14 February 2011)
- Claimants' Post-Hearing Brief on Quantum (11 March 2011)
- Respondent's Post-Hearing Brief on Quantum (11 March 2011)

Chronology of Events Related to Arbitrator Challenges

- Respondent proposes to disqualify Dr. de Trazegnies (22 June 2006)
- Dr. de Trazegnies resigned (7 July 2006)
- Centre notified Tribunal's acceptance of Dr. de Trazegnies's resignation (20 July 2006)
- Respondent appointed Professor Jesús Ramón (26 September 2006)
- Professor Jesús Ramón accepted his appointment (17 October 2006)
- Respondent challenged appointment of Professor Kaufmann-Kohler (29 November 2007)
- Professor Kaufmann-Kohler provided explanation to address disqualification (21 December 2007)
- Tribunal rejected challenge and lifted suspension of the proceeding (25 June 2008)

Principal Tribunal Decisions and Orders

Procedural Orders in Chronological Order

- Procedural Order No. 1 establishing the schedule of pleadings on the merits (13 August 2008)
- Procedural Order No. 2 concerning document production (22 October 2008)
- Procedural Order No. 3 concerning document production (4 December 2008)
- Procedural Order No. 4 concerning document production (19 February 2009)
- Procedural Order No. 5 concerning document production (22 April 2009)
- Procedural Order No. 6 concerning the parties' motions to strike evidence (19 March 2011)

Decision on Professor Kaufmann-Kohler (21 December 2007)

Decision on Jurisdiction (5 August 2008)

Witnesses and Experts

Witnesses On Behalf of Claimants

1. Philippe Barthel
 - a. First Statement (22 April 2005)
 - b. Supplementary Statement (22 April 2009)
2. Carlos Birr Meza
 - a. First Statement (15 April 2005)
 - b. Supplementary Statement (28 April 2009)
3. Patrick Blandin
 - a. First Statement (25 April 2005)
 - b. Supplementary Statement (23 April 2009)
4. Michel Cavé, Statement (27 April 2009)
5. Serge Caubet, Statement (21 April 2009)
6. Jack Cizain, Statement (15 April 2005)
7. Héctor Alberto Gonella
 - a. First Statement (29 April 2005)
 - b. Supplementary Statement (30 April 2009)
8. Didier Lamèthe
 - a. First Statement (25 April 2005)
 - b. Supplementary Statement (12 April 2009)
9. Alejandro Neme, Statement (20 April 2005)
10. Bruno Nitrosso, Statement (2 May 2005)

Experts On Behalf of Claimants

1. Ricardo Héctor Arriazu
 - a. Expert Report (29 April 2005)
 - b. Supplementary Report (27 April 2009)
2. Carlos Manuel Bastos
 - a. Expert Report (27 April 2005)
 - b. Supplementary Report (25 April 2009)

3. Alberto B. Bianchi
 - a. Expert Report (29 April 2005)
 - b. Supplementary Report (25 April 2009)
4. Rudolf Dolzer
 - a. Expert Report (29 April 2005)
 - b. Supplementary Report (17 April 2009)
5. Manuel A. Abdala and Mr. Pablo T. Spiller of LECG
 - a. First Report (28 April 2005)
 - b. Second Report (30 April 2009)
 - c. Third Report (24 September 2010)
 - d. Fourth Report (15 November 2010)

Witnesses On Behalf of Respondent

1. Raúl Faura
 - a. First Statement (5 January 2008)
 - b. Rebuttal Statement (24 July 2009)
2. Daniel E. Fernández
 - a. First Statement (1 December 2008)
 - b. Rebuttal Statement (20 January 2009)
3. Héctor Manuel Laspada
 - a. First Statement (9 January 2008)
 - b. Rebuttal Statement (20 July 2009)
4. Eduardo A. Ratti
 - a. First Statement (15 November 2008)
 - b. Rebuttal Statement (27 July 2009)
5. César Hugo Reos
 - a. First Statement (5 January 2009)
 - b. Rebuttal Statement (20 July 2009)
 - c. Supplementary Statement (10 November 2010)
6. Sergio Isabelino Rodríguez
 - a. First Statement (10 January 2009)
 - b. Rebuttal Statement (21 July 2009)

Experts On Behalf of Respondent

1. Augusto César Belluscio (15 July 2009)
2. Gerardo E. Bozovich (25 July 2009)
3. Liliana De Riz (12 November 2008)
4. Claudio García and Jorge Guidi (11 November 2010)
5. Roberto Frenkel and Mario Damill
 - a. First Report (6 January 2008)
 - b. Supplementary Report (11 July 2008)
6. Ismael Mata
 - a. First Report (22 January 2009)
 - b. Supplementary Report (20 July 2009)
7. Federico Molina, Fabián Bello, Daniel González, Darío Quiroga
 - a. First Report (9 January 2008)
 - b. Supplementary Report (20 July 2009)
 - c. Third Report (23 September 2010)
 - d. Fourth Report (10 November 2010)
8. Mónica Pinto (16 July 2009)
9. Nouriel Roubini (6 January 2009)
10. Alejandro Sruoga
 - a. First Report (29 December 2008)
 - b. Supplementary Report (20 July 2009)

Introduction

1. This proceeding implicates the arbitration provisions of Article 8(3) of the Agreement between the Government of the French Republic and the Government of the Argentine Republic on the Encouragement and Reciprocal Protection of Investments, signed on 3 July 1991 and effective since 3 March 1993 (“Argentina-France BIT” or “Treaty”).
2. The underlying claims of treaty violation were filed at the International Centre for Settlement of Investment Disputes (“ICSID” or “Centre”) in Washington, D.C., pursuant to the 1965 Convention on the Settlement of Investment Disputes between States and Nationals of Other States (“ICSID Convention”) which entered into force in Argentina on 18 November 1994 and in France on 20 September 1967, as well as the ICSID Rules of Procedure for the Institution of Conciliation and Arbitration Proceedings (“Institution Rules”) as amended on 1 January 2003, and the ICSID Rules of Procedure for Arbitration Proceedings (“ICSID Arbitration Rules”) also as amended on 1 January 2003.
3. This proceeding was commenced by three Claimants: (i) EDF International S.A. (“EDFI”), a company incorporated and headquartered in France that holds overseas-investment assets of its wholly-owning parent, Électricité de France (“EDF”), a power company likewise incorporated and headquartered in France; (ii) SAUR International S.A. (“SAURI”), also a company incorporated and headquartered in France that specializes in providing water and energy services around the world; and (iii) León Participaciones Argentinas S.A. (“León”), a company incorporated and headquartered in Luxembourg that was originally created as a wholly-owned subsidiary of Crédit Lyonnais, a company incorporated and headquartered in France, but that was later acquired by Claimant EDFI on 12 March 2004.
4. Respondent is the Argentine Republic (“Argentina”) to which is attributed the sovereign acts of its provincial territory, the Province of Mendoza as well as those of the provincial regulatory agencies acting on behalf of the Government of Mendoza.
5. The Arbitral Tribunal (“Tribunal”) has been duly constituted by Professor Gabrielle Kaufmann-Kohler by appointment of Claimants, and Professor Jesús Remón by

appointment of Respondent, as Arbitrators, and Professor William W. Park by appointment of the Chairman of the Administrative Council pursuant to Article 38 of the ICSID Convention, as President of the Tribunal.

6. Jurisdiction was addressed on a preliminarily bifurcated basis. A hearing was held on 8 March 2006 and a Decision was rendered on 5 August 2008 confirming the Tribunal's jurisdiction. For purposes of pleadings and oral arguments, this proceeding was further bifurcated into merits and quantum phases. A hearing on the merits was held between 1 and 3 October 2009, which continued from 2 thru 7 November 2009, and on quantum on 14 February 2011. All hearings were held at the seat of the Centre in Washington, D.C.
7. The Tribunal renders this Award to dispose of all issues related to the merits and quantum of this arbitration, registered at the Centre as ICSID Case No. ARB/03/23.

I. PROCEDURAL HISTORY

A. CONSTITUTION OF THE TRIBUNAL AND PROCEDURES

8. On 16 June 2003, the Centre received a request for arbitration ("Request of 16 June") against Respondent filed by Claimants EDFI and SAURI. In accordance with Article 36(3) of the ICSID Convention, the Acting Secretary-General of the Centre ("Acting Secretary-General") on even date registered the Request of 16 June as ICSID Case No. ARB/03/23.¹ The next day, pursuant to Institution Rule 5 the Centre acknowledged receipt of the Request of 16 June and transmitted copies thereof to Respondent and to the Argentine Embassy in Washington, D.C.
9. On 4 August 2003, the Centre received an amended request for arbitration ("Amended Request") joining León as an additional claimant to the Request of 16 June. Claimant León is said to be an assignee of the investment made in Argentina by its French parent

¹ One month prior to the filing of the Request of 16 June, Claimant EDFI and its subsidiary, Electricidad Argentina S.A. ("EASA"), a company incorporated under the laws of Argentina, had filed a request for arbitration with the Centre also naming the Argentine Republic as Respondent ("Request of 16 May"). Per ICSID Convention Article 36(3), the case was registered as ICSID Case No. ARB/03/22 on the same day together with the Request of 16 June. The claims underlying both Requests largely mirror each other in all material respects, and on this basis, by letter dated 12 August 2003 the Centre recommended—and all constituents approved—that a common tribunal should address both proceedings. Thereafter the Argentine Republic, EDFI and EASA agreed to suspend ICSID Case No. ARB/03/22 for purposes of negotiating a settlement. That proceeding has remained suspended ever since.

company, Crédit Lyonnais, and hence, has standing to file arbitrations under the Argentina-France BIT. See Amended Request footnote 1. Nevertheless, to the extent its Luxembourgian corporate nationality is found to preclude standing, León invokes provisions of the Agreement between the Government of Argentina and the Belgian/Luxembourg Economic Union for the Promotion and Reciprocal Protection of Investments, signed on 28 June 1990 and which entered into force on 20 May 1995 (“Argentina-Luxembourg BIT”).

10. On 7 August 2003, pursuant to Rule 5 of the Institution Rules, the Centre acknowledged receipt of the Amended Request and transmitted copies thereof to Respondent and to the Argentine Embassy in Washington, D.C.
11. On 12 August 2003, the Acting Secretary-General registered the Amended Request pursuant to Article 36(3) of the ICSID Convention as ICSID Case No. ARB/03/23 under the formal heading, *EDF International S.A., SAUR International S.A. and León Participaciones Argentinas S.A. v. Argentine Republic*. In accordance with Institution Rule 7, on even date the Parties were notified of the registration and were invited to proceed, as soon as possible, with the constitution of the tribunal.
12. On 31 October 2003, Claimants filed a letter requesting that the tribunal be constituted pursuant to ICSID Convention Article 37(2)(b), which prescribes one arbitrator to be appointed by each side and the third arbitrator by agreement of the Parties. By the same letter, Claimants appointed as Arbitrator, Professor Gabrielle Kaufmann-Kohler, a national of Switzerland. Per ICSID Arbitration Rule 2(3), the Acting Secretary-General confirmed by letter dated 3 November 2003 the application of ICSID Convention Article 37(2)(b).
13. On 26 January 2004, Claimants filed a letter on account of the fact that ninety days had elapsed since the case was registered on 12 August 2003 without any tribunal being constituted, and therein invoked ICSID Convention Article 38 as well as ICSID Arbitration Rule 4(4) to request the Chairman of the Administrative Council to appoint and fill the respective vacancies.

14. On 24 March 2004, Respondent appointed as Arbitrator, Dr. Fernando de Trazegnies, a national of Peru.
15. On 18 May 2004 the Chairman of the Administrative Council appointed Professor William W. Park, a national of the United States of America (“U.S.”), to serve as President of the Tribunal.
16. On 2 June 2004, the Acting Secretary-General notified the Parties pursuant to ICSID Arbitration Rule 6(1) that all three arbitrators had accepted their appointments, thereby formally commencing the proceeding, and that ICSID Senior Counsel Mr. Gonzalo Flores would serve as Secretary of the Tribunal (“Secretary”). Since 9 December 2009, ICSID Consultant Ms. Anneliese Fleckenstein has continued to serve as Secretary.²
17. On 1 September 2004, a first session was held at the seat of the Centre in Washington, D.C. (“First Session”).
18. Present on behalf of Claimants included (i) Mr. Didier Lamèthe from EDF; and (ii) Mr. Ronald E. M. Goodman, Mr. Paolo Di Rosa and Ms. Gaela Gehring Flores from the law firm, WHITE & CASE.³ On behalf of Respondent attended (i) Drs. Cintia Yaryura and Juan José Galeano from the PROCURACIÓN DEL TESORO DE LA NACIÓN; and (ii) Drs. Marcelo A. Massoni and Roberto Hermida from the Argentine Embassy in Washington, D.C.
19. During the First Session the Parties agreed on a number of procedural matters reflected in the meeting minutes signed by the President of the Tribunal and the Secretary. A timetable was adopted for the submission of pleadings and the presentation of oral arguments (“First Session Timetable”), pursuant to which Claimants would file a memorial on the merits no later than 30 April 2005. With respect to the latter stages, the First Session Timetable was designed to be contingent upon whether Respondent

² Mr. Flores was subsequently replaced by ICSID Counsel, Dr. Claudia Frutos-Peterson, whose extended leave of absence prompted the interim return of Mr. Flores. Mr. Flores was later substituted by Ms. Anneliese Fleckenstein.

³ Mr. Goodman, Mr. Di Rosa and Ms. Gehring-Flores later moved to the Washington D.C. offices of the law firm, WINSTON & STRAWN, but continued to represent Claimants. Thereafter, Mr. Goodman moved to the law firm, FOLEY HOAG, with representation of Claimants being assumed solely by Mr. Di Rosa and his team at Washington D.C. offices of the law firm, ARNOLD & PORTER, which currently represents Claimants in this proceeding.

challenged arbitral authority, which if so it would be required to submit a memorial on objections to jurisdiction by 15 July 2005.

20. On 2 May 2005, Claimants filed their Memorial on the Merits.

B. JURISDICTIONAL PHASE

21. Per the First Session Timetable, Respondent filed its Memorial on Objections to Jurisdiction on 15 July 2005. Consequently, the merits phase of the proceeding was suspended on 15 July 2005 as prescribed by ICSID Arbitration Rule 41(3).
22. On 12 August 2005, Claimants informed the Centre that Drs. Michael R. Rattagan and Ricardo Barreiro Deymonnaz from the Argentine law firm, RATTAGEN, MACCHIAVELLO, AROCENA & PEÑA ROBIROSA, ABOGADOS, would act as co-counsel for Claimants.
23. In accordance with the First Session Timetable, Claimants filed their Counter-Memorial on Jurisdiction on 3 October 2005. Subsequently, Respondent filed its Reply on Jurisdiction on 17 November 2005, and Claimants their Rejoinder on Jurisdiction on 13 January 2006.
24. On 8 March 2006, a hearing on jurisdiction was held at the seat of the Centre in Washington, D.C.
25. Present on behalf of Claimants were (i) Mr. Didier Lamèthe from EDFI, and (ii) Messrs. Ronald E. M. Goodman, Paolo Di Rosa, Tomás Leonard, A. Manuel García, and Kelby Ballena from the law firm, WINSTON & STRAWN. On behalf of Respondent attended Drs. Adolfo Gustavo Scrinzi, Gabriel Bottini, Florencio Travieso, and María Luz Moglia from the PROCURACIÓN DEL TESORO DE LA NACIÓN.
26. On 20 March 2006, Claimants submitted their post hearing brief on jurisdiction. Respondent filed its observations thereto on 6 April 2006.
27. On 22 June 2006, Respondent proposed the disqualification of its own party-appointed arbitrator, Dr. de Trazegnies, which prompted his resignation through a letter dated 7 July 2006. On 20 July 2006, the Centre notified the Parties that the President of the Tribunal

and Arbitrator Kaufmann-Kohler had considered and consented to the resignation of Dr. de Trazegnies, and invited Respondent to appoint a replacing arbitrator.

28. On 26 September 2006, Respondent appointed Professor Jesús Remón, a national of Spain. By letter dated 17 October 2006, Professor Remón accepted his appointment, thereby resuming the proceeding, and conveyed it was unnecessary to recommence oral procedures as permitted but not required by ICSID Arbitration Rule 12.
29. A second challenge by Respondent was raised on 29 November 2007, this time proposing the disqualification of Claimants' party-appointed arbitrator, Professor Kaufmann-Kohler. In accordance with ICSID Arbitration Rule 9(3), on 21 December 2007 Professor Kaufmann-Kohler furnished explanations addressing Respondent's disqualification proposal. Thereafter, the Parties exchanged observations on the matter. On 25 June 2008, the President of the Tribunal and Arbitrator Remón concluded Professor Kaufmann-Kohler was capable of exercising independent judgment as required under ICSID Convention Article 14(1), and thus, rejected Respondent's challenge and effectively lifted the suspension on the proceeding.
30. On 5 August 2008, the Tribunal, duly comprised of Professors Kaufmann-Kohler and Remón as Arbitrators and Professor Park as President of the Tribunal, issued its Decision on Jurisdiction holding that (i) the Tribunal possesses authority to hear the claims set forth in Claimants' Memorial; (ii) any allocation of costs related to the jurisdiction phase would be addressed as part of an Award on the merits and quantum; and (iii) procedural aspects of further proceedings would be addressed in a subsequent procedural order.

C. MERITS PHASE

31. On 13 August 2008, the Tribunal issued Procedural Order No. 1 and established therein a timetable for submitting pleadings concerning the merits phase of this proceeding. On 22 October 2008, the Tribunal, in consultation with the Parties, fixed the venue and dates for the hearing on the merits.

32. In accordance with Procedural Order No. 1, Respondent filed its Counter-Memorial on the Merits on 26 January 2009, an English translation of which is dated 9 February 2009.⁴ Subsequently, Claimants filed their Reply on the Merits on 30 April 2009, and Respondent its Rejoinder on the Merits on 27 July 2009.
33. A hearing on the merits was held at the seat of the Centre in Washington, D.C., between 1 and 3 October and continued on 2 thru 7 November 2009.
34. Present on behalf of Claimants were (i) Mr. Charles-Henri Prou, Mr. Jean-Paul Palma and Ms. Laure Perrin from EDFI; (ii) Mr. Paolo Di Rosa, Ms. Jean Kalicki, Ms. Mara Senn, Mr. A. Manuel Garcia, Mr. Pablo Valverde, Mr. Patricio Grane, Ms. Cristina Sorgi, Mr. Wells Bennett, Ms. Suzana Medeiros Blades, Mr. Rodrigo Gil, Ms. Paloma Gomez, Mr. Rodolfo Fuenzalida, Mr. Kelby Ballena, Ms. Vanessa Mueller and Ms. Rosario Cornejo from ARNOLD & PORTER; and (iii) Drs. Ricardo Barreiro Deymonnaz Rattagan, and Juan Pablo De Luca from RATTAGAN, MACCHIAVELLO, AROCENA & PEÑA ROBIROSA, ABOGADOS.
35. On behalf of Respondent attended (i) Dr. Osvaldo César Guglielmino, Procurador del Tesoro de la Nación; (ii) Dr. Gabriel Bottini, Dr. Ignacio Pérez Cortés, Dr. Javier Pargament Mariasch, Dr. Alejandra Mackluf Faelli, Dr. Facundo Pérez Aznar, Dr. María Soledad Romero Caporale, Dr. Cintia Yaryura, Dr. Nicolás Grosse, and Dr. Nicolás Duhalde from the PROCURACIÓN DEL TESORO DE LA NACIÓN; and (iii) Dr. Ignacio Torterola from the Argentine Embassy in Washington, D.C.
36. On 14 December 2009, Claimants and Respondent filed post-hearing briefs on the merits. Subsequently on 8 January 2010, the Parties, also simultaneously, submitted replies to each other's Post Hearing Brief on the Merits.

⁴ For good order, the Tribunal notes that all other English translations of Respondent's pleadings, which were submitted in Spanish, are dated the same as the originals thereof.

D. FURTHER CONSIDERATION OF QUANTUM

37. On 9 July 2010, the Tribunal invited each side to submit supplementary expert reports on the quantum of damages and comments of counsel on the other side's as well as each side's own supplementary expert reports.
38. Accordingly on 24 September 2010, each side submitted a supplementary expert report on quantum. On 15 November 2010, the Parties filed comments on the supplementary reports prepared by their own as well as by the other side's experts ("Comments on Quantum").
39. Respondent also submitted a supplementary statement by Mr. Reos dated 10 November 2010 and a new expert report by Messrs. García and Guidi dated 11 November 2010, both sent on 15 November 2010. On 19 November 2010 Claimants applied to declare the statement and report inadmissible. Respondent on 13 December 2010 moved to exclude certain sections of the LECG reports of 24 September and 15 November 2010.
40. The Tribunal declined to grant Claimants' application and declared Respondent's motion moot, confirming that the Tribunal would give all statements and reports the weight deserved, being attentive to identify any portions which attempted to introduce new evidence or argument on which responsive comment has not been possible. Each side was given a right to cross-examine experts on 14 February 2011.
41. The Tribunal later ruled that Messrs. Reos, García and Guidi would appear only if Claimants elected to cross-examine them. In the event, Claimants declined the opportunity to cross examine these individuals.
42. On 14 February 2011, a hearing on quantum was held at the seat of the Centre in Washington D.C.
43. Present on behalf of Claimants were (i) Mr. Jean-Paul Palma from EDFI; (ii) Mr. Paolo Di Rosa, Ms. Mara Senn, Ms. Mallory Silberman, Mr. Kelby Ballena and Ms. Rosario

Cornejo from ARNOLD & PORTER;⁵ and (iii) Messrs. A. Manuel Garcia and Pablo Valverde, consultants for Claimants' counsel.

44. On behalf of Respondent attended (i) Dr. Gabriel Bottini, Dr. Ignacio Pérez Cortés, Ms. Verónica Lavista, Ms. Mariana Lozza, Mr. Patricio Arnedo Barreiro and Mr. Nicolás Grosse from the PROCURACIÓN DEL TESORO DE LA NACIÓN; (ii) Dr. Ignacio Torterola from the Argentine Embassy in Washington, D.C.; and (iii) Mr. Hugo Reos, a Representative of the Province of Mendoza.
45. On 11 March 2011, Claimants and Respondent filed post-hearing briefs on quantum.
46. Pursuant to certain objections raised during the February hearings, on 25 February 2011 the Parties each submitted a Motion to Strike. Claimants submitted a Motion to Strike in connection with the testimonies of Respondent's quantum expert as well as of certain references made by Respondent during closing arguments. Respondent's Motion to Strike concerned Claimants' Exhibits C262 and C263, which Respondent notes were filed with Claimants' pleadings on damages submitted prior to the hearings on quantum. Respondent also challenged the evidentiary weight of these exhibits. On 11 March 2011, the Parties submitted their responses with respect to the other side's Motion to Strike.
47. Having fully considered the motions to strike made by Claimants and by Respondent on 25 February, as well as the responses of each side filed on 11 March, the Tribunal declined to grant either application, concluding that it was able to distinguish between what is, and what is not, relevant, material and admissible.
48. The proceeding was declared closed on 13 March 2012.

E. COST SUBMISSIONS

49. On 16 February 2012, in accordance with the Tribunal's request of 30 January 2012, and the extension of time it granted on 8 February 2012, each Party submitted its Statement of Costs ("Planilla de Costos").

⁵ See *supra* note 3.

II. FACTUAL BACKGROUND

A. THE CONCESSION AND ITS LEGAL FRAMEWORK

1. Overview

50. The dispute arises out of a Concession Agreement between the Government of Mendoza and EDEMSA, signed on 15 July 1998 (“Concession Agreement”) relating to the transmission and distribution of electricity. On 28 May 1997, the Government of Mendoza had reformed the regulatory framework governing distribution of electricity within the Province of Mendoza through the enactment of Provincial Law No. 6,497 (“Provincial Electricity Law”)⁶ and Provincial Law No. 6,498 (“Transformation Law”),⁷ collectively referred to herein as the Regulatory Framework.
51. The Regulatory Framework adopts at the provincial level Argentina’s then-standing national policy on electricity transmission and distribution, which was passed at the federal level on 19 December 1991 as Federal Law No. 24,065. The purpose of the Regulatory Framework is to declare electricity transmission and distribution a public service and to implement a regulatory framework that ensures stability in the electricity sector. See Provincial Electricity Law, Articles 3 and 4. Among the more specific provisions, of particular importance are those contained in Chapter XI: Tariffs—Article 43 thru 52—of the Provincial Electricity Law.
52. Article 43 of the Provincial Electricity Law endorses a policy of fair and reasonable rates to consumers for services supplied by electricity transmission companies and distributors. On the other hand, transmission companies and distributors are allowed to capitalize on an opportunity to derive sufficient income to cover relevant costs and to obtain a reasonable rate of return. In this regard, Article 43 in pertinent part provides:

Los servicios suministrados por los transportistas y distribuidores serán ofrecidos a tarifas justas y razonables, las que se ajustarán a los siguientes principios: (a) proveer a los transportistas y distribuidores que administren los servicios de acuerdo a pautas y parámetros de gestión internacionalmente aceptados, la posibilidad de obtener ingresos

⁶ Official title, “Framework for Regulating Electricity.”

⁷ Official title, “Transformation of the Provincial Electricity Sector Law.”

suficientes para satisfacer los costos operativos, de mantenimiento y de expansión de los servicios, los impuestos y una tasa de rentabilidad razonable determinada conforme lo dispuesto en el art. 46 de esta ley; [y] . . . (c) en el caso de tarifas de distribuidores, el precio de venta de la energía eléctrica deberá incluir los costos propios de distribución reconocidos al concesionario y un término representativo de los costos de adquisición de la energía eléctrica en el mercado eléctrico mayorista, de manera que las variaciones de este último se reflejen en las tarifas a los respectivos usuarios; (d) Asegurar el mínimo costo razonable para los usuarios, compatible con la seguridad del abastecimiento, la calidad del servicio y el uso racional de la energía[.]

In English, the provision reads,

The rates charged by electricity transmission companies and distributors shall be fair and reasonable and shall be subject to the following principles: (a) Rates shall afford transmission companies and distributors operating the services in accordance with internationally-accepted management guidelines and parameters, the opportunity to derive sufficient income to cover any operating, maintenance and expansion costs and taxes applicable to the services, and to obtain a reasonable rate of return defined pursuant to the provisions of Article 46 of this law; [and] . . . (c) For distribution rates, the electricity sale price shall include the specific distribution costs inherent in the distribution business recognized to the concessionaire, and a term representative of the cost of electricity purchased in the wholesale electricity market, in a manner such that any variations in this market may be reflected in the rates applied to the respective users; (d) Ensure the minimum reasonable cost to users, compatible with the security of supply, service quality and rational use of energy[.]

53. Specific to electricity distributors, subsection (c) *supra* envisages what is known to be the “pass through” mechanism. As drafted, the end result is a tariff rate that reflects relevant distribution costs as well as variations in the costs of purchasing and distributing electricity, which “pass through” to consumers.
54. Article 44 of the Provincial Electricity Law restricts the recoupment of costs attributable to services provided to one class of consumers with tariffs collected from another class or classes of consumers. Pursuant to Article 45 of the Provincial Electricity Law, tariff rates are capped at levels allowing for a rate of return that is compatible with the risk level characterizing the electricity transmission and distribution businesses as well as similar to other industries of comparable risk.

55. In line with its underlying objective of stability, Article 46 of the Provincial Electricity Law contemplates for an initial tariff schedule not exceeding a fixed-term of five years as well as designed and calculated pursuant to principles set forth in Articles 43 thru 45 introduced *supra*.
56. Pursuant to Article 47 of the Provincial Electricity Law, prior to the lapse of the initial tariff schedule, a successive tariff schedule also not exceeding a fixed-term of five years must be established (“Ordinary Review”), which mandates compliance with criteria similar to those employed in the design of the initial schedule while taking into consideration changes in the value of goods and services directly associated with the distribution of electricity.
57. Article 48 of the Provincial Electricity Law requires strict adherence to approved tariff schedules. Pursuant to the same provision, however, schedules are subject to interim modification provided an application to that effect is based on objective and justified circumstances (“Extraordinary Review”).
58. Articles 74 and 75 of the Provincial Electricity Law create the Provincial Tariff Compensation Fund (“PTC Fund”) in order to offset the differences in ordinary distribution costs recognized among the different concessionaires and to allow consumers with similar consumption characteristics to pay homogeneous tariffs for the electricity supplied.
59. To oversee the implementation and execution of the regulatory framework, Article 14 of the Provincial Electricity Law created an independent regulatory agency known as Ente Provincial Regulador de la Electricidad (“EPRE”). EPRE is charged with duties to *inter alia* regulate the quality of electrical service, conduct tariff revisions, and apply penalties for any failures by concessionaires to meet standards set forth in the law, regulations and relevant concession agreements. See Provincial Electricity Law, Articles 53 thru 73.
60. On the other hand, the specific purpose of the Transformation Law is to reorganize and privatize the formerly state-owned electricity distributor, Energía Mendoza Sociedad de Estado (“EMSE”). See Transformation Law, Articles 2 and 4. Article 2 of the

Transformation Law separates EMSE's activities into those related to the generation of electricity and those to electricity distribution. Article 4 commissions the incorporation of three companies to become successors in interests of EMSE's divided operations.

61. Accordingly, Empresa Distribuidora de Energía de Mendoza S.A. ("EDEMESA"), along with Empresa Distribuidora de Electricidad de Este S.A. ("EDESTESA"), were created to succeed EMSE as the Province of Mendoza's electricity distributors. The third company, Generación Eléctrica de Mendoza ("GEMSA"), assumed control over EMSE's electricity generating operations.
62. As concerns EDEMESA, Article 4 of the Transformation Law specifies that the transfer of EMSE's electricity distribution concession is effectuated upon the sale of EDEMESA's Class "A" shares. Article 6 of the Transformation Law provides that:

La valuación de las unidades empresarias, será realizada en base al cálculo del valor actual del flujo neto de fondos descontado, generado por la actividad o activos que se privaticen, en concordancia con el art. 96 de la ley 24065, art. 19 de la ley nacional 23696 y de la ley provincial 6072. No serán admisibles ofertas económicas inferiores al setenta por ciento (70%) de la valuación oficial.

In English the relevant portion reads:

economic offers lower than seventy percent (70%) of the official valuation shall not be admissible.

2. Promotional and Bidding Schemes

63. Starting from the second half of 1997, the Province of Mendoza sought the sale of 51% of EDEMESA Class "A" shares, and to further this end, retained Chase Manhattan Bank and Salomon Smith Barney as technical, financial and international marketing advisors to *inter alia* conduct an initial valuation of the offered EDEMESA shares and undertake in road shows to promote the sale thereof.
64. The promotional scheme started with the Global Power Conference held in New York during the month of September 1997, and also included an exclusive meeting in Paris with executives of EDF, parent company to Claimant EDFI.

65. In February 1998, Chase Manhattan Bank and Salomon Smith Barney distributed an Information Memorandum (“Info Memo”) to potential investors, including Claimants, with the aim of aiding them with the decision of whether or not to participate in the purchase of EDEMSA shares. The Info Memo discusses *inter alia* the regulatory framework governing the concession, including its underlying policies on rates and returns, cost allocation, and revision of tariffs. With respect to costs, the Info Memo indicates tariff rates are to be subject to periodic tariff adjustments to account for the inflation of electricity distribution costs as assessed pursuant to an index combining variations in the U.S. producer and consumer price indices published by the U.S. Bureau of Labor Statistics.
66. Furthermore, the Info Memo notes that costs reflected in the tariff schedule are to be first calculated in U.S. dollar terms and then converted to Argentine pesos for purposes of billing consumers.
67. The official bidding process was launched on 23 February 1998 with the publication of the bidding terms (“Bidding Terms”). Among them was the prerequisite obliging bidders to accept and initial a copy of the concession agreement that was to be entered between the Government of Mendoza and EDEMSA. Paragraph 2.1.6 of the Bidding Terms provides that:

La aplicabilidad excluyente del derecho argentino y de la sumisión a la jurisdicción de los tribunales competentes en lo contencioso administrativo de la Provincia de Mendoza, renunciando expresamente a la aplicación de cualquier fuero extranjero regulado por nomas o tratados de cualquier tipo.

In English, the provision reads:

[The acquisition of the Bidding Terms and the presentation of offers imply:] the exclusive application of Argentine law and the submission to the jurisdiction of competent courts for administrative contentions of the Province of Mendoza, expressly renouncing the application of any foreign jurisdiction regulated by norms or treaties of any kind.

68. A consortium company, SODEMSA, was formed between local co-investors and the French companies, EDFI, SAURI, and Crédit Lyonnais (former parent to Claimant León)

to consolidate their respective interests in bidding for the purchase of 51% of EDEMSA's Class "A" shares.

69. On 10 April 1998, Claimants EDFI and SAURI respectively acquired 45% and 15% interests in SODEMSA. On 20 April 1998, Crédit Lyonnais acquired a 70% interest in an Argentine company, MEDINVERT, which in turn purchased 40% of SODEMSA shares.
70. The economic offers of the qualified bidders were opened in a formal ceremony held on 23 June 1998, at which time SODEMSA's bid of US\$ 237.8 million was declared the winner. The second highest bid was for US\$ 207.71 million, the third for US\$ 200.63 million and the fourth was a bid for US\$ 193.13.
71. The Government of Mendoza and EDEMSA signed a formal agreement on 15 July 1998. On 27 July 1998, the Mendoza Congress subsequently approved the transaction and Claimants' consortium was officially awarded ownership over 51% of EDEMSA's Class "A" shares. SODEMSA assumed control of EDEMSA and commenced operations on 1 August 1998.
72. Subsequently Crédit Lyonnais incorporated Claimant León under the laws of Luxembourg as a wholly-owned subsidiary to hold the former's interest in MENDINVERT, and accordingly transferred to León the relevant shares.

3. Contractual Framework

73. The Concession Agreement has a prescribed term of thirty years, divided into three periods of ten years each. See Concession Agreement, Articles 3 and 4.
74. The underlying policies of the regulatory framework formed under the Provincial Electricity and Transformation Laws, in particular those found in Chapter XI of the former, are expressly memorialized, as well as incorporated by reference, in the various provisions of the Concession Agreement. See e.g., Concession Agreement, Preamble ("Concession Agreement between the Province of Mendoza . . . and [EDEMSA] . . . with

attention to the provisions of [Provincial] Laws Nos. 6,497, 6,498; . . . and all the legislation applicable in the Province of Mendoza . . .”).

75. In conformity with Article 3 of the Provincial Electricity Law, the objective of the Concession Agreement is to grant EDEMSA a concession for the exclusive provision of “the Public Service.” See Concession Agreement, Article 1. The Concession Agreement in turn defines “Public Service” to be “the provision of electricity distribution services to Users who are connected to [EDEMSA’s] electricity distribution grid, paying a tariff for the services received.” See Concession Agreement at 2.
76. Article 25 of the Concession Agreement, running parallel with Article 46 of the Provincial Electricity Law, obligates EDEMSA to apply an initial fixed-term tariff schedule during the first five years of the Concession Agreement’s entry into force (“Initial Tariff Schedule”). The Initial Tariff Schedule is annexed to the Concession Agreement as Sub-Annex 3. See Concession Agreement, Article 27.
77. Article 28 of the Concession Agreement memorializes the Ordinary Tariff Review contemplated for in Article 47 of the Provincial Electricity Law. In pertinent part, Concession Agreement Article 28 provides:

Previo al vencimiento el período inicial del Artículo 25, el EPRE elevará al Poder Ejecutivo la propuesta de las tarifas por períodos de CINCO (5) AÑOS. En los nuevos cuadros tarifarios se tendrá en cuenta lo dispuesto por los artículos 43 a 45 de la Ley N° 6.497 y su Decreto Reglamentario, y se establecerán los descuentos anuales previstos en el artículo 46 de la Ley N° 6.498. A ese fin, con UN (1) AÑO de antelación a la finalización de cada período de CINCO (5) AÑOS, la CONCESIONARIA presentará al EPRE la propuesta de un nuevo Cuadro Tarifario.

In English the provision reads:

Prior to the end of the initial period provided for in Article 25, EPRE shall submit to the Executive Branch the proposed rates for FIVE (5) YEAR periods. The provisions of Law 6,497, Articles 43-45, and its Regulations shall be taken into account in preparing the new rate structures and the annual discounts provided for Law 6,498, Article 46 shall be established. To that end, ONE (1) year before the end of each period of FIVE (5) YEARS the CONCESSIONAIRE shall present to EPRE the proposal for a new Rate Structure.

78. The Extraordinary Tariff Review contemplated for in Article 48 of the Provincial Electricity Law is also memorialized in the Concession Agreement, which in Article 29 provides:

For the purpose of rate revision, EPRE:

- a) May contract the services of a consulting group with recognized experience in the electrical sector, which must prepare an alternative rates proposal following guidelines identical to those defined for the CONCESSIONAIRE.
- b) Shall analyze both proposals and establish the Rate Structure that shall be ineffect during the following FIVE (5) YEAR period.

The CONCESSIONAIRE must strictly apply the rates approved. Nevertheless, it may request from EPRE the changes it considers necessary, for which purpose the procedure established in Law 6,497, Articles 48 and following, and its regulations shall apply.

In Spanish the Provision reads:

EI EPRE, a los efectos de proceder a la revisión tarifaria:

- a) podrá contratar los servicios de un grupo consultor de reconocida experiencia en el Sector Eléctrico, que deberá efectuar una propuesta tarifaria alternativa siguiendo idénticos lineamientos que los definidos para la CONCESIONARIA.
- b) analizará ambas propuestas y establecerá el Cuadro Tarifario que estará vigente en el siguiente período de CINCO (5) AÑOS.

La CONCESIONARIA deberá aplicar estrictamente las tarifas aprobadas. Sin embargo, podrá solicitar al EPRE las modificaciones que considere necesarias, a cuyo fin se aplicará el procedimiento previsto por los artículos 48 y ss. de la Ley No 6.497 y su reglamentación.

79. As introduced *supra*, Article 48 of the Provincial Electricity Law in pertinent part provides that “[t]ransmission companies and distributors . . . may, however, solicit to the EPRE modifications considered to be necessary, if their application is based on objective and justified circumstances.”
80. The Concession Agreement also memorializes as contractual terms those matters highlighted in the Info Memo, including *inter alia* the accounting of costs reflected in the

tariff schedule in U.S. dollar terms as well as the periodic adjustment of rates in consideration of inflation in electricity distribution costs. See Concession Agreement, Sub-Annex 2 (“Calculation of Tariff Schedule Parameters”).

81. The Currency Clause in Sub-Annex 2 of the Concession Agreement is of particular importance to the claims raised in the present dispute, and Section I of Sub-Annex 2 in pertinent part provides as follows:

Todos los costos mencionados se calcularán y recalcularán en dólares estadounidenses. El Cuadro Tarifario recalculado o resultante, se expresará en el momento de su aplicación para la facturación a los usuarios en pesos (\$), teniendo en cuenta para ello la relación para la convertibilidad al peso, establecida en el Artículo 3° del Decreto Nacional N° 2128/91 y en las condiciones establecidas en la ley 23.298.

In English translation, the provision reads:

All the aforementioned costs shall be calculated and recalculated in U.S. dollars. The recalculated or resulting Rate Structure shall be expressed in Argentine pesos (\$) at the time it is applied to the user invoices, at the peso conversion rate established in National Decree 2128/91, Article 3, and under the conditions established in [Federal] Law [No.] 23,298 [text corrected by hand to read: “23.928”].

82. First, the Currency Clause’s cross-references to Federal Law No. 23,928 and its implementing National Decree No. 2,128 (collectively “Convertibility Law”) point to a federal legislation and its implementing executive order, respectively passed and issued in March and October of 1991, seven years prior to the signing of the Concession Agreement, as part of a national policy on economic reform instituted in the late-1980’s and early-1990’s by Argentina’s former president, Carlos Menem. Upon its implementation, the Convertibility Law pegged the Argentine peso to the U.S. dollar at a foreign exchange rate of one to one, which as further discussed *infra* lasted until 6 January 2002.
83. In other words, the operation of the Currency Clause may be summarized as follows. Pursuant to the “pass through” mechanism elaborated in Article 43(c) of the Provincial Electricity Law introduced *supra*, tariff rates invoiced to consumers must reflect for EDEMSA’s costs of purchasing and distributing electricity, specifically those mentioned

in the first paragraph of Section I of Sub-Annex 2, namely, costs representing the purchase of electricity from the Electricity Wholesale Market (“MEM”) as well as the transportation, distribution and commercialization of electricity.

84. These costs are then coupled with the concessionaire’s return on capital to make up what is referred to as the distribution-added value (“DAV”). The DAV passes the costs of purchasing and distributing electricity through to the final consumer and constitutes the only remuneration the distributor obtains for services provided.
85. The Currency Clause prescribes the calculation of these costs in terms of U.S. dollar currency for purposes of assessing the ultimate tariff rate to be invoiced to consumers. Subsequently, user invoices would be expressed in Argentine pesos in accordance with the monetary policy and exchange rate contemplated for in the Convertibility Law, which until 6 January 2002 pegged parity between the U.S. dollar and the Argentine peso at a ratio of one to one.
86. Second, the Currency Clause’s reference to “recalculation” of costs concerns the periodic adjustment of tariff rates to account for the inflation of electricity distribution costs, which was highlighted in the Info Memo. In this connection, Section IV of Sub-Annex 2 (“Cost Adjustment Clause”) in pertinent part provides:

Los Costos Propios de Distribución y los Gastos de Comercialización se recalcularán anualmente en coincidencia con la actualización de los Precios Mayoristas de Energía y Potencia para el período estacional que da inicio en el mes de Noviembre de cada año, y tendrán vigencia para los doce (12) meses siguientes al recálculo. Para el recálculo anual se utilizará la siguiente expresión: . . .

In English the provision reads:

The Actual Distribution Costs and the Marketing Costs shall be recalculated each year to coincide with the updating of the Wholesale Energy and Power Prices for the seasonal period beginning in November each year and shall be in effect for the twelve (12) months following the recalculation. The following expression shall be used for the annual recalculation:

87. Accordingly, the Cost-Adjustment Clause directs adjusting tariff rates every twelve months in the month of November. At that time, pursuant to the Currency Clause, relevant costs would undergo a recalculation in U.S. dollars. The purpose of the recalculation is to account for the inflation of electricity distribution costs, which must be assessed in accordance with an index combining variations in the U.S. producer and consumer price indices published by the U.S. Bureau of Labor Statistics. The Producer Price Index (“U.S. PPI”) is an indicator of the wholesale price of industrial commodities in the United States, while the Consumer Price Index (“U.S. CPI”) is an indicator of U.S. retail prices.
88. Article 40 of the Concession Agreement contains an “Applicable Law and Jurisdiction” clause which in its entirety provides:

Sin perjuicio del marco legal sustancial dado por las Leyes N° 6.497, 6.498 y sus reglamentaciones, el CONTRATO será regido e interpretado de acuerdo con las leyes de la República Argentina, y en particular, por las normas y principios del Derecho Administrativo, sin que ella obste a que las relaciones que la CONCESIONARIA mantenga con terceros se rijan sustancialmente por el Derecho Privado.

Para todos los efectos derivados del CONTRATO, las partes aceptan la jurisdicción de los Tribunales en lo Contencioso Administrativo competentes de la ciudad de Mendoza.

In English, the provision reads:

Without prejudice to the substantive legal framework pursuant to the [Provincial Electricity Law], the [Transformation Law], and their regulations, the [Concession] Contract shall be governed and interpreted in accordance with the laws of the Argentine Republic, and in particular, by the norms and principles of Administrative Law, without precluding the substantive governance of Private Law with respect to relationships the Concessionaire maintains with third parties. To all effects derived from the [Concession] Contract, the parties accept the jurisdiction of competent Courts for Administrative Contentions of the city of Mendoza.

89. Claimants’ consortium company, SODEMSA, which owned 51% of EDEMSA Class “A” Shares, thus is what is referred to when the Concession Agreement speaks of “the Investment Company owning the Majority Stake.” For example, pursuant to Article 12 of the Concession Agreement “the Investment Company owning the Majority Stake” may

not “modify its holdings nor sell its shares during the first five (5) years of Entry into Force, without previous authorization of the Executive Power. *** For their part, the shareholders of the referred to Investment Company shall not be able to modify their holdings or sell their shares in said Investment Company during the term of five (5) years since Entry into Force without prior approval of the [Province of Mendoza].”⁸

90. Article 13 of the Concession Agreement makes it EDEMSA’s exclusive responsibility to “realize the necessary investments to assure the provision of the Public Service in conformity with the level of quality required”⁹ See also, Concession Agreement,

⁸ In its original Spanish, Concession Agreement, Article 12 provides:

La CONCESIONARIA deberá tener como objeto principal la prestación del SERVICIO PUBLICO en los términos del presente CONTRATO.

La SOCIEDAD INVERSORA titular del PAQUETE MAYORITARIO, no podrá modificar su participación ni vender sus acciones durante los primeros CINCO (5) ANOS de la ENTRADA EN VIGENCIA, sin previa autorización del Poder Ejecutivo. Con posterioridad al plazo indicado, solo podrá hacerlo previa autorización del EPRE. Cualquier cambio de domicilio, deberá ser aprobado por el EPRE.

Por su parte, los accionistas de la referida SOCIEDAD INVERSORA no podrán durante el termino de CINCO (5) ANOS desde la ENTRADA EN VIGENCIA modificar sus participaciones o vender acciones de dicha SOCIEDAD INVERSORA sin autorización previa de la CONCEDENTE. El OPERADOR, por el mismo término, deberá mantener una participación no menor del VEINTE POR CIENTO (20%) del capital social de la SOCIEDAD INVERSORA. Finalizado dicho termino, de CINCO (5) ANOS, las modificaciones de las participaciones o la venta de acciones solo podrán realizarse previa comunicación al EPRE, cumpliendo las limitaciones societarias establecidas en la Ley N° 6.497 Y su Reglamentación.

En el caso de las sociedades titulares de las acciones de la SOCIEDAD INVERSORA estas deberán informar al EPRE todas las modificaciones sociales o de tenencias accionarias que signifiquen una modificación en el control de las mencionadas sociedades respecto del existente en el momento de celebrarse el contrato de transferencia del PAQUETE MAYORITARIO a dicha SOCIEDAD INVERSORA.

La CONCESIONARIA tiene la obligación de informar al EPRE, en forma inmediata y fehaciente la configuración de cualquiera de las situaciones descriptas precedentemente de las cuales tuvieran conocimiento, y es responsable del cumplimiento de las resoluciones que al efecto determine el EPRE.

En todo supuesto de transferencia o suscripción de ACCIONES CLASE “A”, el adquirente o nuevo titular de las mismas deberá otorgar todos los mandatos que en el presente se prevé que otorguen los COMPRADORES, en los términos y condiciones establecidos.”

⁹ In its original Spanish, Concession Agreement, Article 13 provides:

Es exclusiva responsabilidad de la CONCESIONARIA realizar las inversiones necesarias para asegurar la prestación del SERVICIO PUBLICO conforme al nivel de calidad exigido en el “Subanexo 5”, así como la de celebrar los contratos de compraventa de energía eléctrica en bloque que considere necesarios para cubrir el incremento de demanda dentro de su AREA. Asimismo, la CONCESIONARIA deberá implementar políticas de desarrollo de proveedores y políticas de compras y suministros que habiliten mecanismos de competencia.

El régimen de contrataciones previsto deberá contemplar dispuesto por el art. 13 inc. d) y f) de la Ley N° 6.498.

Article 22 (listing as sub-articles thereof the various obligations of the concessionaire). On the other hand, Article 23 of the Concession Agreement obliges the Province to “guarantee . . . the exclusivity of the Public Service, for the duration and subject to the conditions determined in the present Contract.” In accordance with these provisions, which collectively form the structure of what is referred to as the “price cap system,” EDEMSA can only enhance profitability by lowering costs and increasing efficiency rather than through an escalation of tariff rates.

91. Article 32 of the Concession Agreement authorizes EPRE to sanction EDEMSA for nonperformance of the latter’s contractual obligations. See also, Concession Agreement, Sub-Annex 5, which contains the prescribed sanctions EPRE is authorized to apply.

B. PRE-EMERGENCY MEASURES AFFECTING THE CONCESSION

92. The Tribunal notes a certain fluidity in the claims relating to regulatory measures adopted prior to the national and provincial emergency laws discussed below (“Pre-Emergency Measures affecting the Concession”). Claimants initially listed seven (7) such pre-emergency measures which allegedly breached the Concession Agreement. See Memorial of 2 May 2005, page 69-88. However the damages calculation in the same Memorial (pages 223-224) includes only five enumerated measures (having split the initial category 4 into categories 3 and 5), plus another item at paragraph 480 concerning “additional obligations” seeming to omit the quasi-currency payment matter and the more stringent

El EPRE reglamentará lo referido a los contratos de transferencia de tecnología y subcontratación de obras significativas, como asimismo limitaciones a su respectiva contraprestación. Dicha reglamentación determinará cuales obras se consideran significativas. En los casos de violación de la reglamentación o aquellos en que la contraprestación no sea razonable para la obra contratada, el EPRE aplicará las sanciones correspondientes.

En ningún caso se podrá celebrar contratos de subconcesión o contratos que, bajo cualquier denominación, impliquen la asunción por parte de terceros subcontratantes, de las obligaciones impuestas a la CONCESIONARIA en este CONTRATO.

En todos los casos, deberá informarse al EPRE los actos jurídicos que tengan como objeto principal o accesorio la transferencia, cesión o licencia de tecnología o marcas o cualquier acto que se inscriba de conformidad con el régimen de la Ley de Transferencia de Tecnología del Exterior No 22.426. Igual procedimiento se aplicara a cualquier contrato con personas INTEGRANTES o vinculadas a la SOCIEDAD INVERSORA titular del PAQUETE MAYORITARIO.

Los contratos deberán incluir una clausula estipulando expresamente la posibilidad de continuar su ejecución por parte de la CONCEDENTE u otros concesionarios, en caso de extinción de la CONCESION.

conditions of service. See Claimants' Memorial, at paragraphs 478-79; see also LECG Report of April 2005, at paragraphs 168-84.

93. Moreover, Claimants' Post-hearing Brief on Quantum, as well as their expert reports, seems to omit discussion not only of quasi-currency payments and the more stringent conditions of service, but also Claimants' prior calculation of damages for what was referred to as "unilateral expansion of the scope of concession by including the Polvaredas area" See Claimants' Memorial, at paragraph 480.
94. Respondent's enumeration of the various items takes a different approach, including ten (10) items in their Counter-memorial and nine (9) in their Rejoinder.
95. Claimants' initial seven (7) categories are as follows:
 - First Modification of Tariff Schedule: the "Use of Network" Fees
 - Unilateral Expansion of the Scope of Concession
 - Second Modification of Tariff Schedule: The Optional T-2 Tariff Category
 - Refusal to Pay Amounts Owed to EDEMSA and Denial of Access to Court
 - Modification of the Subsidies Regime
 - Imposition of More Stringent Conditions Regarding Quality of Service
 - Imposition of the Obligation to Accept Quasi-currency as payment from users.
96. Respondent's ten (10) item categorization are provided as follows:
 - Modification of "Use of Network" Fees
 - Second Modification to Tariff Schedule: The Optional T-2 Tariff Category
 - Incorporation of the Town of Polvaredas Into the Concession Area
 - Incorporation of the "scattered electricity market" Users

- Failure to Pay Amounts Owed in Regards to Nihuil IV (First Nihuil Claim)
- Failure to Pay Amounts Owed in Regards to Nihuil IV (Second Nihuil Claim)
- Failure to Pay Subsidies and Provision of Public Lighting Services
- Modification of the “Agricultural Irrigation” Subsidies Regime
- Imposition of More Stringent Conditions Regarding Quality of Service
- Imposition of the Obligation to Accept Quasi-Currency from Users.

97. The Tribunal finds that the substantial overlap among the various categories of Pre-Emergency Measures affecting the Concession commends analysis according to the following six (6) rubrics.

1. Tariff Schedule under the Concession Agreement

a) Payment Structure Applicable to Large Users

98. Anexo II, Subanexo 1 of the Concession Agreement set forth a tariff schedule (“Tariff Schedule”) which *inter alia* established different tariff categories depending on the type of user. Anexo II, Subanexo 1, Chapter 2, subsection 3 of the Tariff Schedule in the Concession Agreement provides that one of the components of the tariffs applicable to large users is a fee for “Use of the Network” (“Network-Use Fee”). Under Anexo II, Subanexo 1, “Tarifa Nro. 2 (Grandes Demandas)” of Chapter 2, Subsection 1, users were to fall under the Tariff No. 2 (“T-2”) category when their maximum power demand exceeded 10kW.
99. The Network-Use Fee is calculated based on the power capacity that is installed and made available to each particular user. Every twelve months, each user is to notify EDEMSA of the power capacity that it will require in the next twelve-month period. The power capacity requested by, and made available to, each user determines the amount of the fee each user will pay for use of the network during the relevant twelve-month period.
100. Issued on 28 August 1998, Resolution No. 8/98 established a different fee schedule based on the last non-null power recorded by each user immediately prior to the beginning of

the concession. Resolution 8/98 retroactively applied to the date of 1 August 1998, which was the first day of the Concession Agreement.

101. The Parties disagree on whether the tariff schedule set forth by Resolution No. 8/98 was intended to apply to all large users, including those pre-existing the Concession Agreement, or solely to future large users.
102. On 16 September 1998, EDEMSA filed an administrative claim before EPRE challenging Resolution 8/98. On 12 May 1999, EPRE issued Resolution EPRE No. 73/99, in which it rejected EDEMSA's claim.
103. Resolution No. 73/99 allowed large users to contract with EDEMSA for the level of power required on a quarterly or bi-annual basis.
104. EDEMSA filed an administrative appeal before the provincial executive power on 28 May 2000, challenging both Resolution 8/98 and Resolution 73/99.
105. On 22 November 2000, the Government of Mendoza issued Decree No. 2468, rejecting EDEMSA's claims and confirming the modifications to the Concession Agreement.

b) Optional Tariff T-2 Category

106. The Tariff Schedule under the Concession Agreement provided for a "transitory tariff", applicable to all users who at the beginning of EDEMSA's concession either (i) did not have power measuring equipment appropriate for their classification level within the Tariff Schedule established by the Concession Agreement, or (ii) had yet to be classified under one of the categories provided in the Tariff Schedule. See "Tariff Regime - Tariff Schedule"; Concession Agreement, Annex II, Sub-Annex 1, Chapter 5 ["Miscellaneous Orders"], Paragraph 2. In such cases, the transitory tariff was to apply until the user was classified under a tariff category.
107. The Concession Agreement required EDEMSA to install the requisite measuring equipment and to classify each user based on its respective power consumption. The Concession Agreement required EDEMSA to complete the meter installation and user

classification by specific deadlines, which, depending on the user's level of service demand, was either 6 or 12 months.

108. During August and September 1999, EPRE issued Resolution No. 125/99, which was later supplemented by Resolution No. 131/99. The evidence shows that Resolution No. 125/99 permitted users whose successive readings falls below 10 kW to continue with their original tariff category, known as the Tariff No. 1 ("T-1") category, applicable to small demands. Resolution No. 131/99 suspended payment obligations of those users which had already been reclassified or were about to be reclassified as T-2 large users, and mandated refund of any and all monies that may have been billed in excess due to their reclassification. Resolution No. 131/99 required EDEMSA to resend invoices to every user which had been reclassified as "T-2 Large Demands." The revised invoices were to be based on the tariff class which was in force prior to their reclassification. Such recalculation was required from the time the reclassification was implemented.
109. On 9 December 1999, the transitory tariff was extended for a period of one year until 31 July 2000.
110. On 11 August 2000, following expiration of the one-year extension, the Governor of Mendoza issued Executive Order No. 1632/00, which incorporated into Chapter 2 of the Concession Agreement a new tariff category as "Subparagraph 7: Large Demands (Optional)." This order was to be in force from 1 August 2000 to 31 July 2003.
111. Decree No. 1632/00 provided all users who had benefited from the transitory tariff the option to remain within such class, identified as the "Optional T-2" category, or to be reclassified into a new category based on their actual power consumption. The Parties are in dispute as to whether the "Optional T-2" Tariff was to include a Network-Use Fee.
112. On 13 September 2000, EDEMSA filed an administrative action before the Supreme Court of Mendoza challenging the constitutionality of Decree No. 1632/00.

2. Polvaredas Area and the Scattered Electricity Market

113. Under Resolution EPRE No.183/99, EPRE expressly incorporated a local town, known as “Polvaredas”, into EDEMSA’s area of concession, and obligated EDEMSA to serve such town.
114. Polvaredas is geographically located within the area covered by EDEMSA’s Concession Agreement, but the Parties dispute whether such town had been expressly excluded from the area of concession specifically defined in the Concession Agreement. Polvaredas was not connected to the distribution network transferred to EDEMSA, and, therefore, required its own generation equipment, which had not been transferred to EDEMSA with the concession.
115. On 23 May 2002, EDEMSA challenged Resolution EPRE No. 183/99 before the Supreme Court of Mendoza. The Parties disagree as to whether the Supreme Court of Mendoza had rendered a decision with respect to EDEMSA’s challenge of 23 May 2002.
116. On 3 December 1999, the Government of Mendoza issued Provincial Decree No. 2379/99, expressly incorporating into EDEMSA’s area of concession another category for users that fall within the “scattered electricity market” (“Scattered Market”). This category comprises of users that are located in distant regions, and that are not linked to the interconnected distribution network.
117. On 8 March 2000 EDEMSA challenged the constitutionality of Provincial Decree No. 2379/99 before the Supreme Court of Mendoza. The Parties disagree whether a decision has been rendered by the Supreme Court of Mendoza with respect to EDEMSA’s challenge of 8 March 2000.

3. Alleged Failure to Pay Amount Owed

a) Nihuil IV Claims

118. Article 37 of the Transformation Law mandated the assignment of EMSE’s rights and obligations arising out of a contract entered into with a power generation company, Hidronihuil S.A. The contract was for the construction, operation and maintenance of a hydroelectric power plant known as NIHUIL IV (“Nihuil IV Contract”).

119. The Nihuil IV Contract provided, *inter alia*, for a commitment by EMSE to purchase all of the Nihuil IV power plant's output at a price higher than that available in the Electricity Wholesale Market. Article 37 of the Transformation Law established that "[t]he difference between the price that EDEMSA must pay pursuant to this contract and the purchase value of energy in the electricity wholesale market, shall be compensated to EDEMSA by the Province with funds allocated pursuant to Article 47."
120. In conformity with Article 37 of the Transformation law, Article 22.36 of the Concession Agreement memorialized the same compensation scheme. In return for servicing a loan obtained by EMSE for purposes related to the construction of the NIHUIL IV, EDEMSA would receive monthly payments of the difference between the NIHUIL IV price and the going market price.
121. The evidence shows that, in February 2000, the Government of Mendoza stopped making payments to EDEMSA for the compensation provided for under Article 37 of the Transformation Law and Article 22.36 of the Concession Agreement.
122. On 20 November 2000, EDEMSA filed a claim before the Supreme Court of Mendoza seeking payment of amounts accrued during the period of February to July 2000. On 31 May 2002, Supreme Court of Mendoza declined to hear EDEMSA's claim, instructing EDEMSA to exhaust all recourses available at the administrative level before resorting to the judiciary.
123. EDEMSA appealed the decision of 31 May 2002 before the Federal Supreme Court of Argentina. In August 2003, the Federal Supreme Court declined to hear EDEMSA's case, finding that it lacked jurisdiction to review an interim procedural decision. On 14 March 2002, EDEMSA filed a similar claim of reimbursement before the Supreme Court of Mendoza, this time seeking payment of amounts accrued during the period August 2000 to June 2001.
124. Following the Mendoza Supreme Court's dismissal of its first claim with respect to NIHUIL IV, EDEMSA withdrew its second claim, and filed a demand for payment with the provincial government authorities. Thereafter, EDEMSA filed an administrative

request for “pronto despacho”, which is a request under administrative law for an expedited decision. EDEMSA received no response from the government authorities.

125. Subsequently, EDEMSA filed an amended complaint with the Mendoza Supreme Court. In August 2003, the Supreme Court refused to hear EDEMSA’s claim for lack of jurisdiction to review an interim procedural decision.
126. Under a contractual renegotiation agreement executed by EDEMSA and the Government of Mendoza, the parties agreed on a procedure to honor the outstanding payments due to the Concessionaire as at 31 February 2005, including the NIHUIL IV non-payments.

b) Subsidies and Public Lighting Services

127. The Tariff Schedule in the Concession Agreement provided for the application of subsidized tariffs for certain users, such as the elderly and those engaged in agricultural irrigation, as well as certain sectors, such as rural areas. The Tariff Schedule establishes that the difference arising out of the application of such tariff in lieu of that set forth in the Concession Agreement shall be covered by the PTC Fund.
128. To collect from the PTC Fund, EDEMSA was required to submit a monthly statement before EPRE, itemizing the amounts due by the Government. EPRE was required to review the calculations submitted by EDEMSA and upon approval, to pay the appropriate amounts due within ten business days from the date of EPRE’s notice of approval.
129. Since August 1999, the provincial government has failed to make payments owed, including compensation for the above-mentioned subsidy as well as for the provision of the public lighting services, despite EDEMSA continuing to submit monthly statements and obtain EPRE approvals.
130. In August 2001, EDEMSA filed an administrative claim with the Ministry of the Environment and Public Works (the authority in charge of managing the Provincial Fund). Receiving no response, in September 2001, EDEMSA filed a similar request with the Governor’s office. On 14 March 2002, EDEMSA filed a claim before the Supreme Court

of Mendoza seeking payment of AR\$ 5,498,653.19. On 31 October 2002, the Supreme Court of Mendoza refused to hear EDEMSA's claim.

4. Agricultural Irrigation Subsidies

131. The Transformation Law set forth a mechanism for subsidizing the electricity consumption by certain agricultural users for irrigation purposes.
132. Under this system, EDEMSA was to be compensated for the difference between the subsidized tariff, referred to as the "Reference Tariff", and a benchmark tariff, known as the "Tariff Payable to Distributor." Under Article 36 of the Transformation Law, all amounts due to EDEMSA were to be paid out from the Provincial Fund for the Compensation of Tariffs.
133. This subsidy mechanism implemented by the Transformation Law was incorporated into EDEMSA's Concession Agreement. Accordingly, Chapter 2 of the Tariff Schedule in the Concession Agreement required EDEMSA to apply the "Reference Tariff" to agricultural producers. Chapter 2 set forth the government's obligation to compensate EDEMSA for the difference that may exist between the amounts billed to the beneficiaries of the subsidy and those that would result from the application of the "Tariff Payable to Distributor."

5. Imposition of Service Quality Conditions

134. On 5 January 2001, the Government of Mendoza enacted Provincial Law No. 6,856. Sections 2 through 6 of Law No. 6,856 set forth procedures for the filing of claims against EDEMSA by users who allege damages due to failures in the electricity distribution system.
135. Section 2 eliminated the requirement to file an administrative claim in the first instance, thereby enabling users to resort directly to local courts. Section 5 directed courts to increase by fifty percent any damages award against EDEMSA in the event that EDEMSA challenges the merits of the claim or the existence of the alleged failure in the system. Section 6 established that the failure to comply with a damages award is tantamount to a "severe breach."

136. EDEMSA filed a claim challenging Law No. 6856 on the ground that many provisions thereof were contrary to the Provincial Constitution. The Provincial Supreme Court dismissed the action brought by EDEMSA on 10 August 2005.

6. Quasi-Currency

137. Provincial Laws No. 6955 (4 December 2001) and No. 6982 (20 February 2002) required EDEMSA to accept payment from its clients with notes, in lieu of monetary currency, issued by the Mendoza government's treasury for users' electricity bills.
138. These notes were known as "LECOPS" (Letras de Cancelación de Obligaciones Provinciales or "Notes for the Cancellation of Provincial Obligations") and "PETROMS."
139. Under Section 2 of Provincial Law No. 6955, a penalty against EDEMSA would apply in the event it refused to accept payments in LECOPs.
140. Section 6 of Law No. 6982 established that the notes would mature on 30 September 2003, on which 110.4904% of their nominal value would be paid.

C. EMERGENCY LAWS AND RENEGOTIATION PROCESS

1. National and Provincial Emergency Laws

141. The confusion and disorder characterizing the economic turmoil experienced by Argentina during late-2001 and early-2002 ("Argentine Economic Turmoil") is well documented by tribunals which have addressed investment treaty-based claims arising from the measures undertaken by Argentina in response to then-existing circumstances.¹⁰
142. In late 2001, Argentine banks experienced massive bank runs, protests and demonstrations were wide-spread, and upon the resignation of elected President Fernando de la Rúa in late December 2001, the national government subsequently witnessed the appointment and resignation of four presidents within the span of three weeks. The

¹⁰ See, e.g., *Sempra Energy (U.S.) v. Argentina*, ICSID Case No. ARB/02/16 (Award of 28 September 2007); *Enron Creditors Recovery Corp. et al. (U.S.) v. Argentina*, ICSID Case No. ARB/01/03 (Award of 22 May 2007); *CMS Gas Transmission Co. (U.S.) v. Argentina*, ICSID Case No. ARB/01/08 (Award of 12 May 2005).

Argentine Congress ultimately appointed Eduardo Duhalde as interim president for a term to last until December 2003.

143. On 19 December 2001, Federal Decree No. 1678/2001 was issued pursuant to Article 23 of the Argentine Constitution, which grants constitutional authority to the Executive and Legislative branches to declare a State of Siege (“*Estado de Sitio*”) in instances considered to threaten the exercise of the Argentine Constitution. Federal Decree No. 1678/2001 originally contemplated a State of Siege to last for thirty days but was terminated three days later on 21 December 2001 through the issuance of Federal Decree No. 1679/2001.
144. President Duhalde’s first measure to stabilize his nation’s economy was the enactment of Federal Law No. 25,561 on 6 January 2002 (“National Emergency Law”).¹¹ Of particular importance is Articles 3 thru 5 and 8 thru 10 of the National Emergency Law.
145. First, Articles 3 thru 5 of the National Emergency Law (the “2002 Monetary Measures”) amended the Convertibility Law in ways that abrogated the fixed foreign exchange rate of one Argentine peso to one U.S. dollar that was adopted in the early 1990’s, and in its stead, implemented a floating monetary regime whereby the value of the local currency would be determined by market forces. Once the fixed-parity regime was set aside, the Argentine peso devalued on average three-fold so that one Argentine peso could no longer be converted into one U.S. dollar but rather approximately three Argentine pesos would be needed to acquire the same U.S. dollar.
146. Second, Articles 8 thru 10 of the National Emergency Law (hereinafter “Emergency Tariff Measures”) *inter alia* abrogated tariff terms involving foreign currencies contained in public utilities contracts, including the Concession Agreement’s Currency and Cost-Adjustment Clauses. In conformity with principles of federalism, the Government of

¹¹ Official title, “Law of Public Emergency and Reform of the Monetary Exchange Regime.”

Argentina invited its provinces to adopt the Emergency Tariff Measures.¹² See National Emergency Law, Article 14.

147. For its account, through the enactment of Provincial Law No. 6,976 on 15 January 2002 (hereinafter “Provincial Emergency Law”), the Government of Mendoza adopted the Emergency Tariff Measures, fully adhering to Articles 8 and 10 of the National Emergency Law and, as discussed *infra*, adopting a slightly revised version of Article 9. The texts of Articles 8 and 10 of the National Emergency Law are not separately spelled out in the Provincial Emergency Law but rather incorporated therein by reference. See Provincial Emergency Law, Article 1.

148. Accordingly, Article 8 of the National Emergency Law provides as follows:

ARTICULO 8° — Dispónese que a partir de la sanción de la presente ley, en los contratos celebrados por la Administración Pública bajo normas de derecho público, comprendidos entre ellos los de obras y servicios públicos, quedan sin efecto las cláusulas de ajuste en dólar o en otras divisas extranjeras y las cláusulas indexatorias basadas en índices de precios de otros países y cualquier otro mecanismo indexatorio. Los precios y tarifas resultantes de dichas cláusulas, quedan establecidos en pesos a la relación de cambio UN PESO (\$ 1) = UN DOLAR ESTADOUNIDENSE (US\$ 1).

149. The relevant English translation, taken from Mr. Eduardo Ratti’s statement of 15 November 2008, would read: “All clauses adjusting prices in dollars or any other foreign currency and any price indexation clauses in any government contracts under public law, including public works and services, shall be null and void. Prices and rates arising from any such provisions are hereby established in pesos at a rate of ARS 1 = US\$ 1.”

150. The Concession Agreement, being a public service contract, falls under the ambit of the Emergency Tariff Measures, which declares the Cost-Adjustment Clause no longer applicable since the provision is one regarding adjustment in U.S. dollars as well as adjustment based on foreign price indices. By precluding periodic tariff adjustments as

¹² For the avoidance of doubt, the Tribunal notes that no such invitation was necessary for the adherence of the 2002 Monetary Measures since monetary policy falls within the prerogative of the Argentine federal government.

provided for in the Cost-Adjustment Clause, the Emergency Tariff Measures in effect placed a freeze on tariff rates.

151. Furthermore, despite the 2002 Monetary Measures, which de-pegged the Argentine peso so as to float at one-third of its value vis-à-vis the U.S. dollar prior to the abrogation of the Convertibility Law, the Emergency Tariff Measures imposed a fixed parity rate between the U.S. dollar and Argentine peso of one to one for purposes of assessing “[p]rices and rates arising from” the Cost-Adjustment Clause. See National Emergency Law, Article 8. This latter aspect of the Emergency Tariff Measures is commonly referred to (and therefore herein as well) as “pesification” and it effectively overrides the Currency Clause, the primary provision in the Concession Agreement addressing the calculation and recalculation of costs and tariffs as well as the terms of conversion thereof between the U.S. dollar and the local currency.
152. The second component of the Emergency Tariff Measures is contained in Article 9 of the National Emergency Law, which authorizes the national executive power to renegotiate all contracts included under Article 8 pursuant to five prescribed criteria, including *inter alia* the profitability of the company.
153. As mentioned *supra*, the Government of Mendoza adopted a slightly revised version of Article 9 as Provincial Emergency Law, Article 2, which adds a sixth criterion, taking into account when renegotiating Public Services Contracts the following factors: (1) the impact of rates on economic competitiveness and income distribution; (2) service quality and investment plans, where these are contemplated in the relevant contracts; (3) user interest and service accessibility; (4) the security of the systems covered; (5) corporate profitability; and (6) the tariff revision methodology established in the relevant Concession Agreements.
154. The third and last prong of the Emergency Tariff Measures, Article 10 of the National Emergency Law, which as mentioned *supra* was fully adhered to by the Province, prohibits public utility concessionaires, including EDEMSA, from derogating contractual obligations during the Renegotiation Process. This provision of the Emergency Tariff

Measures proclaims that under no circumstances are contracting companies or providers of public services authorized to suspend or alter the performance of their obligations.

155. In Spanish, National Emergency law Article 10 provides:

Las disposiciones previstas en los artículos 8° y 9° de la presente ley, en ningún caso autorizarán a las empresas contratistas o prestadoras de servicios públicos, a suspender o alterar el cumplimiento de sus obligaciones.

In English, the provision reads:

Under no circumstances will the provisions of articles 8 and 9 herein authorize utility companies to suspend or change the performance of their obligations.

156. For ease of reference, the Tribunal will on occasion make reference to “Emergency Measures” to include analogous legislative dispositions of both the federal and the provincial governments.

2. Renegotiation Process and Ordinary as well as Extraordinary Reviews

157. In conformity with Article 2 of the Provincial Electricity Law, on 26 April 2002 the Government of Mendoza created the Renegotiation Commission of the Public Utilities Agreements (“Renegotiation Commission”), which, acting under the aegis of EPRE and the Ministry of the Environment and Public Works (“ME&PW”), was commissioned to handle the renegotiation of the EDEMSA Concession Agreement (“Renegotiation Process”). See Provincial Decree No. 487/2002 of 26 April 2002.
158. In July 2002, EDEMSA defaulted on its financial debt.
159. On 24 July 2002, Claimants EDFI and SAURI, along with Crédit Lyonnais, parent company to Claimant León, filed an initial notice of amicable consultations under the Article 8(1) of the Argentina-France BIT, which provides:

Tout différend relatif aux investissements, au sens du présent Accord, entre l’une des Parties contractantes et un investisseur de l’autre Partie

contractante est, autant que possible, réglé à l'amiable entre les deux Parties concernées.

In English, the provision reads:

Any dispute concerning investments in the terms of this Agreement between one Contracting Party and an investor of the other Contracting Party shall whenever possible be settled by amicable consultations between the two parties to the dispute.

160. On 1 August 2002, EDEMSA filed an application for Extraordinary Review pursuant to Article 48 of the Provincial Electricity Law, which was followed by similar applications by other companies involved in the electricity sector. Through Resolution No. 400 of 20 September 2002, EPRE rejected all of these applications on grounds of failure to present a “specific petition in clear and accurate terms” in accordance with Section 129(c) of Law No. 3909 of the Mendoza Administrative Procedure.
161. Pursuant to Article 5 of Provincial Decree No. 487/2002, which marked the beginning of the Renegotiation Process, the Renegotiation Commission was initially required by law to produce new concession terms within a time frame of 180 days that ran from July 2002 until December 2002. The renegotiation, however, was unsuccessful. Consequently, on 17 January 2003, the Government of Mendoza extended the deadline for an additional 180 days up to July 2003 through Provincial Decree No. 89/2003.
162. Prior to the passage of Provincial Decree No. 89/2003, however, on 13 December 2002 EPRE held a public hearing wherein twenty-six entities, including EDEMSA, non-profit organizations, unions, service companies, and users participated (“2002 Public Hearing”). Thereafter, EPRE, on the advice of Consultancy Jorge Lapeña y Asociados S.A., prepared a report proposing an acknowledgement of US\$ 39.6 million to EDEMSA (“JL&A Report”).
163. According to the JL&A Report, EPRE concluded that as of 13 December 2002 EDEMSA covered its operating costs with the average tariff. However, that tariff did not cover payment of principal or interest on most of its debt.

164. Despite the extension, the renegotiation process proved unsuccessful once again, and thus prompted the Mendoza Executive's issuance of Provincial Decree No. 1539/2003 which made effective a second extension that was to expire on 10 December 2003.
165. Upon failure to reach an agreement on renegotiation terms by December 2003, Provincial Law No. 7,187 was passed on 24 February 2004 to extend the deadline yet again to lapse at the end of 2004.
166. Finally, upon the failure yet again to agree on renegotiation terms by the end of the third extension, the Government of Mendoza enacted Provincial Law No. 7,324 which extended the deadline to 30 June 2005. This was the fourth and last extension to the renegotiation deadline before Claimants notified EPRE in July 2004 of their intention to divest from EDEMSA.
167. On 17 January 2003, approximately one year after the enactment of the Emergency Laws, the Government of Mendoza passed Provincial Law No. 7,091, pursuant to which government funds were allocated to the PTC Fund for distribution among the various electricity distributors operating within the Province of Mendoza. Article 59 of Provincial Law No. 7,091 expressly establishes that "Cooperatives" (smaller electricity distributors all of which were owned by local investors at the times relevant to the present dispute) are to be given preference over EDEMSA with respect to the allocation of payouts.
168. On 13 March 2003, the governor of Mendoza issued Provincial Decree No. 323/2003, which sought to institute a 3.4% increase to the DAV reflected in EDEMSA's tariff schedule to apply until the completion of the Renegotiation Process. Without acknowledging any specific right of EDEMSA, EPRE explicitly approved the governor's proposal by issuing Resolution No. 467/2002. The increase in DAV, however, was ultimately rejected by the Mendoza Senate and thus, never entered into force.
169. On 20 March 2003, EDEMSA and EPRE entered into a Memorandum of Agreement No. 1 ("Memorandum No. 1"), which formally postponed the requirement level as prescribed in the Concession Agreement's Sub-Phase 2 of Control Phase I, which

EDEMESA took on to achieve by December 2001. Memorandum No. 1 also left it up to the concessionaire's discretion to notify the moment when its operational and management systems would be ready to begin supplying services in accordance with the stricter quality standards imposed in Control Phase II.

3. Commencement of ICSID Arbitration

170. As detailed *supra* in the Procedural History part of this Award, on 16 June 2003 Claimants EDFI and SAURI filed a request for arbitration against Respondent. The Request of 16 June was subsequently amended on 4 August 2003 to join León as an additional claimant, and on 12 August 2003 the Acting Secretary-General registered the Amended Request as ICSID Case No. ARB/03/23 under the formal heading, *EDF International S.A., SAUR International S.A. and León Participaciones Argentinas S.A. v. Argentine Republic*.

4. Claimants' Divestment and Increases in Tariff Rates

171. On 12 March 2004, Claimants EDFI agreed to purchase from Crédit Lyonnais the interest in EDEMESA held by León, thereby transferring Crédit Lyonnais's indirect ownership in EDEMESA to EDFI. In the following month on 7 April 2004, EDFI purchased all of SAURI's interest in SODEMSA. These two transactions conferred upon EDFI complete ownership of SODEMSA, which held 51% of EDEMESA Class "A" shares, by adding a 55% interest in SODEMSA to EDFI's pre-existing 45% ownership.
172. In July 2004, Claimant EDFI informed EPRE of an agreement reached between EDFI and a local Mendoza-based investment firm, IADESA, to sell EDFI's shares in SODEMSA to the latter. On 10 February 2005, the Argentine press reported on the Province of Mendoza's intention to institute a 12% increase in EDEMESA's tariffs.
173. On 10 March 2005, EPRE submitted to the Renegotiation Commission its proposal to grant a tariff increase based on a study on the Concession Agreement conducted by EPRE's independent expert, Universidad Tecnológica Nacional – Regional Tucumán ("UTN Report").

174. Later that month, on 30 March 2005, EDFI effectuated the sale of its SODEMSA shares to IADESA for US\$ 2 million, including all direct and indirect interests in EDEMSA which EDFI had acquired from SAURI and Crédit Lyonnais. This marked the end of the Renegotiation Process.
175. On the basis of the March 2005 sale, Claimants affirm they no longer have any direct or indirect ownership in EDEMSA or related companies but nevertheless have retained all rights to claims related to their prior ownership in EDEMSA, thus making them entitled to any damages this Tribunal concludes to have been suffered by EDEMSA during the time when Claimants' were owners thereof. Respondent does not controvert this proposition.
176. On 7 April 2005, a week after Claimants' sale of their investment to IADESA, the Province of Mendoza executed a Letter of Understanding (the "Letter of Understanding") with the now locally-owned EDEMSA providing for a DAV increase of 38.05%, thus acknowledging the need to increase the electricity tariffs. Respondent's Exhibit 169. Claimants' Exhibit 37.

III. PARTIES' POSITIONS

A. APPLICABLE LAW

177. Article 42(1) of the ICSID Convention provides that "[t]he Tribunal shall decide a dispute in accordance with such rules of law as may be agreed by the parties." In this connection, Article 8(4) of the Argentina-France BIT prescribes:

El órgano arbitral decidirá en base a las disposiciones del presente Acuerdo, al derecho de la Parte Contratante que sea parte en la controversia—incluidas las normas relativas a conflictos de leyes— y a los términos de eventuales acuerdos particulares concluidos con relación a la inversión como así también a los principios del Derecho Internacional en la materia.

In the French version, Article 8(4) provides:

L'organe d'arbitrage statuera, sur la base des dispositions du présent Accord, du droit de la Partie contractante partie au différend—y compris les règles relatives aux conflits de loi—, des termes des accords

particuliers éventuels qui auraient été conclus au sujet de l'investissement ainsi que des principes de droit international en la matière.

In the English version, Article 8(4) provides:

The arbitration organization shall rule based on the provisions of this Agreement, on the laws of the Contracting Party that is a party to the dispute—including rules relating to conflicts of laws—and on the terms of any special agreements made in connection with the investment, and on the principles of International Law on the subject.

178. Similarly, Article 12(7) of the Argentina-Luxembourg BIT provides:

El órgano arbitral decidirá en base al derecho de la Parte Contratante que sea parte en la controversia—incluidas las normas relativas a conflictos de leyes—, en base a las disposiciones del presente Convenio y a los términos de eventuales acuerdos especiales concluidos con relación a la inversión, como así también según los principios del derecho internacional en la materia.

In French, the provision reads:

L'organe d'arbitrage statuera sur la base du droit de la Partie contractante partie au différend, y compris les règles relatives aux conflits de lois, des dispositions du présent Accord, des termes des accords particuliers éventuels qui auraient été conclus au sujet de l'investissement ainsi que des principes de droit international en la matière.

In English, the provision reads:

The arbitration tribunal shall make a determination based on the laws of the Contracting Party that is a party to the dispute—including its conflict of law provisions—based on the provisions of this Agreement and the terms of any special agreements regarding the relevant investment, as well as in accordance with the applicable international law principles.

179. The Parties are for the most part in accord that this case can and should be decided solely on the basis of the Argentina-France BIT.

180. One exception to this acceptance of the Argentina-France BIT lies in connection with Respondent's affirmative defense asserted exclusively against Claimant León, namely that Article 3(2) of the Argentina-Luxembourg BIT applies to expressly exempt Argentina from any liability which might result from “. . . measures necessary to

maintain public order[.]” See Claimants’ Post Hearing Brief on Merits of 14 December 2009 at paragraphs 112-19; Respondent’s Post Hearing Brief on Merits at paragraphs 280-83.

181. Both Article 8(4) of the Argentina-France BIT as well as Article 12(7) of the Argentina-Luxembourg BIT constitute choice-of-law clauses pursuant to which the substantive legal tenets to be applied to disputes arising under the respective treaties are sourced in the investment instruments themselves, the national law of the Argentine Republic, any special investment agreement, and principles of international law on the matter. See Claimants’ Memorial at paragraphs 314-5; Respondent’s Counter Memorial at paragraphs 233-6; Respondent’s Rejoinder of 27 July 2009 at paragraphs 190-3.
182. Claimants contend that it is common ground that any lacunae in the Treaty must be resolved by resorting to international law in a manner which does not preclude Argentina’s observance of international *jus cogens* norms. See Claimants’ Reply at paragraph 247; Respondent’s Counter Memorial at paragraphs 242-7. And that for Claimants to prevail in this arbitration, nothing short of a breach of those rights granted under the Treaty must be established. See Respondent’s Counter Memorial at paragraphs 237-9. The Parties furthermore agree that other international arbitral awards are not binding on this Tribunal in the sense of *stare decisis*, but that such decisions are illustrative and relevant to the Tribunal’s analysis. See Claimants’ Reply at paragraph 133; Respondent’s Rejoinder at paragraph 270.
183. That being said, the Parties sharply diverge on (i) the relevance of Argentine law and judgments in defining the nature and scope of Claimants’ treaty-based rights as well as in ascertaining the standards against which to measure the legal effects of Respondent’s purported violation of said rights; (ii) the preemptive nature of international human rights laws which might have prohibited the observance of the Treaty; (iii) the existence of a special investment agreement; and (iv) the need to prove discrimination as a general prerequisite in establishing breaches of the Treaty.

1. Relevance of Argentine Law and Judgments

184. Claimants press for a hierarchical approach, contending it is the Argentina-France BIT and customary international law which principally define the nature and scope of their treaty-based rights as well as set forth the standards against which any conduct in violation of those rights will be assessed. Consistent with this reckoning, Argentine law is relevant only as factual matters in the context of purely domestic aspects of the dispute. See Claimants' Reply at paragraphs 247-48, 253.
185. Claimants' legal expert on Argentine administrative and constitutional laws, Dr. Alberto Bianchi, supports the soundness of Claimants' position, opining that the Argentine Constitution ranks treaties as superior to and overriding inconsistent local laws. See Bianchi Expert Report at paragraph 70; see also Claimants' Reply at paragraph 249. Moreover, Claimants maintain that, in the context of investment protections, the Treaty must be deemed to be *lex specialis* that trumps the *lex generalis* embodied in domestic law. See Claimants' Memorial at paragraph 316.
186. On the other hand, Respondent asserts that Claimants' approach incorrectly marginalizes the relevance of Argentine law because the Treaty, national law and international law should not be applied in a mutually exclusive manner. See Respondent's Rejoinder at paragraph 198. In Respondent's view, foreign investors are entitled to exercise rights in accordance with circumstances existing in the host state, and in that respect, Argentine law is essential in determining the nature and scope of Claimants' treaty-based rights as well as in deciding whether a breach of such rights has occurred. See Respondent's Counter Memorial at paragraph 240. Respondent argues it is futile to discuss hierarchy under the Argentine Constitution, affirming that as concerns this proceeding not only is there an absence of any national law provision which might conflict with international obligations, but also there is no contradiction among the four categories of applicable tenets. See Respondent's Rejoinder at paragraphs 197, 202.
187. Respondent insists the purpose of the Treaty is to provide international protection of certain property and shareholder rights Claimants acquired under the Concession Agreement, which in turn is urged to be governed by national law provisions that cannot

be analyzed in isolation from the rest of Argentina's legal regime, in particular those domestic principles and rules germane to economic crises. See Respondent's Counter Memorial at paragraphs 240-1; Respondent's Rejoinder at paragraphs 195-6, 200-1.

188. Respondent stresses that the Supreme Court of Argentina has ratified the validity of national emergency regulations almost one hundred years ago, as well as through subsequent recurrent pronouncements, thereby suggesting Claimants were well aware of (and therefore cannot be exempted from) the contours of Argentina's sovereign capacity during times of economic crises. See Respondent's Rejoinder at paragraph 202.
189. In response, Claimants state that, for purposes of this proceeding, it is ultimately irrelevant whether the Argentine Supreme Court vests Respondent with robust authority during national economic crises or whether measures adopted under crises situations are consistent with such authority because all of Argentina's actions must be measured against a single international standard, that of the Treaty. See Claimants' Reply at paragraph 253. Notwithstanding, Claimants' legal expert, Dr. Bianchi, opines that the Emergency Tariff Measures are, in any event, unconstitutional. See Bianchi Expert Report at paragraph 217.
190. Relying *inter alia* on Article 3 of the 2001 International Law Commission's Draft Articles on Responsibility of States for Internationally Wrongful Acts ("ILC Articles") as well as Article 27 of the 1969 Vienna Convention on the Law of Treaties ("Vienna Convention"), Claimants posit it is well-settled that a state cannot immunize itself from international responsibility by arguing that its actions complied with national law, and thus, the legality of acts of states under national law is not in any way determinative of lawfulness under international law. See Claimants' Memorial at paragraph 316; Claimants' Reply at paragraphs 250-2.

2. Preemption by International Human Rights Laws

191. Although Claimants do not contest that Argentina's observance of the Treaty should not preclude observance of international *jus cogens* norms, Claimants argue Respondent is unable to demonstrate that any such norm is at issue in this case or, even if present, that it compelled the pesification and freeze of tariffs; the facts of this case neither show that

compliance with the Treaty was rendered impossible, nor that the Treaty was rendered void, by virtue of a *jus cogens* norm. In Claimants' view, it is preposterous to suggest that any *jus cogens* norm required Argentina to repudiate Claimants' rights under the Concession Agreement or to rework the Regulatory Framework, or that Argentine citizens hold a supervening right to consume electricity at certain reduced prices. See Claimants' Reply at paragraph 266-67.

192. Respondent disagrees, asserting it was necessary to enact the Emergency Tariff Measures in order to guarantee the free enjoyment of certain basic human rights “such as, *inter alia*, the right to life, health, personal integrity, education, the rights of children and political rights” which were “directly threatened by the socio-economic institutional collapse suffered by the Argentine Republic, where tens of people lost their lives, the right to health, to personal integrity, to work and safety.” Respondent's Rejoinder at paragraphs 206, 208. Respondent's position is that obligations under investment treaties do not undermine obligations under human rights treaties, and thus, the Treaty should be construed and interpreted consistently with international canons aimed at fostering respect for human rights.
193. Respondent argues Claimants' rights under investment treaties should not be deemed absolute to the detriment of the Argentine population's entitlement to universal human rights enshrined in international instruments such as the 1948 U.N. Universal Declaration of Human Rights, the 1966 U.N. International Covenant on Civil and Political Rights, the 1989 U.N. Convention on the Rights of the Child, and the 1969 American Convention on Human Rights. See Respondent's Rejoinder at paragraphs 205, 209. Respondent posits these latter multilateral pacts proscribe the abrogation or suspension in any situation of those rights contained thereunder; hence, the non-derogable nature of such rights is said to be conclusive evidence that they are tantamount to *jus cogens*. See Respondent's Counter Memorial at paragraph 246; Respondent's Rejoinder at paragraphs 209-10.
194. Respondent's legal expert on international law, Dr. Monica Pinto, agrees, opining that “[t]he Government—whichever it were pursuant to the [American Convention]—was not supposed to suspend the exercise of human rights but to ensure of their satisfaction at

reasonable levels.” Pinto Expert Report at paragraph 69. As such, Respondent maintains that measures enacted to safeguard the free enjoyment of human rights should never result in international responsibility. See Respondent’s Rejoinder at paragraph 212.

195. According to Claimants, an international *jus cogens* norm is one that is “accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character.” See Claimants’ Reply at paragraphs 263-4, quoting Vienna Convention, Article 53. Claimants contend that very few norms are recognized internationally as *jus cogens*—two illustrations being treaties on genocide or the legalization of slave trading—and that obligations do not elevate to *jus cogens* status just because the instruments Respondent cites, such as the American Convention on Human Rights, considers such duties to be non-derogable; for example, Claimants call into question the peremptory nature of Articles 17(5) and 18 of the American Convention, which respectively require children born in and out of wedlock to be treated equally and individuals to be allowed to adopt the surnames of one’s parents. See Claimants’ Reply at paragraphs 264-5.

3. Existence of Special Investment Agreements

196. Respondent advances that no special investment agreements exist. See Respondent’s Counter Memorial at paragraph 236; Respondent’s Rejoinder at paragraph 193. As developed in the context of their claims discussed *infra*, however, Claimants argue otherwise. For example, in the context of indirect expropriation, Claimants contend that “for purposes of the BIT, the Concession Agreement is a concrete and legally binding specific commitment to the Claimants with respect to their investment.” Claimants’ Memorial at paragraphs 369.

4. Discriminatory Intent as a General Prerequisite

197. According to Respondent, a showing that the measures were discriminatory is a requirement for Claimants to establish treaty breaches. See Respondent’s Counter-Memorial, at paragraph 553-54. In support of its view, Respondent cites to paragraph 146 of the Tribunal’s Decision on Jurisdiction dated 5 August 2008. In this regard,

Respondent asserts that for the Tribunal to now establish a different approach would be a serious departure from a rule of procedure and thus would take the Parties by surprise. See Respondent's Post-Hearing Reply on the Merits, at paragraph 2.

198. In response, Claimants assert that such proposition has no basis in either the relevant treaty or the Tribunal's Decision on Jurisdiction as Respondent has taken the Tribunal's *dicta* out of content and has drawn spurious conclusions from it. Claimants Post-Hearing Brief on Merits, at paragraphs 69-71. Alternatively, Claimants argue that they have in fact demonstrated the discriminatory nature of the measures adopted by the Argentine authorities.

B. CLAIMS AND DEFENSES

199. Claimants' position is that from the very outset of their investment in EDEMSA in 1998, the Province, by way of the Pre-Emergency Measures affecting the Concession, wrongfully chipped away at the Concession Agreement's legal framework until completely unraveling it with the enactment of the Emergency Tariff Measures in early 2002, at that time radically transforming the "rules of the game" for Claimants and consequently crippling EDEMSA's financial stability. See, e.g., Claimants' Memorial at paragraph 410. All the while the pesification and freeze of tariffs together with the repeal of the convertibility system destroyed EDEMSA's enterprise value the Emergency Tariff Measures explicitly obligated full compliance of the Concession Agreement throughout the duration of the Renegotiation Process, which Claimants argue was engaged in good faith on their part but turned out to be nothing more than a mere formality. See Claimants' Memorial at paragraphs 271, 410. As a result, the agreed upon economic and financial equilibrium contemplated under the Concession Agreement was never restored. See Claimants' Memorial at paragraph 271.
200. Although conceding to the severity of the Argentine Economic Turmoil, Claimants posit that the Renegotiation Process was highly politicized and unwarrantedly so, marked by a lack of any real intent by the Province to reach a solution and resulting in no genuine progress during the three and a half so years that lapsed between its inception and the point Claimants finally decided to mitigate ongoing losses by selling their EDEMSA

Class “A” shares. See Claimants’ Memorial at paragraphs 206-11, 433. Claimants note that Article 2 of the Provincial Law mandated new concession terms to be drawn up within a six-month deadline, but that this time limit was subsequently extended on four occasions without affording any palliative recourse during the meantime for a period of thirty eight months. See Claimants’ Memorial at paragraphs 270-1.

201. In Claimants’ view, the Pre-Emergency Measures affecting the Concession , the Emergency Tariff Measures, and the Renegotiation Process caused a level of injury to Claimants’ investment in EDEMSA sufficient to support findings of breaches of Articles 3 (“Fair and Equitable Treatment”), 4 (“national treatment”), 5(1) (“full protection and security”) and 5(2) (“indirect expropriation”) of the Argentina-France BIT.
202. Moreover, Claimants plead that Respondent’s actions constitute violations of any standards of substantive protections afforded in investment treaties Argentina has entered into with third-party states that might be considered to be more favorable than those found in the Argentina-France BIT but subject nonetheless to incorporation therein by virtue of the most-favored-nation clause found in Treaty Article 4 (“MFN Clause”). See, e.g., Claimants’ Memorial at paragraph 386. As such, Claimants contend Respondent also bears international responsibility for failing to respect specific commitments undertaken in connection with Claimants’ investment as well as to abstain from resorting to discriminatory, arbitrary, unreasonable or unjustified measures. See Claimants’ Memorial at paragraphs 441-8, 452.
203. Claimants assess their damages to be US\$ 7.2 million excluding interest on account of the Pre-Emergency Measures affecting the Concession, and at least US\$ 123.9 million excluding interest on account of the Emergency Tariff Measures and the ensuing failure of the Renegotiation Process. See Claimants’ Post Hearing Brief on Quantum of 11 March 2011 at paragraph 53; Claimants’ Post Hearing Brief on Quantum at paragraphs 45-7.
204. On the other hand, Respondent’s position is that Claimants incorrectly construe the applicable legal standards; in particular, Respondent asserts the principle of *ejusdem generis* proscribes the MFN Clause from incorporating substantive protections of a kind

not explicitly contained in the Treaty itself, such as the treaty-obligation to respect specific commitments undertaken in connection with investments of protected foreign investors. See Respondent's Counter Memorial at paragraphs 612-3.

205. There is no dispute that the Emergency Tariff Measures abrogated certain material aspects of the Concession Agreement, including those provisions that incorporate by reference substantive terms set forth in the Regulatory Framework. See Claimants' Memorial at paragraphs 214, 269; Respondent's Counter Memorial at paragraphs 66-7. Notwithstanding, Respondent posits that, even if Claimants' construction of the law were to be correct, the facts do not support finding in favor of their claims because Claimants misunderstand the terms of the Concession Agreement and it is Claimants' own negligence and ill-performance that negatively affected the value of their investment in EDEMSA. See Respondent's Counter Memorial at paragraphs 206-208, 221. Rather, the Emergency Tariff Measures were legitimate means to conform to the Regulatory Framework's controlling principle of fair and reasonable tariffs as well as to safeguard the indigent class and to prevent hyperinflation. What is more, they actually helped EDEMSA weather the Argentine Economic Turmoil. See Respondent's Counter Memorial at paragraphs 402-8.
206. As regards the Pre-Emergency Measures affecting the Concession, Respondent maintains these were justified exercises of EPRE's authority in its capacity as regulatory agency. See Respondent's Counter Memorial at paragraph 727. Concerning the fallout of the Renegotiation Process, Respondent argues that Claimants encountered nothing but good faith on the part of the Province and EPRE as opposed to Claimants themselves who demanded irreconcilable terms, and that Claimants knew as early as 2005 that a DAV increase would be implemented. As such, Claimants' decision to divest from EDEMSA was not prompted by any purported failure of the Renegotiation Process but instead for reasons wholly unrelated to issues of liability under the Treaty. See Respondent's Counter Memorial at paragraphs 213-28. In Respondent's view, the Renegotiation Process terminated successfully, and thus, all claims presented in this proceeding should be dismissed in their entirety. See Respondent's Post Hearing Brief on Merits at paragraph 170.

1. Respect for Specific Commitments

a) Treaty Framework

207. Article 4 of the Argentina-France BIT, namely the so-called MFN Clause, provides in pertinent part:

Cada Parte Contratante aplicará, en su territorio y en su zona marítima, a los inversores de la otra Parte, en aquello que concierne a sus inversiones y actividades ligadas a estas inversiones, un tratamiento no menos favorable que el acordado a sus propios inversores, o el tratamiento acordado a los inversores de la Nación más favorecida si este último fuese más ventajoso. Por la misma razón, los nacionales de una de las Partes Contratantes autorizados a trabajar en el territorio y en la zona marítima de la otra Parte Contratante deberán poder gozar de las facilidades apropiadas para el ejercicio de sus actividades profesionales.

Ese tratamiento no se extenderá a los privilegios que una Parte Contratante acuerde a los inversores de un tercer Estado, en virtud de su participación o de su asociación a una zona de libre comercio, una unión aduanera, un mercado común o cualquier otra forma de organización económica regional.

Asimismo, este tratamiento no se extenderá a los privilegios que una Parte Contratante acuerde a los inversores de un tercer Estado, en virtud de un convenio para evitar la doble imposición o cualquier otro convenio en materia fiscal.

In the French version, the MFN Clause provides:

Chaque Partie contractante applique, sur son territoire et dans sa zone maritime, aux investisseurs de l'autre Partie, en ce qui concerne leurs investissements et activités liées à ces investissements, un traitement non moins favorable que celui accordé à ses investisseurs, ou le traitement accordé aux investisseurs de la nation la plus favorisée, si celui-ci est plus avantageux. A ce titre, les ressortissants de l'une des Parties contractantes autorisés à travailler sur le territoire et dans la zone maritime de l'autre Partie contractante doivent pouvoir bénéficier des facilités appropriées pour l'exercice de leurs activités professionnelles.

Ce traitement ne s'étend pas aux privilèges qu'une Partie contractante accorde aux investisseurs d'un Etat tiers, en vertu de sa participation ou de son association à une zone de libre échange, une union douanière, un marché commun ou toute autre forme d'organisation économique régionale.

De même, ce traitement ne s'étend pas aux privilèges qu'une Partie contractante accorde aux investisseurs d'un Etat tiers, en vertu d'une convention tendant à éviter la double imposition fiscale ou de toute autre convention en matière fiscale.

In English, the MFN clause reads:

Within its territory and in its maritime zone, each Contracting Party shall provide to the investors of the other Party, with respect to their investments and activities associated with such investments, a treatment no less favorable than that accorded to its own investors or the treatment accorded to investors of the most favored Nation if the latter is more advantageous. For the same reason, the nationals of either of the Contracting Parties authorized to work in the territory and in the maritime zone of the other Contracting Party shall be able to enjoy suitable terms for the conduct of their professional activities.

Such treatment shall not extend to the privileges that a Contracting Party grants to investors of a third State by virtue of its participation or its association with a free trade zone, a customs union, a common market, or any other form of regional economic organization.

Furthermore, such treatment shall not extend to the privileges that a Contracting Party grants to investors of a third State by virtue of an agreement to prevent double taxation or any other agreement covering fiscal matters.”

208. Claimants' position is that by virtue of the MFN Clause they are entitled to any substantive protections which might be considered to be more favorable than those contained in the Argentina-France BIT but are found in third-party investment treaties; one such protection being what shall be referred to herein as the “umbrella clause(s),” that is, the express treaty obligation of a host state to respect specific commitments undertaken in connection with investors of the counter-party contracting state. See Claimants' Memorial at paragraph 452.
209. Article 10(2) of the Argentina-Luxembourg BIT, which Claimant León is noted to be able to invoke directly without having to rely on the MFN Clause, furnishes an “umbrella clause”:

Cada una de las Partes Contratantes respetará en todo momento los compromisos contraídos con los inversores de la otra Parte Contratante.

In English, the provision reads:

In English, the provision reads: “Each of the Contracting Parties shall respect at all times the commitments it has undertaken with respect to investors of the other Party.”

210. Likewise, the investment treaty concluded on 9 April 1991 between Argentina and Germany in Article 7(2) provides:

Cada Parte Contratante cumplirá cualquier otro compromiso que haya contraído con relación a las inversiones de nacionales o sociedades de la otra Parte Contratante en su territorio.¹³

In English, the provision reads:

“Each Contracting Party shall comply with any other commitment undertaken in connection with the investments made by nationals or companies from the other Contracting Party in the former’s territory.”

211. Claimants moreover invoke Article 2(3) of the Agreement between the Government of the Hellenic Republic and the Government of the Republic of Argentina on the Promotion and Reciprocal Protection of Investments concluded on 26 October 1999, which provides that “Each Contracting Party shall observe any other obligation it may have entered into with regard to investments of investors of the other Contracting Party.”
212. According to Claimants’ legal expert on international law, Dr. Rudolf Dolzer, as concerns to this case specific commitments undertaken in connection with Claimants’ investment in EDEMSA are “contained in the national and provincial regulatory framework, and in the Concession Agreement.” Dolzer Supplement Expert Report at paragraph 189. In paragraph 467 of their Reply, Claimants posit that, among those specific commitments the Province bargained to undertake as well as those implemented by law, particular emphasis should be given to Respondent’s purported failure to respect: (i) the principles of the Regulatory Framework, including those governing the right to calculate and recalculate tariffs as well as those proscribing the unwarranted and

¹³ See Claimants’ Memorial of 2 May 2005, at paragraph 452. In this connection, Respondent argues that the Argentina-Greece BIT was, as of the date Respondent filed its Rejoinder on 27 July 2009, not yet effective. See Respondent’s Rejoinder, at paragraph 540.

unilateral modification of the Concession's legal framework; (ii) Claimants' right to fair and reasonable tariffs which produce reasonable rates of return for EDEMSA; (iii) Claimants' right to calculate tariffs in U.S. dollar terms as prescribed in the Currency Clause; (iv) Claimants' right to adjust tariffs for inflation based on U.S. producer and consumer price indexes as prescribed in the Cost-Adjustment Clause; and (v) Claimants' right to Ordinary Reviews every five years and Extraordinary Reviews in objective and justified circumstances.

213. On the issue of applicability, Respondent sets forth a three-tier defense, asserting that (i) the principle of *ejusdem generis* effectively bars Claimants from invoking any "umbrella clauses," (ii) even if the scope of the MFN Clause is found to be able to incorporate "umbrella clauses," there are no specific commitments Claimants can base their claim on because the Concession Agreement was signed with EDEMSA, and thus, Claimants lack contractual privity, and (iii) even in the event the Tribunal were to find in favor of Claimants on counts (i) and (ii), applying "umbrella clauses" to enforce provisions set forth in the Concession Agreement would mean having to enforce the forum selection clause contained therein, which grants exclusive jurisdiction to the administrative courts of the City of Mendoza. See Respondent Rejoinder at paragraphs 541-2, 558-64; Respondent's Post Hearing Reply on the Merits at paragraph 109.
214. According to Respondent, the MFN Clause is of a generic type subject to the principle of *ejusdem generis*, which in effect prohibits the incorporation of a new standard of protection into the Argentina-France BIT. See Respondent's Counter Memorial at paragraph 613. Quoting Article 9(1) of the U.N. Draft Articles on the Most Favored Nation Clause, titled "Scope of Rights under a Most-Favored-Nation Clause," Respondent presses that under the MFN Clause, Claimants acquire "only those rights that fall within the scope of the purpose of the clause." Respondent's Rejoinder at paragraph 541.
215. Furthermore, Respondent suggests that the language of Treaty Article 8(1), namely the jurisdiction clause and which is formulated in terms of "[t]out différend relatif aux

investissements, au sens du présent Accord, . . . [.]”¹⁴ should be construed to place claims based on treatment standards not expressly contemplated under the Argentina-France BIT as falling outside the authority of the Tribunal. In this respect, Respondent highlights that consent is a cornerstone of the arbitral process. See Respondent’s Rejoinder at paragraph 545-46.

216. As such, Respondent asserts that the MFN Clause is unable to incorporate “umbrella clauses” because the question of whether there has been a breach of such standards does not arise “in the sense of [the Argentina-France BIT].” See Respondent’s Rejoinder at paragraph 544. In Respondent’s view, “umbrella clauses” constitute exceptions to the fundamental principle of customary international law that a breach of a domestic law does not give rise to international responsibility, and exceptions by their very nature must be considered to be specifically negotiated. Respondent posits that the majority of investment treaties entered into by either France or Argentina does not provide “umbrella clauses.” See Respondent’s Rejoinder at paragraphs 550-55. What is more, any other interpretation would contradict the principle of *effet utile*—in other words, there would be no purpose of signing treaties not containing an “umbrella clause” if treaties concluded either prior or subsequent thereto in fact do. See Respondent’s Rejoinder at paragraph 556.
217. In response, Claimants contend that foreign investors have relied on most-favored-nation clauses to obtain more favorable substantive protections contained in investment treaties between the host state and third-party states since otherwise investors protected under third-party investment treaties would in fact receive more favorable treatment from the host state, which in Claimants’ view is exactly what the MFN Clause proscribes. See Claimants’ Reply at paragraph 459. Claimants’ legal expert, Dr. Dolzer, agrees, opining that “umbrella clauses” should be found to fall within the scope of the MFN Clause because or else, “certain foreign investors would receive treaty protection with respect to specific commitments made to them in circumstances in which French investors would

¹⁴ Respondent’s English translation: “Any dispute relating to investments, in the sense of the present Agreement,”

not, which would contradict the MFN guarantee provided by the France BIT.” Dolzer Supplement Expert Report at paragraph 183.

218. As concerns Respondent’s second line of defense, Claimants’ position is that contractual privity is not a prerequisite for invoking “umbrella clauses” because for starters, a literal interpretation of the standard supports the inference that obligations under the Concession Agreement and the Regulatory Framework constitute specific commitments undertaken in connection with Claimants’ investments, and hence, are provisions that shareholders such as Claimants are entitled to enforce under the Treaty even if contractual privity is lacking and as a consequence thereof redress under Argentine law would have been precluded. See Claimants’ Reply at paragraph 461.
219. Dr. Dolzer for his part opines that the “umbrella clauses” in question are broadly worded and do not refer to contractual privity, requiring only “that the subject matter of the commitment concern the investment of a foreign investor.” Dolzer Supplement Expert Report at paragraph 187. Claimants add that (i) provisions under concession agreements and local regulations become obligations subject to “umbrella clause” protection by virtue of being targeted at foreign investors and applying specifically to their investments, (ii) payment obligations are contemplated as well, and (iii) the inquiry is whether a contractual breach affects a right protected under the Treaty. See Claimants’ Reply at paragraphs 463-5.
220. In Claimants’ view, the relationship between contracts and international investment law is well established: absent an “umbrella clause,” if a host state acts as an ordinary commercial or contractual counterparty in breach of contractual obligations, then the state is answerable for its conduct only to its contractual counter-party according to the dispute resolution mechanism provided in the contract and consequently, generally not internationally liable. See Claimants’ Reply at paragraph 317.
221. According to Claimants, it is clear that a repudiation of contractual rights by a state through a governmental act, as opposed to a commercial breach, gives rise to breaches of investment treaty-based rights. Claimants posit that the sovereign acts at issue in this case are not mere ordinary contractual breaches of a commercial nature, but rather the

outcome of major legal and regulatory changes induced by the state—it is incontrovertible that only the Governments of Argentina and the Province of Mendoza possess the power to freeze tariff rates, reform monetary policy, and to regulate the distribution of electricity. As such, the key issue is whether the relevant acts were taken in a sovereign or regulatory capacity, or merely as a commercial counterpart. See Claimants’ Reply at paragraphs 318, 319-21.

222. On the other hand, Respondent asserts that specific commitments contemplated by “umbrella clauses” (i) are consensual obligations arising independently of investment treaties, (ii) are specific obligations concerning the investment, (iii) do not cover general requirements imposed by the law of the host State, (iv) are not entered into *erga omnes* but with regard to particular persons and whose performance occurs with regard to, and as between, obligor and obligee, (v) are obligations that do not transform into something else, as their content ‘is unaffected, as is its proper law and the parties are bound thereto, and (vi) are bilateral or intrinsically linked to obligations of the investment company, but nevertheless are not confused with such obligations, as a shareholder will not be bound by them. See Respondent’s Rejoinder at paragraph 561. In sum, based on the foregoing factors, Claimants may not allege that the Province undertook specific commitments with respect to them as they are not parties to the instruments invoked. See Respondent’s Rejoinder at paragraph 564.
223. Notwithstanding, even if an “umbrella clause” were to apply to the present dispute, Respondent argues that the rights provided under the Concession Agreement or their legal consequences would remain unaffected, in particular the forum selection clause contained in Article 40 therein. As such, when the essence of a claim falls under the scope of a contractually-agreed forum selection clause, such stipulation should be respected. See Respondent’s Rejoinder at paragraphs 565-68, 569.
224. In Respondent’s view, the maxim *generalia specialibus non derogant* dictates that a document containing a dispute settlement clause which is more specific in relation to the parties and to the dispute should be given precedence over a document of more general application, namely investment treaties, which are not concluded with any specific

investment or contract in view but rather as a framework treaty intended to support and supplement, not to override and replace, the actually negotiated investment arrangements made between the foreign investor and the host state. See Respondent's Rejoinder at paragraph 570. Respondent notes that neither the Argentina-France BIT nor the ICSID Convention sets forth any provision which could prevail over forum selection clauses, and thus, if the Tribunal were to find "umbrella clauses" as applicable to the claims presented herein, the forum selection clause found in Article 40 of the Concession Agreement must be respected. Respondent's Rejoinder at paragraphs 570-4.

225. Claimants contend that it is widely accepted that even where the facts of a dispute arise in connection with a contract, a foreign investor is still entitled to pursue treaty-based claims notwithstanding any contractual forum selection clause that might govern mere breach of contract claim. Claimants insist that local law might be relevant at most in assessing whether there has been a breach of the treaty since the breach of a commitment under national norms is an appropriate factor for consideration in determining whether the same act of state amounts to a treaty violation. Consequently, any overlap which might exist as regards the facts supporting a breach of contract claim and a corollary breach of treaty claim does not prevent a tribunal from considering the prevalence of the latter. See Claimants' Reply at paragraphs 393-94.
226. Claimants reiterate that where an act of state reflects the exercise of quintessentially public or sovereign powers, then a treaty claim can be pursued completely independent of issues concerning contract breach. See Claimants' Reply at paragraph 398. In this respect, Claimants note that Respondent admits the Pre-Emergency Measures affecting the Concession were exercises of the Province's sovereign capacity and that there can be no doubt the Emergency Measures and the overseeing of the Renegotiation Process were so as well. See Claimants' Reply at paragraphs 402-3; Respondent's Counter Memorial at paragraph 702. Accordingly, it is not a matter of being disappointed in the performance of the host state in the execution of a contract, but rather whether an investor, whose contract rights are destroyed through the exercise of governmental prerogatives, is entitled to circumvent the operation of contractual forum selection clauses and head

straight to claiming violations of investment treaties before an international arbitral tribunal. See Claimants' Reply at paragraphs 399-401.

b) Pre-Emergency Measures Affecting the Concession

227. As mentioned earlier, Claimants have initially listed seven (7) Pre-Emergency Measures affecting the Concession whereas Respondent's defenses break them down into ten (10) categories. As discussed hereinafter the Tribunal finds substantial overlap which permits such measures to be considered most accurately under six (6) rubrics.
228. Claimants assert that, from the very beginning of EDEMSA's concession, the Respondent altered the Regulatory Framework and Concession Agreement, negatively impacting EDEMSA's operations and finances. Claimants' Reply at paragraph 189. According to Claimants, Respondent's conducts caused a change to the financial equilibrium of the Concession Agreement in a way detrimental to EDEMSA. Moreover, all these measures discussed *infra* adversely affected the company's technical performance and made it increasingly difficult to meet the quality standards.
229. In Respondent's view, Claimants' Pre-Emergency claims affecting the Concession pertain to measures under the regulatory authority of EPRE or the Government of Mendoza. Respondent asserts that the nature of the claims based on Pre-Emergency Measures affecting the Concession is strictly contractual and that Claimants have already brought said claims before local courts. Respondent's position is that the claims are subject to *res judicata* and pertain to matters foreign to the jurisdiction of this Tribunal. Respondent's Rejoinder at paragraph 777.
230. Respondent argues that contractual renegotiation agreement was executed by EDEMSA and the Government of Mendoza, in which the parties agreed on a procedure to honor the outstanding payments due to EDEMSA as at 31 February 2005, including the NIHUIL IV non-payments. Respondent's Rejoinder at paragraph 778. According to Respondent, such agreement had been memorialized in the Letter of Understanding dated 7 April 2005. In this connection, Respondent argues that the Tribunal's finding in favor of Claimants with respect to these claims based on Pre-Emergency Measures affecting the Concession

would result in double recovery. The Parties' dispute with respect to the Pre-Emergency Measures affecting the Concession can be categorized as follows.

(1) Modification of the Tariff Regime under the Concession Agreement

231. Claimants assert that EPRE unilaterally altered the tariff regime under the Concession Agreement by modifying its fee structure and the contracting period applicable to large users as well as by wholly creating a new tariff category. See Claimants' Reply at paragraph 190.
232. According to Claimants, it is uncontested that the Tariff Schedule under the Concession Agreement permitted EDEMSA to recuperate the additional costs incurred as a result from having to supply greater levels of power for large electricity users. See Claimants' Memorial, at paragraph 149; see Respondent's Counter-Memorial, at paragraphs 729-37. As such, the scheme was set forth in Anexo 1, Subanexo 1, Chapter 2, Subsection 3 of the Tariff Schedule in the Concession Agreement, establishing a fee for "Use of the Network" ("Network-Use Fee") as part of the tariffs applicable to large users. The Network-Use Fee was to be calculated based on the power capacity that had been installed and made available to each large user. Every twelve months, each large user would notify EDEMSA of the power capacity that it will require in the next twelve-month period. The power capacity requested by and made available to each user determined the amount of the fee each user will pay for use of the network during the relevant twelve-month period. See Respondent's Counter-Memorial at paragraphs 729, 37.
233. Claimants assert that it is uncontested that Resolution No. 8/98 established a fee structure different from that mentioned above in that the new fee calculation would be based on the last non-null power recorded by each user immediately prior to the beginning of the concession on 1 August 1998. Claimants' Memorial, at paragraph 151-52; Respondent's Counter-Memorial, at paragraph 736-37.
234. The Parties, however, disagree whether EPRE's resolutions in relation to this tariff regime constitute unilateral modifications or instead legitimate exercise of authority by

EPRE. See Claimants' Reply, at paragraphs 190-94; see Respondent's Counter-Memorial of 9 February 2009, at paragraph 727.

235. Moreover, Claimants assert that Resolution No. 8/98 in effect allowed users to only pay for the yearly minimum of their electricity use rather than the maximum as originally contemplated in the Concession Agreement. See Claimants' Memorial, at paragraph 151. According to Claimants, the last non-null power usage immediately prior to the beginning of the concession would have been recorded in July, which was during the winter season in the southern hemisphere. Claimants' Reply, at paragraph 191. Claimants' witness, Mr. Gonella, attests that electricity consumption falls to its lowest level during the winter, and that EPRE regulations permitted large users to contract for their minimum use, regardless of the power capacity actually installed and made available to such users. See Supplementary Witness Statement of Héctor Gonella, at paragraph 13.
236. In Respondent's view, such modification was consistent with the requirements of the Concession Agreement in order to ensure that the tariffs were just, proportional, and equitable. See Respondent's Rejoinder at paragraph 782. Respondent's witness, Mr. Sergio Rodríguez, opines that such modifications were sought in response to consumer complaints and applied in general to all power distributors in the province and not just to EDEMSA. See Witness Statement of Sergio Rodríguez, at paragraphs 33-42. Respondent further argues that this new tariff system was only applicable to new large users, as opposed to those pre-existing at the date of the Concession Agreement's execution. See Respondent's Counter-Memorial at paragraph 732. Mr. Rodríguez further opines that, given the existence of over 4,000 large users, the parties could not have expected the individual agreements with users to be completed by the time of service take over.¹⁵
237. Claimants' witness, Mr. Gonella, seeks to undermine Respondent's argument by stating that EMSE in fact had at its disposition the exact figures of maximum energy consumption of each large user from the twelve months prior to the beginning of the

¹⁵ Rebuttal Witness Statement of Sergio Rodríguez, at paragraph 11.

concession.¹⁶ See Claimants' Reply at paragraph 193. Mr. Gonella further opines that, in light of these figures, EDEMSA could have easily projected each consumer's energy use for the following year.

238. The second alleged modification imposed by EPRE concerns the reduction of the twelve-month contracting period with large users. See Claimants' Memorial at paragraph 153. According to Claimants, Resolution EPRE No. 73/99 further modified the tariff regime by reducing the twelve-month contracting period to three months. See Claimants' Reply at paragraph 195. Claimants assert that at no time during the negotiating process prior to signing the Concession Agreement were periods of less than twelve months ever contemplated for calculating the Network-Use Fee. See Claimants' Reply at paragraph 197.
239. Claimants argue that it is uncontested that in practice, Resolution 73/99 would allow large users with seasonable production cycles to pay EDEMSA for power capacity only during the months when each user actually makes use of the maximum power capacity, while paying lesser amounts during the remainder of the year when, due to lower levels of activity, separate contracts are entered for a lesser power capacity. See Claimants' Memorial, at paragraph 154; see Respondent's Counter-Memorial, at paragraph 744. Moreover, Claimants contend that it is undisputed that EPRE did in fact modify the duration of the contracts to be entered into with large users. See Claimants' Reply, at paragraph 195; see Respondent's Counter-Memorial, at paragraph 744
240. The third modification asserted by Claimants regards the events leading to EPRE's imposition of a new category, referred to as the "Optional T-2" Tariff. See Claimants' Memorial at paragraph 168.
241. As detailed above, the Tariff Schedule under the Concession Agreement provided for a temporary tariff, applicable to all users who at the beginning of EDEMSA's concession either (i) did not have the power measuring equipment appropriate for their classification level within the Tariff Schedule established by the Concession Agreement, or (ii) had yet

¹⁶ Supplementary Witness Statement of Héctor Gonella, at paragraph 12.

to be classified under one of the categories provided in the Tariff Schedule. In such cases, the transitory tariff was to apply until the user was classified under a tariff category. The Concession Agreement required EDEMSA to complete the meter installation and user classification by specific deadlines, which, depending on the user's level of service demand, was either 6 or 12 months. See Claimants' Memorial at paragraph 168.

242. According to Claimants' witness, Mr. Gonella, the Concession Agreement originally required that if the first reading with new digital readers exceeded 10kW, the user would be automatically categorized under the T-2 large user category, thereby being subject to the Network-Use Fee. See Supplementary Witness Statement of Hector Gonella, at paragraph 23.
243. In August 1999, EPRE issued Resolution No. 125/99, which was later supplemented by Resolution No. 131/99. In Claimants' view, these resolutions effectively prevented EDEMSA from properly classifying the temporary tariff users. See Claimants' Memorial, at paragraph 167.
244. Respondent admits that Resolution No. 125/99 permitted users whose consumption fell between 10 and 50 kW to continue with the original T-1 tariff category. See Respondent's Rejoinder, at paragraph 799. Claimants thus assert that EPRE wrongfully permitted modification of the tariff regime by permitting consumers to opt for the T-1 tariff category (applicable to small consumers) if successive readings showed power uses of less than 10kW; in effect, some large users could avoid the T-2 tariff classification so long as later monthly readings fell below the threshold level. Claimants' Reply at paragraph 199.
245. Claimants argue that it is uncontested that Resolution No. 131/99 suspended payment obligations of those users which had already been reclassified or were about to be reclassified as T-2 large users, and mandated refund of any and all monies that may have been billed in excess due to their reclassification. See Claimants' Reply, at paragraph 199; see Respondent's Rejoinder, at paragraph 801. In addition, Resolution No. 131/99 required EDEMSA to resend invoices to every user which had been reclassified under the T-2 tariff category. The revised invoices were to be based on the tariff class which was

- in force prior to their reclassification. Such recalculation was required from the date on which the reclassified tariffs were implemented. Claimants contend that it is undisputed that the transitory tariff was later extended for one year until 31 July 2000.
246. In defense, Respondent argues that Resolutions No. 125/99 and 131/99 were issued in the interest of the electricity consumers. According to Respondent, the former was enacted provided that the application of the Measurement Normalization Plan under Chapter 5, subsection 2 of the Tariff System was inadequate, resulting in only a series of measures aiming at safeguarding the information rights of users. Respondent further asserts that the latter resolution was established as a precautionary measure. See Respondent's Rejoinder at paragraph 800-1.
247. In addition, Claimants argue that despite expiration of the one-year extension, the Governor of Mendoza issued Executive Order No. 1632/00, which unilaterally incorporated the transitory tariff into the Concession Agreement as a new tariff category. See Claimants' Memorial at paragraph 168. This order was to be in force from 1 August 2000 to 31 July 2003.
248. On 13 September 2000, EDEMSA filed an administrative action before the Supreme Court of Mendoza challenging the constitutionality of Decree No. 1632/00. Parties disagree whether a decision has been rendered by the Supreme Court of Mendoza with respect to EDEMSA's challenge of 13 September 2000.
249. Claimants contend that it is undisputed that Executive Order No. 1632/00 provided all users who had benefited from the transitory tariff the option to remain within such class, identified as the "Optional T-2" category, or to be reclassified into a new category based on their actual power consumption. Claimants' Reply, at paragraph 200; see Respondent's Rejoinder, at paragraphs 802-6.
250. The Parties, however, disagree whether the "Optional T-2" Tariff was to include a fee for the use of the network. See Claimants' Memorial, at paragraphs 168-69; see Respondent's Rejoinder, at paragraphs 808-10.

251. Claimants assert that this new tariff category in effect allowed certain commercial users the option to avoid paying the Network-Use Fee, which had been originally agreed to apply when a users maximum power demand exceed an average of 10kW per periods of fifteen consecutive minutes. See Claimants' Memorial at paragraph 165.
252. Moreover, Claimants argue that Respondent's arguments as to equity and the need to protect certain groups of consumers are wholly irrelevant in the present case. Claimants' Reply at paragraph 202. Rather, EPRE was simply not authorized by the Concession Agreement to implement such unilateral modifications. This resulted in substantial harm to EDEMSA, for which it was not compensated.
253. In response, Respondent argues that users classified under the Optional T-2 Tariff were not exempt from paying the Network-Use Fee and that this tariff category was not lower than the electricity actually being consumed. See Respondent's Rejoinder at paragraph 808. Respondent's witness, Mr. Rodríguez, opines that although the Optional T-2 and the regular T-2 tariffs were calculated by way of different methods, both compensated for all costs related to the provision of the service, that is, the DAV and the procurement cost. See Rebuttal Witness Statement of Sergio Rodríguez, at paragraphs 60-61. According to Mr. Rodríguez, the optional tariff set forth a variable charge, which resulted in increases in the amount billed as power usage increased.

(2) Expansion of the Scope of the Concession Area

254. Claimants assert that EPRE unilaterally expanded the scope of the Concession Agreement by incorporating therein the town of Polvaredas as well as the Scattered Market without adequate remuneration in exchange. See Claimants' Memorial at paragraphs 158-63.
255. Claimants suggest that it is common ground that these categories comprise of users located in remote regions that are not linked to the interconnected distribution network. Claimants' Memorial, at paragraphs 160, 162; see Respondent's Counter-Memorial, at paragraphs 752-53, 757.

256. Claimants contend that it is undisputed that the area of Polvaderas was not transferred to EDEMSA upon commencement of the concession as this region was self-serviced by a generation equipment. See Claimants' Memorial, at paragraph 160; see Respondent's Counter-Memorial, at paragraph 753. According to Claimants, it is uncontested that, after an incident resulting in damages to the generation equipment and thus halt of power services to the Polvaderas inhabitants, Resolution EPRE No.183/99 was issued, expressly incorporating the town of Polvaderas into EDEMSA's area of concession. In addition, Claimants argue that it is undisputed that, on 3 December, 1999, the Government of Mendoza issued Provincial Decree No. 2379/99, expressly incorporating into EDEMSA's area of concession the Scattered Market. Claimants' Reply, at paragraph 211; see Respondent's Counter-Memorial, at paragraph 757.
257. In defense, Respondent argues that such isolated areas are deemed public service and thus serve as an integral part of EDEMSA's distribution services. See Respondent's Counter-Memorial at paragraphs 754, 759-60. In support, Respondent cites to Article 2 of the Concession Agreement, which obliged the concessionaire "to satisfy in whole the demand for electricity service within the Area" Respondent's Counter-Memorial at paragraph 759. In turn, the Definitions section of the Concession Agreement defined "Area" in a way so as to establish "the scope within which CONCESSIONAIRE is obliged to render the PUBLIC SERVICE and cover the increase in the demand as provided for in this Agreement, including the areas defined in the regulation of [the Transformation Law] and Annex I of the Bidding Conditions." In this connection, Respondent cites to the definition of "area of exclusivity" under the Concession Agreement. See Respondent's Counter-Memorial, at paragraph 760. Respondent's position is that both Polvaderas and the Scattered Market fall under the scope of "public service", as the terms of the Concession Agreement require EDEMSA to cover the increase in demand within the area of concession. Respondent's Counter-Memorial at paragraphs 759.
258. Moreover, Respondent notes that the Mendoza Supreme Court recognized the need to compensate EDEMSA as the Polvaderas area was delivered to Claimants after their taking of possession. In this connection, Respondent concedes that EDEMSA was to be

compensated through the PTC Fund, in order to balance the difference in distribution costs. Respondent further posits that Mendoza undertook the responsibility of providing Polvaredas with the fixed material needed for power supply, without EDEMSA having to invest money for such purpose. Respondent's Rejoinder at paragraph 791-92.

259. Claimants respond by asserting that the documents presented during the due diligence process, though making reference to the distribution system, fails to mention inclusion of isolated populations located in areas such as Polvaredas or the Scattered Market. See Claimants' Reply at paragraph 206, 213.
260. Citing to paragraph 755 of Respondent's Counter-Memorial, Claimants assert that Respondent's own admission of the need to compensate EDEMSA for additional costs incurred in relation to services in the Polvaredas area further supports Claimants' view that the isolated regions were never considered as part of the Concession Agreement. See Claimants' Reply at paragraph 207. Had such area been included prior to the concession, extra compensation would not have been required. Furthermore, Claimants assert that, had Polvaredas been included in the area of concession, there would have been no need for EPRE to issue Resolution No.183/99. See Claimants' Reply at paragraph 208. Claimants further argue that despite recognizing the need for compensation, Respondent has never provided compensation or reimbursement in this connection. See Claimants' Reply at paragraph 209.
261. With respect to the Scattered Market, Claimants further assert that EDEMSA was denied the right to charge certain local users located in small rural communities with their own electricity generation equipment and local low voltage distribution network (referred to as "collective users") as well as those connected to a secondary network consisting of a single wire used for transmission purposes (referred to as "monofilar"). Claimants' Memorial at paragraph 163. According to Claimants, Provincial Decree No. 2379/99 further burdened EDEMSA by requiring it to apply to the Scattered Market the same stringent quality of service that applied to users within the interconnected distribution network. See Claimants' Memorial at paragraph 163. Claimants' witness, Mr. Gonella,

posits that this new contractual obligation resulted in an increase in cost to EDEMSA. See Supplementary Witness Statement of Hector Gonella, at paragraph 46.

262. In response, Respondent cites to Mr. Rodríguez, who opines that “tariffs were expressly regulated in Schedule 1.2 of [Decree No. 2379/99], which established a regime of subsidies and compensations payable to the Concessionaire.”¹⁷ See Respondent’s Rejoinder at paragraph 797.

(3) Modification of Agricultural Subsidy Regime

263. Claimants assert that EPRE changed the original subsidies regime that had been established for the benefit of agricultural irrigation users. See Claimants’ Memorial at paragraphs 192-95.
264. Claimants contend that it is undisputed that the Transformation Law set forth a mechanism for subsidizing the electricity consumption by certain agricultural users for irrigation purposes. Claimants’ Reply, at paragraph 214; see Respondent’s Rejoinder, at 822. The Transformation Law mandated the application of a special tariff schedule to all agricultural irrigation users existing at the time the Regulatory Framework was passed. Under this system, EDEMSA was to be compensated for the difference between the subsidized tariff, referred as the “Reference Tariff”, and a benchmark tariff, known as the “Tariff Payable to Distributor.” Under Article 36 of the Transformation Law, all amounts due to EDEMSA were to be paid out from the PTC Fund.
265. This subsidy mechanism implemented by the Transformation Law was incorporated into EDEMSA’s Concession Agreement. Claimants’ Reply, at paragraph 214; see Respondent’s Rejoinder, at 822. Accordingly, Chapter 2 of the Tariff Schedule in the Concession Agreement set forth the government’s obligation to compensate EDEMSA for the difference that may exist between the amounts billed to the beneficiaries of the subsidy and those that would result from the application of the “Tariff Payable to Distributor.” See Respondent’s Rejoinder at paragraph 822.

¹⁷ Rebuttal Witness Statement of Sergio Rodríguez, at paragraph 44.

266. The Parties disagree as to whether, under this subsidy framework, EDEMISA was required to deposit back into the PTC Fund any excess amount in instances where the “Reference Tariff” resulted in a higher amount than that from the “Tariff Payable to Distributor.” See Claimants’ Reply, at paragraph 216; see Respondent’s Rejoinder at paragraph 828.
267. According to Claimants, such regime was altered by EPRE preventing EDEMISA from collecting on excess amounts in instances where the “Reference Tariff” resulted in a higher amount than that from the “Tariff Payable to Distributor.” See Claimants’ Memorial at paragraph 194-95. In this connection, Claimants argue that nowhere in the Concession Agreement was there a requirement that EDEMISA reimburse the PTC Fund under the concerned scenario.
268. Claimants assert that said subsidy only applied to those agricultural users whose consumption was during hours of lowest demand. Claimants’ Reply at paragraph 215. Consequently, Claimants were justified in charging the T-2 Tariff category for those users that failed to meet the aforementioned criterion for agricultural subsidy benefits. In this connection, Claimants argue that EDEMISA in fact did not charge a “Reference Tariff” higher than the “Tariff Payable to Distributor,” but rather simply applied the T-2 Tariff in those situations. See Claimants’ Reply at paragraph 217.
269. In defense, Respondent asserts that EDEMISA was not entitled to charge agricultural users a fee higher than the one under the Concession Agreement. See Respondent’s Rejoinder at paragraph 821. Rather EDEMISA had agreed to collect the “Tariff Payable to Distributor” in relation to agricultural irrigation users, and thus that any excess resulting from the difference with the Reference Tariff should have been deposited back into the PTC Fund. See Respondent’s Rejoinder at paragraph 823, 828. In support of such view, Respondent cites to Mr. Rodríguez’s statement, opining that such procedure was implied in the subsidy framework. See Respondent’s Rejoinder at paragraph 826-27.¹⁸ Respondent’s witness, Mr. Faura, posits that the subsidy was not restricted to those agricultural users that consume during low-demand hours. Rebuttal Witness Statement of

¹⁸ Rebuttal Witness Statement of Raul Faura, at paragraph 44.

Raul Faura, at paragraph 48. Rather, the agricultural subsidy framework contemplated both low and high hours of demand while merely encouraging consumption during the former by establishing different pricing structures.

270. In support, Respondent cites to Article 36 of the Transformation Law, which, in pertinent part, state that “[t]he collection of this compensation shall only be applied to electrical power users for agricultural irrigation to the date of enactment of this law, in accordance with the regulations, and such compensation shall be gradually allocated in relation to the higher efficiency in the use of surface and ground water for agricultural irrigation” See Respondent’s Rejoinder at footnote 946. Respondent’s witness, Mr. Faura posits that the agricultural subsidy framework simply encouraged consumption during low-demand hours by providing different prices for low- and high-demand hours. See Rebuttal Witness Statement of Raul Faura, at paragraph 48.

(4) Failure to Pay Amount Owed

271. Claimants contend that the Government of Mendoza refused to make payment owed to EDEMSA under two situations, both of which were explicitly contemplated in the Concession Agreement. Claimants’ Reply at paragraph 221.
272. First, Claimants assert that EDEMSA was owed reimbursement for extra costs incurred in purchasing power from the Nihuil IV power plant. Claimants’ Reply at paragraph 222.
273. According to Claimants, it is common ground that Article 37 of the Transformation Law mandated the assignment of EMSE’s rights and obligations arising out of a contract entered into with a power generation company, Hidronihuil S.A. Claimants’ Memorial at paragraph 172; see Respondent’s Counter-Memorial at paragraphs 777-83. The Nihuil IV Contract was for the construction, operation and maintenance of a hydroelectric power plant known as NIHUIL IV. The Nihuil IV Contract provided, *inter alia*, for a commitment by EMSE to purchase all of the Nihuil IV power plant’s output at a price higher than that available in the Electricity Wholesale Market. Article 37 of the Transformation Law established that “[t]he difference between the price that EDEMSA must pay pursuant to this contract and the purchase value of energy in the electricity

wholesale market, shall be compensated to EDEMSA by the Province with funds allocated pursuant to Article 47.”

274. In conformity with Article 37 of the Transformation law, Article 22.36 of the Concession Agreement memorialized said compensation scheme. In return for servicing a loan obtained by EMSE for purposes related to the construction of the NIHUIL IV, EDEMSA would receive monthly payments of the difference between the NIHUIL IV price and the going market price.
275. Claimants assert that it is undisputed that, in February 2000, the Government of Mendoza stopped making payments to EDEMSA for the compensation provided under Article 37 of the Transformation Law and Article 22.36 of the Concession Agreement. Claimants’ Reply at paragraph 222; see Respondent’s Counter-Memorial at paragraphs 777-83.
276. According to Claimants, EDEMSA made numerous requests for payment over the course of almost a year, but faced substantial delays and unusual administrative proceedings. See Claimants’ Memorial at paragraph 176; see Claimants Reply at paragraph 223. Moreover, Claimants assert that they were unable to seek recourse in the Supreme Court of Mendoza, which found that it lacked jurisdiction by reason that all administrative proceedings had not been terminated. See Claimants Reply at paragraph 223.
277. Second, Claimants argue that EDEMSA was owed reimbursement and compensation for certain subsidized tariffs as well as for public lighting services. Claimants’ Reply at paragraph 224.
278. Claimants contend that it is uncontested that the Tariff Schedule contained in the Concession Agreement provided for the application of subsidized tariffs for specific users (e.g., the elderly, those engaged in agricultural irrigation) and certain sectors (e.g., rural areas). See Claimants’ Memorial, at paragraph 184; see Respondent’s Rejoinder, at paragraphs 818-19. The Tariff Schedule established that the difference in amount resulting from the subsidy was to be reimbursed to EDEMSA through the PTC Fund. In accordance with the Concession Agreement, Claimants submitted monthly statements before EPRE, itemizing the amounts due by the Government.

279. Claimants contend that it is undisputed that since August 1999, the provincial government has failed to make payments owed, including compensation for the above-mentioned subsidy as well as for the provision of the public lighting services. See Claimants' Memorial, at paragraph 186; see Respondent's Rejoinder, at paragraphs 818-19.

(5) Quasi-Currency

280. Claimants assert that EDEMSA was forced to accept payments from its customers with notes issued by the Province's treasury. Claimants' Reply at paragraph 218. According to Claimants, these notes were issued in lieu of monetary currency, which further hindered EDEMSA's ability to satisfy its own monetary obligations.

281. In response, Respondent states that these notes could in fact be used to satisfy taxes and other obligations owed to the provincial government. Respondent's Rejoinder at paragraph 835. Respondent contends that during times of economic crisis, the Governor of California also had issued similar bonds called IOUs. Respondent's Rejoinder at paragraph 834. Respondent argues that the bonds were ultimately redeemed by the Province at 110,4904% of their nominal value. Respondent's Rejoinder at paragraph 837.

282. Notwithstanding, Claimants contend that such unilateral conduct by Respondent was unfair, as it was not only unforeseeable within the Concession Agreement but also contrary to the tariff principles set forth in the Regulatory Framework. See Claimants' Reply at paragraph 219.

283. According to Claimants, such unilateral conduct by Respondent caused EDEMSA to face cash flow problems. Claimants contend that EDEMSA was forced to purchase cash in exchange for these notes, for which EDEMSA was able to receive only 80% of the notes' face value, thereby resulting in a 20% loss. See Claimants' Reply at paragraph 220.

(6) Imposition of Service Quality Conditions

284. Claimants assert that Provincial Law No. 6856 imposed obligations and conditions more onerous than those originally provided for in the Regulatory Framework. In particular, Claimants advance Sections 2 through 6 of Law No. 6856, which set forth procedures for

the filing of claims against EDEMSA by users who allege damages due to failures in the electricity distribution system.

285. According to Claimants, Section 2 eliminated the requirement to file an administrative claim in the first instance, thereby enabling users to resort directly to local courts. Section 5 directed courts to increase by fifty percent any damages award against EDEMSA in the event that EDEMSA challenges the merits of the claim or the existence of the alleged failure in the system. Section 6 established that the failure to comply with a damages award is tantamount to a “severe breach.”
286. In response, Respondent clarifies that Provincial Law No. 6856 in fact was applicable to every concessionaire and any type of public services’ providers, whether on the national or provincial level. Respondent further argues that it was Claimants failure to mention that these allegations were submitted to the decision of the Supreme Court of Mendoza, which, on 10 August 2005, dismissed such action. See Respondent’s Counter-Memorial at paragraph 801-802. Following the Mendoza Supreme Court’s decision, Claimants have no grounds to affirm the unconstitutionality of the regulations, given the court found them consistent with the principles set forth in Articles 41, 42 and 43 of the Argentine Constitution. Respondent’s Rejoinder at paragraph 803.

c) Emergency Laws and Renegotiation Process

287. Claimants assert that Respondent has violated the specific commitments undertaken in connection with Claimants’ investment by breaching the terms of the Concession Agreement. In support, Claimants cite to several ICSID decisions that have ruled in the investor’s favor in this regard, including the *Sempra*, *Enron* and *CMS Gas* cases.
288. As discussed *supra*, Claimants contend that it is undisputed that the Emergency Measures abrogated the fixed-exchange regime provided under the Convertibility Law as well as invalidated key provisions in the Concession Agreement, in particular the Currency Clause and Cost-Adjustment Clauses. See Claimants’ Memorial at paragraphs 206-11; Respondent’s Counter Memorial at paragraphs 63, 66-7. In this connection, Claimants state that it is also common ground that EDEMSA, while under the control of Claimants in their capacity as shareholders, and pursuant to the price cap system, had the duty to

make necessary investments for the maintenance and expansion of the service, and as such, EDEMSA could only enhance its profitability by lowering costs and increasing efficiency rather than through the increase of tariffs. See Claimants' Memorial at paragraphs 117, 358; Respondent's Counter Memorial at paragraphs 167, 357.

289. The Parties disagree, however, as to who bears the currency risk, the applicability of tariff principles embodied in the Concession Agreement during the Argentine Economic Turmoil, the justifiability of the Emergency Tariff Measures, the real causation behind the destruction of EDEMSA's value as of December 2001, and who lacked good faith during the Renegotiation Process as well as the outcome thereof.
290. Claimants contend that the Concession Agreement, which incorporates by reference the provisions of the Provincial Electricity Law, sets forth the terms and conditions of the concession granted to EDEMSA, including mechanisms to protect the concessionaire against currency risk, inflation, and political and regulatory risks. See Claimants' Memorial at paragraph 97.
291. First, Claimants' position is that the Currency Clause, by establishing the calculation and recalculation of tariffs in U.S. dollar terms, allocates to the Province any risk associated with currency fluctuations between the U.S. dollar and the Argentine peso. According to Claimants, despite the seven-year reign of the fixed-exchange system under the Convertibility Law by the time the EDEMSA shares were being promoted, concern over the sustainability of that system as well as over the stability of the Argentine currency lurked among foreign investors, and thus, the assumption of currency risk by part of the Province was essential in comforting any such apprehensions. See Claimants' Memorial at paragraphs 103-4.
292. Claimants posit that other reasons underlie their position, including the fact that many investment costs were to require payments in U.S. dollars, such as the purchase of equipment only available outside of Argentina, and because assuming debt in U.S. dollars would allow long-term debt financing from the international capital markets at lower interest rates. As such, the Province would benefit from operational efficiencies resulting eventually in lower tariffs and improved service at every tariff review. To protect the

investor from inflation risks, Claimants argue that the Cost-Adjustment Clause provided for a mechanism to maintain the real value of tariffs constant. See Claimants' Memorial at paragraph 105-108.

293. Second, Claimants posit that the Province was aware of the harmful effects that politically-motivated tariff policies have, and accordingly, made it explicit under the Provincial Electricity Law that guarantees of long-term political and regulatory stability was being implemented for the Concession Agreement. See Claimants' Memorial at paragraph 100, 109. Claimants emphasize that tariffs were to be determined on the basis of economic criteria and were to afford the concessionaire sufficient income to cover all costs associated with the distribution of electricity as well as to obtain a reasonable return on the any investments made in that connection. See Claimants' Memorial at paragraphs 109-12. Claimants argue that the Concession Agreement contemplates tariff schedules of five-year terms subject to interim modification only on grounds of significant variations in the cost structure of the distributor caused by unforeseen events beyond the control of the Parties, and at the expiration of such term, subject to revision only in conformity with pre-determined procedures in order to augment the stability of the Regulatory Framework. See Claimants' Memorial at paragraphs 114-20.
294. According to Claimants' expert on quantum, LECG, "[t]he use of individualized contracts, as opposed to simply using regulatory frameworks based on general legislation, grants investors an additional protection against governmental opportunistic behavior, as general regulatory frameworks can be changed by new legislation, while changing contracts require, in principle, the agreement of both parties to the contract." See LECG Expert Report at paragraph 46.
295. In Claimants' view, the foregoing panoply of protections made EDEMSA an attractive investment prospect, which as a matter of fact, was relied on heavily when Claimants decided to invest in the Province. See Claimants' Memorial at paragraph 121. Claimants argue that the Emergency Tariff Measures imposed drastic changes in the tariff regime so as to fundamentally alter the economic equation of the Concession Agreement, thereby

- severely affecting Claimants' investment. See Claimants' Memorial at paragraphs 115, 214.
296. Claimants argue that the Emergency Tariff Measures (i) caused a *de facto* freeze on the tariffs, thus depriving Claimants from their contract protection under the Cost-Adjustment Clause against inflation risks and the consequent loss of value of revenues over time, and (ii) pesified tariffs so as to require by law the conversion of dollar-denominated tariffs into peso-denominated tariffs at a ratio of 1 to 1 despite the exchange parity of the market of US\$ 1 to ARS 3 following the abrogation of the Convertibility Law. See Claimants' Memorial at paragraphs 214-5.
297. Claimants illustrate that, whereas prior to the Emergency Laws, when consumer bills were calculated in U.S. dollars and then converted to pesos for purposes of billing, the calculated bill in U.S. dollar terms would equal the billing invoice denominated in peso terms because the Convertibility Law fixed an exchange rate of 1:1, the enactment of the Emergency Tariff Measures skewed this formula so as to force the same billing invoice amount in peso terms even though the fixed convertibility system had been scrapped and the peso had consequently floated and devalued three-fold. Consequently, Claimants state that the value to the concessionaire of the billing invoice charged to the consumer would be worth only a third of what it had been prior to 2002, thereby depriving Claimants of the fundamental protections provided under the Concession Agreement against currency risk. What is more, the Emergency Tariff Measures also required EDEMSA to abide by its contractual obligations, thus creating an asymmetry that further exacerbated injury to Claimants' investment during the thirty-eight months in which the Renegotiation Process took place. See Claimants' Memorial at paragraphs 216-20.
298. Claimants' position is that their investment incurred devastating damages by reason of the Emergency Tariff Measures that can be inferred from the sharp drop of 32% in the revenues of private entities, which in turn resulted in the reduction of cash flows to a level insufficient to cover operational costs, taxes and interest payments, in the depreciation of equity value, in the default of commercial debt, and in the reduction of investments for improving infrastructure. See Claimants' Memorial at paragraph 246.

Claimants contend that the pesification and freeze of tariffs combined with the rapid devaluation of the peso caused EDEMSA's revenues to drop drastically, in U.S. dollar terms, to practically one-third of its value prior to 2002 all the while EDEMSA's costs experienced sharp increases due to inflation, thereby creating a severe imbalance between revenues and operational expenses. See Claimants' Memorial at paragraph 252.

According to Claimants, the Emergency Tariff Measures are directly responsible for reducing EDEMSA's operating profits by 75% in 2002, instigating EDEMSA's default of debts financed in U.S. dollar terms, and diluting the value of equity. See Claimants' Memorial at paragraphs 253-9.

299. Respondent's position is that the mechanisms provided under the Concession Agreement operate according to the economic, monetary and social conditions existing at the time of contract, and that neither the Concession Agreement nor the Regulatory Framework supplied appropriate means to restore the balance between the rights of the concessionaire and those of the users during the Argentine Economic Turmoil. As such, Respondent asserts the tariff system contemplated under the Concession Agreement was inapplicable both from economic as well as legal angles, for enforcing them would have destroyed the principle of fair and reasonable tariffs and caused serious damages to the Province, EDEMSA, and the users. See Respondent's Counter Memorial at paragraph 401-403. Respondent's regulatory expert, Mr. Alejandro Sruoga, agrees, opining that the Argentine Economic Turmoil altered the expectations incorporated in the Concession Agreement, thus suggesting a justification for abandoning the protection mechanisms thereunder. See Sruoga Expert Report at paragraphs 128-31.

300. In Respondent's view, the Currency Clause established a direct and indissoluble link between the Convertibility Law and the Concession Agreement, whereby only a change in the exchange rate parity under the Convertibility Law would be taken into account and not the total repeal of the Convertibility Law so as to implement a completely different monetary system. See Respondent's Counter-Memorial, at paragraphs 435-41. Respondent argues that Claimants are wrong in construing the Currency Clause so as to have the Province bear the currency risk since EDF acknowledges in a *Plan Directeur* dated 31 March 1998 that, upon the abandonment of convertibility, the Currency Clause

does not anticipate what would happen in a crisis scenario. See Respondent's Counter-Memorial, at paragraph 442. That document states in pertinent part:

Tant que la convertibilité US\$/Peso est garantie par la loi, la formule d'indexation couvre correctement le risque de change. En revanche dans un scénario de crise du Peso, le décret 2118/1991 pourrait alors être amendé. Dans ce cas, la formule ne prévoit pas le risque du taux de change réel du peso, phénomène qui se produit normalement après un subite dévaluation.

301. The Parties, however, disagree on the correct English translation. Claimants' translation reads as follows:

As long as US\$/Peso convertibility is guaranteed by law, the indexation formula adequately covers the exchange risk. However, in a scenario of crisis of the Peso, decree 2128/1991 could then be amended. In that case, the formula does not contemplate the risk of appreciation of the real exchange rate of the peso, a phenomenon that normally occurs after a sudden devaluation ("tequila effect").

302. In contrast, Respondent's version states as follows:

As long as the dollar/peso convertibility is guaranteed by law, the indexation formula adequately covers the exchange risk. Quite the opposite, in a scenario of the crisis of the peso, Decree No. 2128/1991 could thus be modified. Consequently, the formula does not foresee the risk of modification of the real exchange rate of the peso, which normally occurs after a sudden devaluation (*tequila* effect).

303. Moreover, Respondent posits that the maintenance of the Currency Clause, the Cost-Adjustment Clause, and other tariff terms tailored into the Concession Agreement would have extinguished the principle of fair and reasonable tariffs, which Respondent insists is the single means for safeguarding the interests of supplier companies and service users. See Respondent's Counter-Memorial, at paragraph 443. Respondent states that Claimants' regulatory expert, former Secretary of Energy for the Argentine Republic, Mr. Carlos Bastos, agrees with Respondent's position and recognizes that calculating tariffs at the average floating-exchange rate of 1 US\$ for 1 ARS would have led to increases in billing invoices by three-fold, in turn resulting in service theft and payment delinquencies. See Respondent's Counter-Memorial, at paragraphs 444-6, citing Bastos Expert Report at paragraphs 196-7; see also Sruoga Expert Report at paragraphs 122-4. In the words of

Respondent's legal expert, Professor Ismael Mata, in a scenario where the Convertibility Law was repealed, the tariff system under the Concession Agreement "had become impractical and impossible for service users." Mata Expert Report at paragraph 220.

304. Respondent asserts that, under Argentine law, every concession involving a public utility must search for and materialize, to the extent possible, an equilibrium between the advantages agreed upon the burdens imposed on the concessionaire, thereby guaranteeing by way of the principle of fair and reasonable tariffs, the guarantee of the original contractual equivalence and the defense of the economic interests of users. See Respondent's Counter-Memorial, at paragraphs 377-85. According to Respondent's understanding of Argentine law, although the Argentine Constitution recognizes that tariffs must allow account for costs of the service provided as well as the provider's profitability, the Constitution also *inter alia* withholds from concessionaires the right to obtain profits with no objective limit whatsoever and prohibits the modification of tariff guidelines for mere allegations of a certain deterioration of business profitability. See Respondent's Counter-Memorial, at paragraphs 386-7.
305. As such, the Emergency Laws were legitimate and reasonable means to maintain tariffs at fair and reasonable rates that allowed, in time, for the gradual economic and social recovery which would benefit all constituents. See Respondent's Counter-Memorial, at paragraph 448. In this respect, Respondent notes that the Convertibility Law was not abandoned to increase sovereign wealth or to restructure productivity forces, and that the Argentine Supreme Court has declared the Emergency Laws as constitutional. See Respondent's Counter-Memorial, at paragraphs 410, 420.
306. Respondent asserts that the value of EDEMSA was already worthless by the time the Emergency Tariff Measures were adopted due to Claimants' overbidding of the purchase price caused by defective due diligence and faulty macro-economic forecasts, to Claimants' poor performance of EDEMSA's operations and to their dangerous policies on debt financing and capital reduction. See Respondent's Counter-Memorial, at paragraphs 150-204. According to Respondent, the Emergency Tariff Measures actually helped EDEMSA's economic and financial position amidst the Argentine Economic

Turmoil, and allowed for Argentina's economic indicators to change towards a positive trend by as early as the second quarter of 2002. See Respondent's Counter-Memorial, at paragraphs 127-30. Respondent notes, however, that many issues remaining pending, such as the reduction of poverty, improvement of production, and the reduction of social conflicts.

307. In response, Claimants contend that it is absurd to propose that the Emergency Tariff Measures benefitted EDEMSA. In Claimants' view, the Emergency Tariff Measures were over-inclusive and disproportional to their stated purposes of *inter alia* alleviating the financial burden of the indigent class. Equally invalid is Respondent's assertion that the Currency and Cost-Adjustment Clauses were never intended to apply in the event the Convertibility Law was abandoned. See Claimants' Reply, at paragraphs 105-8. Claimants' witness, Mr. Didier Lamèthe, at the time the legal adviser of the EDEMSA Project Team, attests that, had the Province not borne the currency risk, not a single foreign investor "would have dared to invest in Argentina, given the country's history of economic and monetary volatility." Lamèthe Supplemental Witness Statement at paragraph 15. In Claimants' view, the Tribunal should resort to the Info Memo as well as the privatization efforts undertaken by the national government of Argentina in the early 1990's in order to confirm the proper interpretation of the Concession Agreement. See Claimants' Reply, at paragraphs 107-10, 305.
308. Claimants state that, had the Currency Clause been conditioned on the prevalence of the Convertibility Law, the Concession Clause could have clearly said so, and that it would have been futile to resort to calculation and recalculation in U.S. dollar terms since, under the fixed parity of the Convertibility Law, a peso-denominated tariff would have accomplished exactly the same result. See Claimants' Reply at paragraphs 134-5. Claimants posit that the primary purpose and effect of the Currency and Cost-Adjustment Clauses are to protect the actual value of the tariffs from the likelihood of devaluation or depreciation of the local currency, and that any other interpretation would be contrary to common sense and deprive such clauses of all meaning. See Claimants' Reply, at paragraph 137.

309. According to Claimants' expert on Argentine law, Dr. Alberto B. Bianchi, Claimants' interpretation of the Concession Agreement is correct because:

There is no reason preventing the continued validity of the right granted to the concessionaire once the Convertibility Law was extinguished[,] . . . this right would acquire economic meaning if the peso was rated below the dollar, for example, 2 AR\$ = 1 US\$. Similarly, and from the hermeneutics point of view, it is more reasonable to maintain that the contract has no lacunae, and therefore the repeal of the Convertibility Law shall not produce the loss of the clause, but its substitution with another, in this case the substitution of the parity fixed by the Convertibility Law with another parity or different exchange rate. See Bianchi Supplemental Expert Report at paragraph 30.

310. Furthermore, Claimants argue that Respondent distorts Mr. Bastos's statement for what Mr. Bastos meant to convey in paragraphs 196-7 of his expert report was that the Regulatory Framework was designed to withstand situations precisely like that of the Argentine Economic Turmoil, thereby dispensing with any need to freeze and pesify tariffs. See Claimants' Memorial at paragraphs 111-2. Rather, in Claimants' view the Currency Clause naturally refers to the Convertibility Law because the exchange rate at the time of contract was established by that Law, and pursuant to the principle of *plénitude du droit*,¹⁹ the only rational interpretation of the Currency Clause would mean that, in the event the Convertibility Law is repealed, the conversion from dollars to pesos to be done for purposes of billing would have to resort to a new official exchange rate if existent or at the then-current market rate. See Claimants' Reply, at paragraphs 114-5.
311. Claimants add that, had the Province's understanding of the Currency Clause been that such would inherently lose effectiveness upon the repeal of the Convertibility Law, it would have been unnecessary for the Emergency Tariff Measures to separately repeal the Currency and Cost-Adjustment Clauses. See Claimants' Reply, at paragraph 116. What is more, Respondent overlooks the phrase of the Currency Clause that reads, "at the time of its application to the billing of users," a phrase Claimants consider to be critical given that it demonstrates the Currency Clause contemplated U.S. dollar calculation of tariffs under a floating exchange regime as well. See Claimants' Reply, at paragraph 121.

¹⁹ Or *plenitud hermética del ordenamiento jurídico* in Spanish or "completeness of the law" in English.

312. As concerns the *Plan Directeur*, Claimants request that the Tribunal apply Claimants' translation for reason that Respondent's version contains critical mistakes that radically alter the sense of the relevant paragraph. See Claimants' Reply, at footnote 63. According to Claimants, Respondent's use of the word "modification" in lieu of "appreciation" is incorrect and deceptive because it can be interpreted as a downward shift in the real exchange rate when the key point here is that EDF was concerned only about an upward shift. With respect to the other two alleged errors, Claimants assert that they predispose the reader as to the content of the phrase following them, thereby coloring the reader's perception of such content.
313. Moreover, Claimants press that the paragraph in question refers to "real exchange rates," and that this concept is distinct from nominal exchange rates which form the basis of the Currency Clause's protection against currency risk. See Claimants' Reply, at paragraphs 122-5. Claimants explain that a sharp devaluation followed by sharp inflation (i.e., "tequila effect") exposes the concessionaire to risks resulting from real exchange rates because although the purchasing power of foreign currencies would initially be enhanced due to the devaluation of the local currency, it would eventually diminish on account of inflation of costs. See Claimants' Reply, at paragraph 126. As such, Claimants argue that the *Plan Directeur* expressed concern for losses resulting from real exchange rates, conversely identifying no risk at all resulting from a change in the nominal exchange rates alone. See Claimants' Reply, at paragraph 127.
314. Claimants maintain that, as a matter of law, their conduct does not immunize Respondent from international responsibility under the Argentina-France BIT. See Claimants' Reply, at paragraphs 329-34. And that, in any event, Claimants' due diligence was sound, performance of EDEMSA matched expectations, and policies on debt financing and capital reductions were all justified and conformed to industry standards. See Claimants' Reply, at paragraphs 85-91, 139-88. Rather, EDEMSA's higher-than-anticipated levels of debt are a principal result of Respondent's actions in violation of the Concession Agreement. See Claimants' Reply, at paragraphs 145-7. Moreover, Claimants' position is that they did not overbid the purchase price, as can be evinced by the second-place bid which was merely 14.5% less than Claimants'. See Claimants' Reply, at paragraph 104.

According to Claimants, the official initial valuation performed by Chase Manhattan Bank and Salomon Smith Barney only serves to express a minimum value, and hence, the fair market value is the price agreed on by a willing seller and a willing buyer, namely Claimants' winning bid for US\$ 237.7 million. See Claimants' Reply, at paragraphs 94-100.

315. Also noteworthy is Claimants' contention that, under the Regulatory Framework, the tariff rates necessarily had to enable the concessionaire to cover the cost of capital, or debt. See Claimants' Reply, at paragraphs 154-6. Claimants' regulatory expert, Mr. Bastos, fully supports this proposition, opining that the use of the term "specific distribution costs" in Article 43(c) of the Provincial Electricity Law is a term of art "widely acknowledged in the electricity sector and in a number of nations around the world" as clearly including as one of its components the cost of capital. Bastos Supplement Expert Report at paragraph 23.
316. With respect to the Renegotiation Process, Claimants contend that despite their own good faith participation, the Province for its part violated the spirit and letter of its own law when it failed to renegotiate the Concession Agreement and also failed to provide interim tariff adjustments to help EDEMSA survive. Claimants note that the Province proceeded to extend the deadline for completing the Process seemingly *ad infinitum*, such that even as of 30 April 2009 the relevant Concession Agreements have yet to be renegotiated. See Claimants' Reply, at paragraph 227-28.
317. According to Claimants, the reasons underlying their divestment from EDEMSA are irrelevant to the determination of whether Respondent has violated the Argentina-France BIT, but that to clarify, Claimants proceeded to divest mainly to mitigate losses and to become unburdened of toxic investments such as EDEMSA, which had attained such status due to the Emergency Tariff Measures. See Claimants' Reply, at paragraphs 232-42. In light of such objective, Claimants decided to consolidate under EDFI's ownership a controlling interest in SODEMSA, which would make it easier to sell the SODEMSA shares as well as to obtain an added premium to the sales price. See Claimants' Reply, at paragraph 243.

318. On the other hand, Respondent asserts that Claimants' reliance on the Info Memo and the regulatory framework applying at the national level have no bearing in this arbitration because the former contains a disclaimer that strips the document of any legal effect and the latter can be distinguished from its provincial corollary. See Respondent's Counter-Memorial, at paragraphs 366-76.
319. In Respondent's view, it was the Province that participated during the Renegotiation Process in good faith and Claimants who lacked it, as corroborated by their proposal for an 87.1% DAV increase amidst the worst economic crisis experienced by Argentina. See Respondent's Counter-Memorial, at paragraphs 457, 468. The Province relaxed stringent quality requirements through Memorandum No. 1 and even agreed to a 3.4% DAV increase that was shot down by the Mendoza Congress. See Respondent's Counter-Memorial, at paragraphs 461-7.
320. According to Respondent, Claimants were well aware that a DAV increase would be forthcoming at the conclusion of the UTN Report, which had been completed shortly prior to Claimants' sale of their EDEMSA shares to the Mendoza-based company, IADESA. See Respondent's Counter-Memorial, at paragraphs 472-6. Consequently, the Letter of Understanding signed on 7 April 2005 between the Province and IADESA stipulated a DAV increase, and Respondent suggests that the precise timing of when Claimants became aware of this directive is unimportant since Claimants could have withdrawn their decision to leave EDEMSA when such information had become available. See Respondent's Counter-Memorial, at paragraph 476. Respondent argues Claimants divested from EDEMSA not because of the Emergency Laws, but because of reasons wholly unrelated to this proceeding. See Respondent's Counter-Memorial, at paragraph 478.

2. Discrimination, National Treatment and Arbitrary Measures

a) Treaty Framework

321. Article 4 of the Argentina-France BIT, the so-called National Treatment Clause, provides in pertinent part:

Cada Parte Contratante aplicará, en su territorio y en su zona marítima, a los inversores de la otra Parte, en aquello que concierne a sus inversiones y actividades ligadas a estas inversiones, un tratamiento no menos favorable que el acordado a sus propios inversores

In its French version, the National Treatment Clause provides:

Chaque Partie contractante applique, sur son territoire et dans sa zone maritime, aux investisseurs de l'autre Partie, en ce qui concerne leurs investissements et activités liées à ces investissements, un traitement non moins favorable que celui accordé à ses investisseurs

In English the provision reads:

Within its territory and in its maritime zone, each Contracting Party shall provide to the investors of the other Party, with respect to their investments and activities associated with such investments, a treatment no less favorable than that accorded to its own investors”

322. In addition, Claimants invoke the MFN clause to direct the Tribunal to Article 3(2) of the Argentina-Luxembourg BIT which states:

Without prejudice to measures necessary to maintain public order, investments shall enjoy permanent protection and security, to the exclusion of any unjustified or discriminatory measure that could impede in fact or in law its management, maintenance, use, enjoyment or liquidation.

323. In addition, pursuant to the MFN clause Claimants invoke the bilateral investment treaties Argentina has entered into respectively with Israel, Mexico, and The Netherlands. See Claimants’ Memorial at paragraph 445-7.

324. Article 2(2) of the Argentina-Israel BIT provides:

No Contracting Party may hinder, in any manner, through unreasonable or discriminatory measures, the right of the investors from the other Contracting Party to manage, maintain, use, profit from or dispose of their investments in its territory.

Article 3(1) of the Argentina-Mexico BIT states:

Each Contracting Party . . . shall not impair [the investors’] management, operation, use, enjoyment or disposal through arbitrary or discriminatory measures.

Article 3(1) of the Argentina-Netherlands BIT reads:

Each Contracting Party . . . shall not hinder [the investors’] operation, management, maintenance, use, enjoyment or disposal by means of unjustified or discriminatory actions.

b) Parties’ Contentions

325. Claimants argue that Respondent is prohibited from enacting measures which are unreasonable, unjustified, arbitrary, and or are discriminatory so as to impede in fact or in law the management, maintenance, use, enjoyment or liquidation of their protected foreign investment. See Claimants’ Memorial at paragraph 444.
326. Respondent avers that they have engaged in no discriminatory treatment against Claimants, and that Claimants’ arguments do not fit within the international law concept of discrimination or arbitrariness, and do not constitute measures contrary to the national treatment guarantee. See Respondent’s Counter-Memorial at paragraph 559-60.
327. In addition, Respondent argues the Argentina-France BIT does not contain a provision on discrimination. A previous case, *ELSI*, set out criterion for a finding of discriminatory treatment, which include intentional treatment, action in favor of a national against a foreign investor, and action that is not taken in similar circumstances against a national.²⁰ See Respondent’s Rejoinder on the Merits at paragraph 462. If Claimants wish to allege a more comprehensive rule on discrimination than the concept than in the *ELSI* case they have to prove that such a rule has evolved in international law, which they have not done. See Respondent’s Rejoinder on the Merits at paragraph 474.
328. Claimants’ contest that due to the MFN clause in Article 4 of the Argentina-France BIT, French investors subject to the treaty protection are entitled to receive treatment from Argentina that is at least equal to that which it confers on its own nationals or is no worse

²⁰ *Elettronica Sicula S.p.A. (ELSI) (United States) v. Italy*, 1989 I.C.J. 15, ¶ 122 (20 July) (LA AR 22).

than that accorded to third-party nationals, such as Luxembourg, Israel, Mexico, or the Netherlands. See Claimants' Memorial at paragraph 443-8.

329. In this connection, Claimants seek to incorporate those protections accorded in *inter alia* the Argentina-Luxembourg BIT, which states that, “[I]nvestments shall enjoy permanent protection and security, to the exclusion of any unjustified or discriminatory measure that could impede in fact or in law its management maintenance, use, enjoyment or liquidation.”
330. Respondent argues that Claimants' situation is unique and not comparable to the businesses of other sectors with which they are comparing themselves because of Claimants' position in the market and the nature of the services they supply. See Respondent's Counter-Memorial at paragraphs 584-6. Respondent specifically contends that discrimination can only be alleged in cases of different treatment of two people in equal circumstances, in this case the same business and economic sector. See Respondent's Counter-Memorial at paragraphs 566-7.
331. Claimants assert that, in the present case, Respondent adopted measures that altered the tariff scheme, suspended the legal framework within which EDEMSA was operating and abrogated EDEMSA's contractual rights under the Concession Agreement. Claimants also argue that such measures in effect were discriminatory in that they created a *de facto* cross subsidy by EDEMSA for all of its consumers, especially those in the industrial and exporting sectors, which, while not particularly affected by the Argentine crisis, financially benefited from the devaluation; what is more, such consumers were allowed to increase the price of their own products or services to keep pace with the ensuing inflation. See Claimants' Memorial at paragraph 449.
332. In defense, Respondent asserts that the measures they adopted are not discriminatory because the National Emergency Law was effective for inhabitants and investors of the Argentine Republic while the renegotiation of all public utilities agreements was determined. In fact, the impact upon Claimants' investments was no greater than the impact on the rest of the distribution companies and the rest of the economy, and EDEMSA's value actually increased after the measures were adopted. See Respondent's

Counter-Memorial at paragraph 579, 597. In addition, Respondent argues that Claimants fail to identify how this alleged cross subsidy was granted, to whom, for how much, and when, and fail to show how such an assertion would breach the BIT. See Respondent's Counter-Memorial at paragraph 588.

333. Claimants contend that no defensible or legitimate justification can be adduced by Respondent for the Emergency Measures that targeted the public utilities. Instead such measures were adopted for no apparent purpose other than to discriminate by shifting the political blame and economic burden of the crisis onto a discrete and individualized sector that is almost entirely owned or controlled by foreign investors. See Claimants' Memorial at paragraph 449.
334. Respondent argues that there cannot be discrimination because foreign investors were not injured by measures, which were designed to combat the worst crisis suffered in Respondent's history, to the benefit of local investors. In addition, Respondent claims that all distribution companies, both national and foreign, were affected by the crisis and renegotiation process with no distinction made an account of nationality, and that public utility tariffs have always been afforded legal treatment different from other non-regulated prices of the economy. See Respondent's Counter-Memorial at paragraphs 577, 581-2, 587, 593.
335. Claimants aver that in light of the fact that the Emergency Measures were unnecessary to begin with and also that such measures had no objectives other than being discriminatory, Claimants have suffered from arbitrary, unjustified, unreasonable and discriminatory treatment, thereby warranting compensation under the BIT. See Claimants' Memorial, at paragraph 451.
336. Respondent contends that the measures were adopted in good faith, were non-discriminatory, and were effective for the country in general and the Claimants' investments in particular. Furthermore, the measures were not arbitrary since they were both reasonable and proportionate, and therefore do not fit the legal definition of arbitrariness as being contrary to reason, rules, or law. See Respondent's Counter-Memorial at paragraphs 593, 600-9.

337. Claimants also assert that the discriminatory intent of Respondent is further evidenced by the statements of legislators during the national congressional debates on the draft emergency legislation as well as those of executive branch officials, along with the fact that the provincial government failed to make any meaningful progress in over three years in providing relief to EDEMSA through tariff increases or through a *bona fide* renegotiation of the Concession Agreement. But as soon as Claimants sold their interests to a local Mendoza company in March 2005, the Province began to move in earnest toward the approval of 38.05% increase in tariffs. See Claimants' Memorial at paragraph 450. According to Arriazu's expert report, "Since foreign investments in public utilities were much higher than those found in other sectors of the economy, the devaluation of the peso and the freeze and pesification of public utility tariffs affected foreign investors asymmetrically in relation to national investors." See Claimants' Memorial at paragraph 245.
338. Respondent's argue that the statements by the legislators were not sufficient to conclude that there is a discriminatory intent or effect towards foreign investors, and that a thorough analysis indicates a clear intention by the Argentine National Congress to take measures to overcome the worst crisis in the history of the country; in addition the renegotiation process took place simultaneously between the eleven provincial distribution companies, all with the same procedure at the same time. In addition, Respondent asserts that Claimant's argument that the tariff increase was subject to EDEMSA's withdrawal is baseless since they knew there would be an increase and still decided to leave. See Respondent's Rejoinder on the Merits at paragraphs 468-70, 472.

3. Fair and Equitable Treatment

a) Treaty Framework

339. Article 3 of the Argentina-France BIT provides:

Cada una de las Partes Contratantes se compromete a otorgar, en su territorio y en su zona marítima, un tratamiento justo y equitativo conforme a los principios de Derecho Internacional, a las inversiones efectuadas por los inversores de la otra Parte y a hacerlo de manera tal que el ejercicio del derecho así reconocido no sea de hecho ni de derecho obstaculizado.

In the French version, Article 3 states:

Chacune des Parties contractantes s'engage à assurer, sur son territoire et dans sa zone maritime, un traitement juste et équitable, conformément aux principes du droit international, aux investissements effectués par des investisseurs de l'autre Partie et à faire en sorte que l'exercice du droit ainsi reconnu ne soit entravé ni en droit, ni en fait.

In English, the provision reads:

Each of the Contracting Parties undertakes within its territory and its maritime zone to grant Fair and Equitable Treatment according to the principles of International Law to the investments made by the investors of the other Party, and to do so in such a way that the exercise of the right thus granted is not impaired *de facto* or *de jure*.

b) Interpretation of Article 3 of the Argentina-France BIT Based on Principles of International Law

340. The Parties disagree on the contours of the treaty's standard of protection and the applicable principles of international law.
341. According to Claimants, the Fair and Equitable Treatment clause under Article 3 not only obligated Respondent to accord Claimants' investment "Fair and Equitable Treatment in accordance with the principles of international law," but also required observance of this commitment in principle as well as in a practical sense. See Claimants' Memorial at paragraph 388.
342. First, Claimants state that it is unclear whether qualifying the obligation of Fair and Equitable Treatment to conform to "principles of international law" results in any changes to the standard. They conclude, however, that even if so, ultimately the outcome remains unaffected because any variation in the standard is compensated for by virtue of Article 4 of the Argentina-France BIT, that is, the MFN Clause. See Claimants' Memorial at footnote 194. In particular, Claimants cite to several third-nation BITs that contain an unqualified fair and equitable treatment clause, including Article 3 of the Argentina-Luxembourg BIT, Article 3(1) of the Argentina-Mexico BIT, Article 3(1) of the Argentina-Netherlands BIT and Article 3(2) of the Argentina-New Zealand BIT.

343. In Respondent's view, reference to principles of international law pursuant to Article 3 of the Argentina-France BIT entails a minimum standard of objective treatment. According to Respondent, such reference to customary international law implicates that the concept of Fair and Equitable Treatment does not establish an autonomous and independent standard but rather coincides with the minimum standard. Respondent asserts that such standard of minimum treatment has been endorsed by several nations, including the United States of America, Canada, Switzerland, Mexico and Ecuador, as well by several international tribunals.²¹
344. Respondent advances the standard set forth in the 1927 case of *Neer v. Mexico*²². Respondent argues that this approach, also known as the "Neer standard", does not impose obligations to keep the investment unharmed.
345. In this connection, Respondent argues that this minimum standard approach sets a high benchmark to prove a violation of the Fair and Equitable Treatment. In support of this view, Respondent cites to several ICSID and NAFTA awards as well as an ICSID annulment decision²³, in which the committee required a "clear showing" of treaty violation.
346. As to incorporation through the MFN Clause, Respondent asserts that Claimants cannot invoke their indirect shareholdings in EDEMSA in order to claim substantive protection under the treaties with respect to a contractual relationship to which they are not privy. Respondent's Counter-Memorial at paragraph 330.
347. In response, Claimants contend that the treaty's text under Article 3 ("Fair and Equitable Treatment according to principles of international law") is not synonymous with the minimum standard of treatment recognized in customary international law. See

²¹ Respondent cites to *Alex Genin et al. v. Republic of Estonia*, ICSID Case ARB/99/2, Award of 25 June 2001, at paragraph 367; *Saluka Investments BV v. Czech Republic*, UNCITRAL Arbitration, Arbitration Permanent Tribunal, Partial Award, decision dated 17 March 2006, at paragraph 292; and *M.C.I. Power Group L.C. and New Turbine, Inc. v. Ecuador*, ICSID Case No. ARB/03/6, Award of 31 July 2007, at paragraph 369.

²² See *Neer v. Mexico*, published at 21 AM. J. INT'L L. 555 (1927).

²³ See *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. the Argentine Republic*, ICSID Case No. ARB/03/97, Decision on Annulment, 3 July 2002, at paragraph 113.

Claimants' Memorial at paragraph 399. Claimants argue that the Argentina-France BIT does not contain any reference to the minimum standard of treatment under customary international law, and thus that comporting to Respondent's interpretation would contravene principles of treaty interpretation under Article 31(1) of the Vienna Convention as well as the contracting parties' intent. See Claimants' Reply, at paragraph 275.

348. Claimants argue that the *Neer* standard has been traditionally interpreted to afford foreign investors a level of protection that is relatively lower than that offered by the standard of Fair and Equitable Treatment, but that in any event, the *Neer* standard itself has evolved since its inception in the 1920s. See Claimants' Memorial at paragraphs 399-400.

349. Claimants' expert opines that whereas "[b]efore 1927 the emphasis on the economic dimension of sovereignty of each state was accompanied by an indifference toward the role of foreign investment in the international economic arena, [] a current perspective will focus much more on global economic interdependence, on the necessity of economic growth and its significance for the reduction of poverty, on the role of foreign investment, and on the accompanying competition among states in attracting foreign investors." See Dolzer Expert Report at paragraph 110.

350. According to Claimants, Respondent's reliance on NAFTA jurisprudence and analysis is without merit in that the treaty language used for NAFTA is different from that of the Argentina-France BIT. Claimants argue that the very title of the Fair and Equitable Treatment provision under NAFTA Article 1105(1) is "Minimum Standard of Treatment" whereas neither the France nor Luxembourg BITs contain language akin to that of NAFTA. Claimants cite to the NAFTA Free Trade Commission's binding Note of Interpretation of 31 July 2001, which according to Claimants essentially instructed the tribunals to take such a restrictive approach. Claimants thus conclude that Respondent cannot apply the NAFTA strictures to the broader Fair and Equitable Treatment provisions of modern BITs. Claimants Reply, at paragraph 281-82.

351. Claimants state that the evolution of the *Neer* standard has prompted debate with respect to the standard's relationship with the obligation of Fair and Equitable Treatment, but

contend that the two standards remain separate. See Claimants' Memorial at paragraph 401. In support, Claimants cite to an ICSID award in which an arbitral tribunal also dealt with *inter alia* Article 3 of the Argentina-France BIT.²⁴ See Claimants Post-Hearing Brief on Merits, at paragraph 76. Claimants stress the fact that the tribunal rejected Respondent's minimalist approach, finding that the provision's reference to principles of international law invites consideration of a wider range of international law principles rather than the minimum standard alone. According to Claimants several other international tribunals have held similarly.²⁵ Alternatively, Claimants argue that Respondent's acts were arbitrary and unjust to such a degree that they amount to breaches of the *Neer* standard anyhow. See Claimants' Memorial at paragraphs 439-40.

352. Second, Claimants contend that the scope of the FET Clause, as drafted, is broader and goes beyond that provided for in most other bilateral investment treaties. See Claimants' Memorial at paragraph 398. According to Claimants, the language of the FET Clause stating that "the exercise of the right thus granted is not impaired either de facto or de jure," brings within the scope of the provision any act that has the *de facto* effect of impairing the right to Fair and Equitable Treatment even if an intent to achieve such an effect is not manifested by the host state. See Claimants' Memorial at paragraph 418.

c) Contours of the Legal Standard

353. Claimants contend that modern jurists accord the standard of Fair and Equitable Treatment a *sui generis* significance. See Claimants' Memorial at paragraph 391. Claimants cite to a number of arbitration awards that have dealt with the subject and conclude that Fair and Equitable Treatment (i) requires the host state to refrain from affecting the basic expectations that were taken into account by the foreign investor in making the investment,²⁶ that is, evisceration of the arrangements in reliance upon which

²⁴ Referred to as the "Vivendi II" decision, Claimants cite to *Compañía del Aguas del Aconquija, S.A. and Vivendi Universal, S.A. v. Argentina*, ICSID Case No. ARB/97/3, Award (20 August 2007).

²⁵ Claimants cite to *Saluka Investments v. Czech Republic*, (Partial Award, 17 March 2006), at paragraph 294; and *MTD Equity Sdn. Hbd. et al. v. the Republic of Chile*, ICSID Case No. ARB(AF)/99/2, Award, at paragraphs 111-12 (25 May 2004); *PSEG Global, Inc. et al. v. Republic of Turkey*, ICSID Case No. ARB/02/5; and *National Grid v. Argentina*, at paragraph 167.

²⁶ See *Técnicas Medioambientales TecMed, S.A. v. Mexico*, ICSID Case No. ARB(AF)/00/02 (Award of 29 May 2003), at paragraph 152.

the foreign investor was induced to invest;²⁷ (ii) depends on the factual context of the host state's actions, including factors such as the undertakings made to the investor and the actions the investor took in reliance on those undertakings,²⁸ and thus prohibits conduct that might be permissible in some circumstances but appears unfair and inequitable in the context of a particular dispute; and (iii) precludes consideration of whether the host state has proceeded in good faith.²⁹ See Claimants' Memorial at paragraph 391.

354. Claimants add that a trend in international arbitration may be gleaned from recent arbitration awards, which is that the legitimate expectations of the foreign investor is understood to be a key element in assessing whether there has been a breach of the Fair and Equitable Treatment obligation.³⁰ See Claimants' Memorial at paragraph 397.
355. According to Claimants, the expectations upon which investors can reasonably rely in making their investment include assurances and representations with respect to the Concession Agreement and relevant regulatory laws, as well as to the stability and predictability of the Regulatory Framework. In support, Claimants' expert, Professor Dolzer, opines that respecting the assurances and representations made as inducement to investors is central to the concept of legitimate expectations. See Claimants Post-Hearing Brief on Merits, at paragraph 84 (citing to Hearing Transcript of 6 November 2009, at 2680:9 to 2682:9). In Claimants' view, prior UNCITRAL awards also support such position.³¹

²⁷ See *CME Czech Republic B.V. v. Czech Republic*, UNCITRAL (Partial Award of 13 September 2001), at paragraph 611.

²⁸ See *CME*, Partial Award of 13 September 2001), at paragraph 157.

²⁹ See *Occidental Exploration & Prod. Co. v. Ecuador*, LCIA Case No. UN3467 (Award of 1 July 2004), at paragraphs 185 and 187.

³⁰ Claimants cite to *TecMed v. Mexico*, Award of 29 May 2003), at paragraph 152; *ADF Group Inc. v. United States of America*, ICSID Case No. ARB(AF)/00/01 (Award of 9 January 2003), at paragraph 189; *Waste Mgmt. Inc. v. Mexico*, ICSID Case No. ARB(AF)/00/03 (Award of 30 April 2004), at paragraph 98; and *CME v. Czech Republic* (Partial Award of 13 September 2001), at paragraph 157.

³¹ Claimants cite to *National Grid PLC v. The Argentine Republic*, UNCITRAL, (Award, 3 November 2008), at paragraphs 178-79; and *BG Group Plc. v. The Argentine Republic*, UNCITRAL, (Definite Award of 24 December 2007), at paragraph 310.

356. In addition, Claimants argue that the Fair and Equitable Treatment standard is commonly understood to entail protection as to the stability and predictability of the legal framework³², as well as the obligation not to adopt arbitrary, unreasonable or discriminatory measures.³³ See Claimants Post-Hearing Brief on Merits, at paragraphs 87, 89.
357. Professor Dolzer opines that the standard seeks to ensure the continuity and stability of the legal framework embodied in an investment contract, especially contracts for long-term projects wherein the foreign investor will sink high volumes of resources into the project at an early stage and the calculated economic return will materialize only in the subsequent years and decades, thereby depending on the host country's will to honor its contractual commitment and treat the investor in a fair manner. See Dolzer Expert Report at paragraph 91.
358. Respondent agrees that assessment of Fair and Equitable Treatment requires consideration of the factual context, especially the extraordinary economic and social crisis existing at the time of occurrence conduct. See Respondent's Counter-Memorial, at paragraph 331. Respondent cites to *inter alia* the *Saluka* award wherein the tribunal stressed that the investor's expectations "must rise to the level of legitimacy and reasonableness in the light of the circumstances."³⁴
359. Respondent, however, argues that customary international law recognizes neither legitimate expectations nor legal stability as essential elements to the Fair and Equitable Treatment standard. See Respondent's Rejoinder, at paragraphs 249-50, 255. Respondent asserts that such broad interpretation extending to the protection of legitimate expectation constitutes a legislative expansion inconsistent with the contracting parties' intentions as well as the principles of treaty interpretation under Articles 31 and 32 of the Vienna Convention. In support of their restrictive approach, Respondent cites to, *inter*

³² Claimants cite to *Sempra v. Argentina*, Award of 28 September 2007); *Enron v. Argentina*, Award of 22 May 2007); and *CMS Gas*, Award of 12 May 2005).

³³ Claimants cite to *Saluka Investments BV v. Czech Republic*, UNCITRAL Arbitration, Arbitration Permanent Tribunal, Partial Award, decision dated 17 March 2006, at paragraph 309.

³⁴ *Saluka Investment v. Czech Republic*, Partial Award, at paragraph 232.

alia, the *Continental Casualty Co. v. Argentina* award³⁵ as well as ICSID annulment decisions.³⁶ Moreover, Respondent argues against Claimants' interpretation of *CMS Gas*, *Enron* and *Sempra* by suggesting that those awards are distinguishable in that those tribunals included an obligation to maintain a stable and predictable framework because the preamble of the Argentina-U.S. BIT made express reference to the concept of stability.

360. In Respondent's view, legitimate expectations do not demand that the host state refrain from modifying its legislation unless there has been an assumption of specific commitment to the investor. See Respondent's Counter-Memorial of 9 February 2009, at paragraph 320. Respondent emphasizes that modifications implemented to the Regulatory Framework in situations otherwise do not violate the standard of Fair and Equitable Treatment.
361. In this connection, Respondent reiterates its position that the Government of Argentina undertook no specific commitments. See Respondent's Counter-Memorial of 9 February 2009, at paragraph 321. Respondent thus argues that there can be no legitimate expectation that Respondent will refrain from implementing changes to the legal framework set forth at the time of the Concession Agreement's execution.
362. Respondent further argues that the standard for Fair and Equitable Treatment additionally requires a showing of denial of justice or discrimination. In support of this view, Respondent cites to several ICSID and NAFTA awards.³⁷ See Respondent's Counter-Mem, at paragraphs 310-11; Respondent's Rejoinder, at paragraphs 244. Respondent also seeks support of such view from the Tribunal's Decision on Jurisdiction, citing specifically to paragraph 146 therein.

³⁵ *Continental Casualty Co. v. Argentina*, ICSID Case No. ARB/03/9 (Award of 5 September 2008), at paragraph 250.

³⁶ *MTD Equity v. the Republic of Chile*, (Decision on Annulment of 21 March 2007), at paragraph 67; and *CMS Gasv. the Argentine Republic*, (Decision on Annulment, 25 September 2007), at paragraph 89.

³⁷ Respondent cites to, *inter alia*, *Waste Management, Inc. v. United Mexican States*, ICSID No. ARB(AF)/00/03, Award of 30 April 2004, at paragraph 98; *Glamis Gold, Ltd. v. United States of America*, UNCITRAL (NAFTA), Award of 8 June 2009, at paragraph 620; and *Int'l Thunderbird Gaming Corp. v. United Mexican States*, UNCITRAL (NAFTA), Award of 26 January 2006, at paragraph 194.

363. Alternatively, Respondent asserts that, even if a different standard than that of *Neer* were to apply, there was no violation of Claimants' right to Fair and Equitable Treatment. In this connection, Respondent cites to an ICSID award, seeking support of its view that legitimate expectations must be reasonable in light of the circumstances.³⁸

d) Application to the Facts

364. Claimants contend that Respondent has violated its treaty obligation to accord "Fair and Equitable Treatment according to principles of international law" by thwarting Claimants' fundamental investment expectations. Specifically, they claim that (i) the Pre-Emergency Measures affecting the Concession systematically contravened contractual rights that Claimants relied upon when investing; (ii) the Emergency Laws (which, according to Claimants, were unrelated or disproportionate to state objectives, discriminatory, and unconstitutional under Argentine law) destroyed the legal regime created to attract Claimants' investment; and (iii) the Renegotiation Process was discriminatory and conducted in bad faith.

365. Claimants argue that from the very outset of their investment in August 1998, EPRE through arbitrary regulatory measures chipped away at the legal framework guaranteed to EDEMSA's investors, until 2002, when the Government of Mendoza is alleged to have completely unraveled that framework through the enactment of the Provincial Emergency Law, thereby radically transforming the "rules of the game" and crippling EDEMSA financially. Claimants add that Respondent's acts are rendered all the more unjust by the fact that the Provincial Emergency Law explicitly obligated EDEMSA to continue complying fully with the Concession Agreement, thus further exacerbating EDEMSA's financial plight and creating a markedly unfair asymmetry in the contractual relationship. See Claimants' Memorial at paragraph 410.

366. Furthermore, Claimants stress the importance of the additional requirement under Article 3, which imposes the obligation not to impair Claimants' right to Fair and Equitable Treatment either *de facto* or *de jure*. As such, Claimants contend that, whatever the

³⁸ In support of its view, Respondent cites to *Parkerings-Compagniet AS v. Republic of Lithuania*, ICSID Case No. ARB/05/8, Award of 11 September 2007, at paragraph 332.

intent of the Government of Mendoza may have been with respect to the Pre-Emergency Measures affecting the Concession and the enactment of the Emergency Measures, as a practical matter a marked injustice was perpetrated insofar as Claimants' use of and benefit from their investment was radically impeded. See Claimants' Memorial at paragraph 418.

(1) Expectation Based on Respondent's Conducts

367. Claimants contend that the Province of Mendoza embarked on a campaign to specifically attract foreign investors in purchasing 51% of EDEMSA Class "A" shares. According to Claimants, Respondent's road shows and Info Memo promoted *inter alia* a foreign investor-friendly legal regime that provided investors with reasonable returns as well as a series of protections tailored to make the investment more appealing to foreign capital markets. See Claimants' Memorial at paragraph 403-406.
368. Key features of the Respondent's sales pitch are said to have been (i) the creation of a regulatory agency with independent oversight to insulate investors from politically motivated measures and actions; (ii) the Currency Clause; (iii) the Cost Adjustment Clause; (iv) the Extraordinary Tariff Adjustment Clause; (v) an initial tariff schedule with a fixed-term of five years; and (vi) a concession with a duration of thirty years. See Claimants' Memorial at paragraphs 406-407.
369. According to Claimants, foreign investors were lured with specific guarantees and commitments that created strong expectations of a long-term investment subject to only *de minimis* political or regulatory risk. See Claimants' Memorial at paragraph 408. Claimants contend they in fact did rely on such guarantees and commitments to effectuate their purchase of EDEMSA shares. See Claimants' Memorial at paragraph 409. Claimants emphasize the fact that Respondent's representations and assurances were directly related to the rights and protections under the Concession Agreement and the Regulatory Framework.
370. In defense, Respondent asserts that in all circumstances the national and provincial authorities acted in a reasonable, responsible, non-discriminatory and proportionate manner in light of their public responsibility under extraordinary economic conditions.

Moreover, Respondent contends that even if it had failed to comply with its contractual obligations, such breaches do not amount to violations of Fair and Equitable Treatment. In support of such view, Respondent cites to *Waste Mgmt. Inc. v. Mexico*, ICSID Case No. ARB(AF)/00/03 (Award of 30 April 2004).

371. In Respondent's view, a scenario in which the Concession Agreement would go unmodified despite economic and social crisis was beyond Claimants' reasonable expectation. Moreover, it was beyond expectation that no renegotiation would take place to account for the new macroeconomic and social situation of the country. See Respondent's Post-Hearing Brief on Merits, at paragraph 68. According to Respondent, such expectation of Claimants runs afoul of what should be fair and equitable in the context of a general and dramatic crisis in which everyone loses. See Respondent's Counter-Memorial, at paragraph 290.
372. Moreover, Respondent argues that assurances made by the Argentine officials prior to Claimants' investment could not give rise to legitimate expectations because the privatization materials provided therewith were not contractually binding. See Respondent's Post-Hearing Brief on the Merits, at paragraphs 70-73. Said materials did not establish Claimants' legitimate expectation given the bidders' responsibility to conduct due diligence and base their bids on their own assessment and investigation.
373. According to Respondent, the Regulatory Framework and Concession Agreement were expressly subject to the existing circumstances at the time of investment and Claimants' efficient operation of the concession. As such, the Regulatory Framework and Concession Agreement were not intended to compensate Claimants for consequences pertaining to their business risk. See Respondent's Counter-Memorial, at paragraph 291.
374. Respondent further argues that Claimants were at their own fault in their investment failing to meet their expectations. Respondent asserts that such failure was caused by Claimants' inadequate due diligence despite Respondent supplying sufficient information per the Data Room, as well as by Claimants' own breaches, technical inefficiencies and bad management. According to Respondent, Claimants had voluntarily invested in Mendoza after making their own assessment and becoming fully aware that they would

assume the risks inherent in a regulated sector. See Respondent's Counter-Memorial, at paragraph 292.

375. Claimants respond by asserting that Respondent's due diligence arguments cannot alter its liability under the BIT, which should necessarily be based on the state's post-investment conduct, not Claimants' pre-investment conduct. Alternatively, Claimants argue that such arguments by Respondent are baseless because Claimants did carry out adequate due diligence and inspections as well as properly manage the company.
376. In Claimants' view, the fact that bidders were supposed to conduct due diligence does not render their reliance on the State's assurances and representatives irrational or illegitimate, or provide *carte blanche* to Argentina to renege on those assurances. See Claimants' Post-Hearing Reply on the Merits, at paragraph 16.

(2) Pre-Emergency Measures Affecting the Concession

377. As an initial matter, Respondent asserts, without admitting wrongdoing, a claim based on denial of justice should be dismissed *in limine* insofar as it is based on the Pre-Emergency Measures affecting the Concession because it was not pled in Claimants' Memorial, and thus, must be deemed untimely. See Respondent's Rejoinder at paragraph 768.
378. Claimants contend that the Pre-Emergency Measures affecting the concession unilaterally and systematically contravened aspects of the Concession Agreement alleged to have been fundamental in the Claimants' evaluation of investing in the Province of Mendoza. See Claimants' Memorial at paragraph 423.
379. Claimants argue that the Pre-Emergency Measures affecting the Concession blatantly disregarded material financial and contractual commitments, such as to compensate EDEMSA for losses incurred as a result of provincial subsidies and for financial obligations assigned to EDEMSA as part of the contractual arrangement, as well as to abide by the tariff schedules and tariff revision mechanisms established in the Concession Agreement. See Claimants' Memorial at paragraph 423. In Claimants' view, EPRE

summarily ignored such commitments by *inter alia* establishing new categories of tariffs and users and arbitrarily expanding the geographical scope of the concession area.

380. Claimants contend that these measures went beyond mere contractual breaches in that they were adopted by the Province of Mendoza in exercise of its regulatory powers. According to Claimants, such acts configure a pattern of conduct that is clearly not fair or equitable, as it substantially altered *the economic* equilibrium of the Concession Agreement that the Claimants had relied upon, thereby significantly reducing the value of their investment. See Claimants' Memorial at paragraph 424.
381. Claimants argue that EDEMSA faced difficulties in the administrative and judicial proceedings, which were sought to vindicate rights under the Concession Agreement. See Claimants' Memorial at 148-89. Claimants thus assert that Respondent frustrated Claimants' access to fair legal proceedings, thereby breaching one of the core principles inherent in the standard of Fair and Equitable Treatment.
382. Claimants' witness, Mr. Gonella, provides further detail regarding the barriers that EDEMSA confronted in the administrative proceedings. See Claimants' Reply, at paragraphs 335-37. According to Mr. Gonella, EDEMSA was required to submit any administrative claim in the first instance to EPRE, which in fact was the same independent government entity that had issued the administrative resolutions detrimental to EDEMSA by way of unilaterally changing the terms of the Concession Agreement. See Supplementary Witness Statement of Hector Gonella, at paragraph 79. Mr. Gonella further provides that EPRE's dual role as judge and party prevented any justice before the administrative tribunal. Mr. Gonella opines that the general trend in the way in which EDEMSA's claims were being dealt with followed a pattern involving lengthy proceedings with long periods of time spent waiting for decisions to be adopted and notified; followed by, "incorrectly based decisions without a direct reply to EDEMSA's arguments in defense of EDEMSA's rights, and the repeated denial of each claims being submitted."
383. Mr. Gonella further comments on the administrative appeal process before the ME&PW that followed after the initial proceedings mentioned above. See *id.* at paragraphs 80.

According to Mr. Gonella, the officials in charge of resolving EDEMOSA's appeal had a contractual relationship with the predecessor company, EMSE, and displayed hostility against EDEMOSA. Each and every claim submitted before the ME&PW was rejected.

384. As to the final stage of appeal, which was made before the judicial courts, Claimants assert that EDEMOSA suffered significant denials of due process, including an inability to have its claims heard on the merits as well as an inability to obtain relief. Claimants' Reply at paragraph 337. Claimants cite to Mr. Gonella's statement, in which he provides that the Supreme Court of Mendoza, having original and exclusive jurisdiction over EDEMOSA's claims, rejected all claims made by EDEMOSA based on merely formal considerations. Mr. Gonella opines that several delays in the judicial process were made intentionally and that EDEMOSA's arguments were rejected for political reasons. Moreover, Mr. Gonella states that during the appeal process, the court refused to accept expert reports on damages. *Id.* at paragraphs 89, 90-91.
385. With respect to Claimants' witnesses, including Mr. Gonella, Respondent seeks to undermine their credibility. See Respondent's Post-Hearing Brief on the Merits, at paragraphs 25-32. In this regard, Respondent asserts that Mr. Gonella has a conflict of interest because he has served as counsel to EDF. See Respondent's Post-Hearing Brief on the Merits, at paragraphs 25-32. In response, Claimants argue that such argument cuts both ways in that all of Respondent's fact witnesses are themselves employees of the Province of Mendoza. Claimants' Post-Hearing Reply on the Merits, at paragraph 5.
386. Respondent further argues that Claimants alleged difficulties were caused by their own inaccurate business projections, which resulted from Claimants' negligent failure to properly conduct its due diligence obligations, including adequate analysis of the network's conditions as well as geographic and climatic characteristics of the concession area. See Respondent's Post-Hearing Reply on the Merits, at paragraphs 26-31.
387. In this connection, Respondent contends that the acts of the Province prior to the Argentine crisis demonstrate its good faith. See Respondent's Post-Hearing Reply on the Merits, at paragraphs 34-35. Despite EDEMOSA's management deficiencies and inability to meet objectives and deadlines with respect to service quality, EPRE and provincial

government displayed good faith as well as a strong will to collaborate. Respondent underscores that Claimants have not contested these particular facts.

(3) Emergency Measures and Renegotiation Process

388. Claimants contend that the enactment of the Emergency Laws completely destroyed the value of their investment in EDEMSA by eliminating a legal regime purposefully created and promoted to induce foreign investors. According to Claimants, the Emergency Laws first delinked the Argentine peso from the U.S. dollar, thus ending the Convertibility System. Claimants note that this measure by itself would not have affected the legal regime since tariffs were guaranteed to be calculated in dollars regardless of the exchange rate. However, the Emergency Laws' further pesification and freeze of tariff rates are alleged to have overturned the legal framework that Argentina had guaranteed to Claimants in order to secure their investment. See Claimants' Memorial at paragraphs 425-426.
389. Claimants contend that, consequently, they suddenly found EDEMSA's cash flow generation capabilities eroded, thereby resulting in a significant reduction of operating profits which by 2003 became negative, with no tariff adjustment remedy to enable a reasonable return on their long-term investment while at the same time EDEMSA was obligated by law to keep up with the quality standards to which it was bound under the original terms of the Concession Contract. See Claimants' Memorial at paragraph 426.
390. Claimants posit that such an arrangement is totally at odds with the contractual regime upon which Claimants relied on when making their investment and constitutes a repudiation of applicable contractual rights, and thus amounts to a violation of the FET Clause. See Claimants' Memorial at paragraph 426.
391. Claimants add that the Emergency Laws were unrelated or disproportionate to Respondent's asserted objective, that is, to protect the lower socio-economic classes. Claimants argue that the Emergency Laws did not include similar freezing measures with respect to other components of the basket of expenses of lower income groups, even though monthly public utility expenses is alleged to make up less than 8% of the national average low-income family budget and electricity consumption is alleged to account for

- less than 2% of total consumer expenditures. See Claimants' Memorial at paragraph 427-28.
392. Claimants highlight that no effort was made to tailor the measures to those sectors that the Emergency Laws supposedly sought to help. Claimants allege that low income households account for less than 9% of total electricity consumption nationally, and no more than 5% in the Province of Mendoza, but yet the tariff freeze was imposed across the board, thereby conferring a windfall on sectors of society that did not need help. In Claimants' view, the over-inclusiveness of the Emergency Laws constitutes an unfair and forced subsidy by EDEMSA in favor of sectors of Argentine society that had the full or substantial capacity to bear increases in energy costs prompted by the economic situation of early 2002. See Claimants' Memorial at paragraph 429.
393. It is also claimed that the Emergency Laws were discriminatory as well. Claimants argue that the various remarks made by both the legislative and executive branches of the Government of Mendoza alleged to xenophobic in nature. Claimants also state that the Emergency Law's price freeze was imposed exclusively on the public utilities sector, the majority of which is owned by foreign investors, and, in the case of EDEMSA, the freeze was kept firmly in place until Claimants sold their shares and a local Mendoza-based company became EDEMSA's new majority owner. See Claimants' Memorial at paragraph 430-31.
394. With respect to any difficulties encountered by Claimants in connection with the Emergency Measures, Respondent argues that their cause was due to Claimants' poor management decision to incur high levels of debt in foreign currency. See Respondent's Counter-Memorial, at paragraph 293.
395. Respondent further argues that even after enactment of the Emergency Measures in 2002, the government authorities made a good-faith effort to consider EDEMSA's request for tariff adjustment. Respondent's Counter-Memorial at paragraph 314. In Respondent's view, the Emergency Laws were legitimate and reasonable means to maintain tariffs at fair and reasonable rates that allowed, in time, for the gradual economic and social recovery which would benefit all constituents. See Respondent's Counter Memorial at

paragraph 448. In this connection, Respondent notes that the Convertibility Law was not abandoned to increase sovereign wealth or to restructure productivity forces, and that the Argentine Supreme Court has declared the Emergency Laws as constitutional. See Respondent's Counter Memorial at paragraphs 410, 420.

396. Moreover, Respondent asserts that it had displayed good faith during the Renegotiation Process as well, essentially suspending EDEMISA's service quality obligations in light of the latter's failure.
397. Claimants contend that despite their good-faith cooperation with the Renegotiation Process, the process was highly politicized, characterized by repeated extensions of the legal deadlines for its completion, and lacking of any real intent on Respondent's part to reach a solution. Claimants argue that no genuine progress was made in the nearly three and a half years that passed from the inception of the Renegotiation Process to the point where Claimants decided to sell their EDEMISA shares. According to Claimants, the focus of the Renegotiation Process from 2002 through March 2005 was on short-term palliatives rather than on the renegotiation of the concession contracts themselves as required by the Provincial Emergency Law. Claimants argue that, even so, no solutions were forthcoming until EDEMISA's ownership was transferred to Argentine hands. In Claimants' view, the fact that the Renegotiation Process was inordinately delayed even though by Decree it was to be concluded originally in 180 days, reflects the Government of Mendoza's lack of political will to take the necessary steps to lift the tariff freeze, which Claimants allege is precisely the type of political risk the Argentina-France BIT is designed to protect against. See Claimants' Memorial at paragraph 433-34.
398. Claimants argue that while their persistent requests for a tariff increase ever since the 2002 tariff freeze was imposed were consistently rejected, the stage was suddenly transformed shortly after Claimants publicly announced their divestiture from EDEMISA and a local Argentine company took over ownership of EDEMISA, at which time the Government of Mendoza announced a tariff increase of 38.05% which became effective only after Claimants' sale of their EDEMISA shares. See Claimants' Memorial at paragraph 430.

4. Full Protection and Security

a) Treaty Framework

399. Article 5(1) of the Argentina-France BIT provides:

Las inversiones efectuadas por inversores de una u otra de las Partes Contratantes gozarán, en el territorio y en la zona marítima de la otra Parte Contratante de protección y plena seguridad en aplicación del principio del tratamiento justo y equitativo mencionado en el artículo 3 del presente Acuerdo.

In the French version, Article 5(1) reads:

Les investissements effectués par des investisseurs de l'une ou l'autre des Parties contractantes bénéficient, sur le territoire et dans la zone maritime de l'autre Partie contractante, d'une protection et d'une sécurité pleines et entières, en application du principe de traitement juste et équitable mentionné à l'article 3 du présent Accord.

In English, the provision reads:

The investments made by investors of either of the Contracting Parties shall enjoy protection and full security in the territory and in the maritime zone of the other Contracting Party in application of the principle of Fair and Equitable Treatment discussed in Article 3 of this Agreement.

b) Admissibility of Claim

400. As an initial matter Respondent requests dismissal of this claim by reason that it was not included in Claimants' Memorial of 2 May 2005 and thus that it violates Article 31(3) of the ICSID Arbitration Rules. Respondent's Rejoinder, at paragraphs 575-76.

401. Respondent further argues, without admitting wrongdoing, that a claim based on denial of justice should be dismissed *in limine* insofar as it is based on the Pre-Emergency Measures affecting the Concession because it was not pled in Claimants' Memorial, and thus, must be deemed untimely. See Respondent's Rejoinder at paragraph 768.

402. In response, Claimants argue that their full protection and security claim was first asserted in the Request for Arbitration dated 4 August 2003, and was fully briefed in their Reply of 30 April 2009. As such, the mere fact that this claim was not briefed in

Claimants' Memorial of 2 May 2005 caused no prejudice to Respondent because it had notice of that claim by virtue of Claimants' assertions made in the Request for Arbitration and thus was given opportunity to respond not only in its Rejoinder but also at the hearing. Alternatively, Claimants assert that this claim qualifies as an incidental or ancillary claim under Article 46 of the ICSID Convention and Rule 40 of the ICSID Arbitration Rules because it arises directly out of the subject-matter of the dispute. Those norms require that such incidental or additional claims be presented no later than the reply, which Claimants have done. Claimants Post-Hearing Brief on the Merits, at paragraph 119.

c) Parties' Contentions

403. Claimants assert that Respondent has violated Article 5(1) of the Argentina-France BIT by breaching its obligation to afford full protection and security to Claimants' investments. Specifically, Claimants argue that Respondent compromised the legal security of Claimants' investments by overriding and repudiating the rights granted under the Concession Agreement and that it failed to provide EDEMSA with a meaningful opportunity to resolve its contractual claims before fair administrative and judicial bodies in Mendoza. According to Claimants, modern jurisprudence confirms that the obligation to provide full protection and security of an investment goes beyond physical protection, thus affording legal security and a stable investment environment. See Claimants' Reply, at paragraph 340-41.
404. Had Argentina and France wished to devise the meaning of "security" narrowly so as to preclude obligations to legal security, they could have expressly indicated so in the treaty. Rather, the countries agreed to provide "full" security, which, according to Claimants, should be broadly defined so as to include legal protection. Claimants' expert, Dr. Dolzer opines that "full security", when given its ordinary meaning, runs afoul with a narrow interpretation limiting the scope of application to strictly physical aspects. See Expert Report of Dolzer, at paragraph 178. In further support, Claimants cite to an

ICSID award,³⁹ in which the tribunal rejected Argentina's narrow reading of Article 5(1) of the Argentina-France BIT.

405. In Claimants' view, the concept of full protection and security is closely linked to that of Fair and Equitable Treatment. See Claimants' Reply, at paragraph 343. What is more, Article 5(1) expressly links full protection and security to the "application of the principle of Fair and Equitable Treatment." Given that the latter concept guards investors from all unfair acts or omissions by the host country, reference thereto under Article 5(1) makes clear that full protection is not limited to physical aspects but rather includes legal security, which in turn relates to the stability and predictability of the legal framework. See Claimants' Post-Hearing Brief on the Merits, at paragraph 114.
406. According to Claimants, such linkage between the two treaty protections has been recognized in several arbitral awards, including *Vivendi II*, *Occidental* and *National Grid*. Claimants provide their reading of the *Occidental* decision, which is that violation of the Fair and Equitable Treatment standard necessarily entails a violation of the full protection and security standard. See Claimants' Reply of 30 April 2009, at paragraph 343-44 (citing to *Occidental* (Final Award, 1 July 2004), at paragraph 187).
407. Alternatively, Claimants argue that, regardless whether Article 5(1) directly assures legal security, Claimants are still entitled to such protection through the MFN clause under Article 4 of the Argentina-France BIT. Pursuant to those clauses, Respondent is required to extend the more favorable treatment accorded to other investors under, for instance, the Argentina-Germany BIT, which expressly guarantees the "legal security" of all foreign investments. See Claimants' Reply at paragraph 344.
408. Claimants further contend that, in the present case, the evidence shows that the measures trampled on EDEMSA's rights under the Concession Agreement and the Regulatory Framework. According to Claimants, Respondent repudiated contractual terms while unilaterally substituting others, and radically altered the operation of the Regulatory Framework. See Claimants' Reply at paragraph 345.

³⁹ *Compañía del Aguas del Aconquija, S.A. and Vivendi Universal, S.A. v. Argentina*, ICSID Case No. ARB/97/3, Award (20 August 2007).

409. Furthermore, Respondent failed to afford Claimants with fair and meaningful legal process to vindicate their contractual rights against Mendoza. In support, Claimants cite to *Parkerings-Compagniet S.A. v. Lithuania* and *Tecmed*. According to Claimants, these awards establish that full protection and security obligations include a fair and accessible legal system. Claimants argue that, in the present case, Mendoza's administrative and judicial authorities have created needless delays and engaged in gross procedural improprieties, including biases displayed by Mendoza's administrative agencies against EDEMSA as well as the Mendoza Supreme Court's refusal to consider EDEMSA's claims on the merits. See Claimants' Reply, at paragraph 351-52.
410. As a result, the above mentioned conducts by Respondent amounted to violations of its obligation to provide full protection and security to Claimants' investments. See Claimants' Reply at paragraph 345-6.
411. In support of its conclusion, Claimants further cite to, *inter alia*, the *National Grid* award, which dealt with similar facts as those in the present case. According to Claimants, the *National Grid* tribunal found a violation of the full protection and security clause on the basis of Argentina imposing pesification of public contracts and a tariff freeze, as well as impeding the company's ability to renegotiate its Concession Agreement. See Claimants' Post-Hearing Brief on the Merits of at paragraph 118 (citing to *National Grid*, at paragraphs 59-60, 189-90).
412. In defense, Respondent contends that Claimants' accusations fall outside the scope of protection provided under either Article 5(1) of the Argentina-France BIT or Article 3(2) of the Argentina-Luxembourg BIT. Alternatively, Respondent asserts that this accusation lacks factual grounds. See Respondent's Rejoinder at paragraph 586.
413. In Respondent's view, it is impossible to put the two standards on the same footing in the sense that violation of Fair and Equitable Treatment equals breach of full protection and security. Respondent argues against Claimants' view by asserting that, if such were the case, the existence of one of the two standards would become unnecessary. See Respondent's Rejoinder at paragraph 592.

414. Moreover, Respondent disagrees with Claimant that legal security was intended by Argentina and France, saying that Claimants' reasoning is flawed in that the same construction can be used to support the contrary, meaning that the countries had intended to extend the protection to include legal security, they could have expressed so in the text of the Argentina-France BIT. In this connection, Respondent states that other investment treaties entered into by Argentina do in fact contain the expression, "legal security", such as those entered into with Germany, Chile, Guatemala, Panama and Peru, as well as the fact that the Argentina-Germany BIT had entered in force prior to the Argentina-France BIT, but inclusion of the term "legal security" was not agreed to in the latter. See Respondent's Rejoinder at paragraph 596.
415. Respondent attempts to undermine Claimants' reading of *Vivendi II* and *National Grid* by arguing that neither tribunal expressly stated that treaty reference to "full protection and security" includes legal security or stable investment environment, and with respect to the *CME v. Czech Republic* award, Respondent seeks to distinguish its facts from that of the present case as well as the text of relevant treaty provisions. Respondent's Rejoinder, at paragraphs 601-2.
416. According to Respondent, the *CME* tribunal conclusion was based on its finding that the measures adopted were "targeted" to remove the security and legal protection. Respondent asserts that Claimants have presented no evidence of such "targeted" conduct in the present case, and rather, objectives behind the measures adopted by Respondent in the present case were of general nature, such as to avoid hyperinflation, improve fiscal situations and halt deterioration of life conditions. Respondent's Rejoinder, at paragraph 603.
417. Moreover, Respondent argues against incorporation of other treaty standards by way of the MFN clause, which would run afoul of the intentions of the contracting states. Respondent's Rejoinder at paragraph 611. For the reasons mentioned above, Respondent concludes that it has not violated the treaty standard because neither Claimants nor EDEMSA were deprived of physical protection and security. Respondent's Rejoinder of 27 July 2009, at paragraph 608. Alternatively, Respondent asserts that legal security was

in fact afforded to Claimants' investments. See Respondent's Rejoinder of 27 July 2009, at paragraph 624.

418. According to Respondent, the guarantee of protection and security is not absolute and does not impose strict liability on the host state. See Respondent's Rejoinder at paragraph 618. Rather, the obligation implicates a requirement to exercise due diligence as reasonable under the circumstances. In support of such view, Respondent cites to *Lauder v. Czech Republic*, UNCITRAL case (Award of 3 September 2001).
419. Citing to the *Lauder* and *Parkerings-Compagneit* awards, Respondent advances the position that the only duty under the full protection and security standard was to keep the judicial system available and permit such claims to be properly examined and decided. See Respondent's Rejoinder at paragraphs 620-21.
420. Respondent argues that, in the present case, Mendoza's administrative and judicial system has been fully available to Claimants and EDEMSA, which is evidenced by the fact that EDEMSA had in fact brought several actions before the administrative and judicial tribunals; Respondent further asserts that it has provided Claimants due process of law at all times. Respondent's Rejoinder at paragraph 622.

5. Indirect Expropriation

a) Treaty Framework

421. Article 5(2) of the Argentina-France BIT provides:

Las Partes Contratantes se abstendrán de adoptar, de manera directa o indirecta, medidas de expropiación o de nacionalización o cualquier otra medida equivalente que tenga un efecto similar de desposesión, salvo por causa de utilidad pública y con la condición que estas medidas no sean discriminatorias ni contrarias a un compromiso particular.

Las medidas mencionadas que podrían ser adoptadas deberán dar lugar al pago de una compensación pronta y adecuada, cuyo monto calculado sobre el valor real de las inversiones afectadas deberá ser evaluado con relación a una situación económico normal y anterior a cualquier amenaza de desposesión.

Esta compensación, su monto y sus modalidades de pago serán fijados a más tardar a la fecha de la desposesión. Esta compensación será efectivamente realizable, pagada sin demora y libremente transferible. Y producirá intereses calculados a una tasa apropiada hasta la fecha de su pago.

In the French version, Article 5(2) prescribes:

Les Parties contractantes ne prennent pas, directement ou indirectement, de mesures d'expropriation ou de nationalisation, ni tout autre mesure équivalente ayant un effet similaire de dépossession, si ce n'est pour cause d'utilité publique et à condition que ces mesures ne soient ni discriminatoires, ni contraires à un engagement particulier.

Les mesures visées ci-dessus qui pourraient être prises doivent donner lieu au paiement d'une indemnité prompte et adéquate dont le montant, calculé sur valeur réelle des investissements concernés, doit être évalué par rapport à une situation économique normale et antérieure à toute menace de dépossession.

Cette indemnité, son montant et ses modalités de versement sont fixés au plus tard à la date de la dépossession. Cette indemnité est effectivement réalisable, versée sans retard et librement transférable. Elle produit, jusqu'à la date de versement, des intérêts calculés au taux d'intérêt approprié.

In English, the provision reads:

The Contracting Parties shall abstain from directly or indirectly adopting measures of expropriation or nationalization or any other equivalent measure having a similar effect of dispossession, except for causes of public utility and provided such measures are not discriminatory or contrary to a specific commitment.

Such measures as may be adopted shall result in the payment of prompt and adequate compensation, the amount of which, calculated on the genuine value of the relevant investments, shall be valued in terms of a normal economic situation prior to any threat of dispossession.

The amount and terms of payment of such compensation shall be established by the time of dispossession at the latest. Such compensation shall be effectively realizable, paid without delay, and freely transferable. It shall accrue interest calculated at an appropriate rate up to the date of payment.

422. Treaty Article 1(1) defines the term "inversiones" as:

activos tales como los bienes, derechos e intereses de cualquier naturaleza y, en particular, aunque no exclusivamente: . . . b) las acciones, primas de emisión y otras formas de participación, aún minoritarias o indirectas, en las sociedades constituidas en el territorio de una de las Partes Contratantes; . . . e) las concesiones acordadas por la ley o en virtud de un contrato

In the French version, “investment” is defined as:

avoirs tels que les biens, droits et intérêts de toute nature, et plus particulièrement mais non exclusivement: . . . b) Les actions, primes d’émission et autres formes de participation, même minoritaires ou indirectes, aux sociétés constituées sur le territoire de l’une des Parties contractantes; . . . e) Les concessions accordées par la loi ou en vertu d’un contrat

In English, the provision reads:

assets such as goods, rights, and interests of any nature, including but not limited to: . . . b) shares, issue premiums, and other forms of participation, even minority or indirect participation, in companies established in the territory of one of the Contracting Parties; . . . e) concessions granted by law or under contract

423. Furthermore, Treaty Article 1(3) provides:

Las ganancias de las inversiones y, en caso de reinversión, las ganancias de su reinversión gozan de la misma protección que la inversión.

In the French version, Article 1(3) states:

Les revenus de l’investissement et, en cas de réinvestissement, les revenus de leur réinvestissement jouissent de la même protection que l’investissement.

In English, the provision reads:

Returns on investments and, in the event of reinvestment, returns on reinvestment shall enjoy the same protection as the investment.

424. The same provision defines “*ganancias*” as:

[T]odas las sumas producidas por una inversión, tales como los beneficios, retribuciones o intereses, durante un período determinado.

In the French version, “*revenus*” is defined as

[T]outes les sommes produites par un investissement, telles que bénéfices, redevances ou intérêts, durant une période donnée.

In English, the provision reads:

[A]ll the amounts yielded by an investment, such as profit, income or interest, in a given period.

b) Parties’ Contentions

425. Claimants observe that Treaty Article 5(2) generally reflects customary international law precepts proscribing host state measures which prevent, unreasonably interferes with, or unduly delays the effective enjoyment or disposal of the property, whether such acts were lawful or not. See Claimants’ Memorial on the Merits at paragraphs 317, 320-3, 329.
426. In response, Respondent contends that its regulatory actions were valid, which does not necessitate compensation; such regulation power is part of the general customs of international law, and is therefore relevant in the application of the Treaty. See Respondent’s Counter Memorial, at paragraphs 539-44.⁴⁰
427. Claimants take the position that the Argentina-France BIT obliges Respondent to promptly and adequately compensate for adopting measures of direct or indirect expropriation, or for measures having a similar effect. See Claimants’ Memorial, at paragraph 317. According to Claimants, the Pre-Emergency Alterations, Emergency Tariff Measures and ensuing failure of the Renegotiation Process had the effect of indirectly expropriating Claimants’ investments, but the Respondent has failed to compensate for this taking. See Claimants’ Memorial, at paragraphs 323, 335, 350-3, 371.

⁴⁰ Respondent cites to leading commentator F.A. Mann, who purports that “[T]hose measures which matter in the present context, namely, general legislation or executive provisions put into force for the benefit of the community at large, do not involve the taking of property even if they affect the rights of the owner or the value of his property.” See F.A. Mann, “State Contracts and State Responsibility,” in *International Law in the Twentieth Century* (Leo Gross ed., 1996), 577.

428. Respondent asserts that when taken in context of the emergency situation such actions were lawful and fall under Respondent’s police power, which due to the Harvard Draft Convention include a “general change in the value of currency” and “the action of the competent authorities of the State in the maintenance of public order” and do not constitute an expropriation. See Respondent’s Counter-Memorial, at paragraphs 533, 536-7.
429. According to Claimants, the concept of indirect expropriation is more expansive than direct expropriation, extending even to repudiation of contractual or concession rights,⁴¹ and including at least three key factors, namely the nature of the measure or act at issue, whether the impact on the investor was disproportionately severe, and whether the duration of the interference was not merely ephemeral. See Claimants’ Memorial at paragraphs 325-8, 342-3.
430. Respondent, however, takes the position that under Article 5(2) of the Argentina-France BIT indirect expropriation only occurs when an act or series of acts constitute a material deprivation of property rights. See Respondent’s Counter Memorial on the Merits at paragraphs 493-4. Respondent emphasizes the fact that indirect expropriation necessitates the deprivation be material, including whether the investor maintains ownership and control of the investment or if the Government administers the daily operations of the company, that the measures are severe in nature, and the threshold for indirect expropriation should not be lower than that for direct expropriation. See Respondent’s Counter Memorial on the Merits at paragraph 495, 501-505, 507. Also, the fact that Claimants retained control and increased their shareholding in SODEMSA indicates that there was no deprivation of ownership. See Respondent’s Rejoinder at paragraph 412.
431. In addition, in Claimants’ view the definition of the term “investment” is also broad as it not only comprises assets of any nature, but also any income or returns derived from the

⁴¹ Claimants’ legal expert, opines that “[a] substantial deprivation . . . also [occurs] when the earnings derived from the investment are no longer reasonably related to those which would have accrued if the host state had not altered the conditions laid down in the concession contract[;] . . . [a]ny alteration of these rights which goes beyond the framework of the investment back expectations as recognized in the contract . . . simultaneously alters the property rights of the investor in a manner which has the same effect as a dispossession of property within the meaning of Article 5 section 2 of the Argentine-French BIT.” Dolzer Expert Report, at paragraphs 43-4.

corpus; thus shares in EDEMSA and the value of and returns on those shares are all “investments” for purposes of the Treaty.⁴² See Claimants’ Memorial at paragraphs 318-9. Claimants emphasize that the focus of the inquiry must constitute a finding on the expropriatory effect of Respondent’s actions upon the investment, as opposed to the governmental purpose or objective underlying the measures in question, thus meaning whether or not Respondent intended to expropriate is irrelevant.⁴³ See Claimants’ Memorial at paragraphs 336-8.

432. Respondent argues that a diminution in the value of the shares does not equate to an expropriation, and that Claimants actually sold their interests in EDEMSA for a positive value. See Respondent’s Rejoinder at paragraph 405, 408, and Respondent’s Counter-Claim on the Merits at paragraph 501. Furthermore, Claimants’ investment had no value when the measures took effect, and therefore the Respondent’s measures are not at fault for any loss in value experienced by Claimants. See Respondent’s Counter Memorial on the Merits at 503. Finally, Respondent takes the view that the Tribunal must also take into account whether Respondent intended to perpetrate an expropriation. See Respondent’s Rejoinder at paragraph 458.
433. Claimants assert the effect of the Pre-Emergency Alterations, the Emergency Tariff Measures, and ensuing failure of the Renegotiation Process significantly deprived Claimants of their control or use of the investment as well as their reasonably expected economic benefits, ultimately forcing divestiture in order to mitigate losses. See Claimants’ Memorial at paragraph 329.

⁴² Claimants’ legal expert, Professor Dolzer, opines that “it is expressly recognized in the BIT that shares held by nationals of one state in companies established in the other state are covered by the rules of the BIT. Argentina was aware of its obligations under various BITs, including the one with France, when it carried out its program of privatization, and allowed and encouraged the acquisition of shares by foreign investors such as EDFI. Therefore, the economic value of the shares in the national companies are protected in the same way as is the economic value embodied in other property rights protected under the BIT, as defined in Article 1 of the BIT. As shareholders in the interests in EDEMSA, EDFI, SAURI, and León have the right to assert claims for State measures that affect their property rights which consist of their shares in EDEMSA and the value which is embodied in these shares.” Dolzer Expert Report, at paragraph 12.

⁴³ Claimants’ legal expert, Professor Dolzer, supplements by opining that “[t]he absence of good faith will mean only that the act is unlawful, with the consequences provided by the general rules of international law on state responsibility. In other words, good faith is a prerequisite for a lawful measure of expropriation and the fact that the government does act in good faith does not exempt it from the obligation to compensate, because a lawful expropriation still triggers a duty to pay compensation.” Dolzer Expert Report, at paragraph 37.

434. Respondent's view is that a decrease in the expected return does not amount to expropriation, and the BIT's protection against expropriation "investment" does not extend to a guarantee of profits. See Claimants Counter Memorial on the Merits at paragraph 525. In connection to this, Respondent did not procure rights from the Claimants, meaning no expropriation occurred. See Respondent's Rejoinder at paragraph 459-60.
435. In particular, Claimants contend that the Emergency Tariff Measures destroyed the economic terms of the investment by unilaterally altering the Concession's Legal Framework, eliminating any return on the investment despite legal guarantees of reasonable returns, causing an inability to sustain infrastructural investment levels for adequate network maintenance, threatening the medium- to long-term sustainability of the investment, eroding EDEMSA's cash flow generation capabilities so as to result in negative operating margins and defaults on debts, and completely diluting the value of Claimants' equity holdings due to the phenomenal increase in the relative value of EDEMSA's financial debt occasioned by the pesification and freeze of tariffs. See Claimants' Memorial at paragraph 330.
436. Respondent replies that the crisis and various management mistakes on the part of the Claimants, including constant breaches and a high level of indebtedness, caused the loss of value in EDEMSA. See Respondent's Counter-Memorial, at paragraph 511.
437. Claimants emphasize that actions on the part of the Respondent effectuated an expropriation, especially as BIT's do not require an investment's obliteration as a precondition to indirect expropriation; instead an investor need only show that the state substantially deprived the investment of value. See Claimants' Reply on the Merits at paragraph 354. Claimants add that loss of legal title is not necessary to establish indirect expropriation. See Claimants' Memorial at paragraphs 339-41.
438. According to Respondents, a substantial deprivation is not enough to constitute expropriation, and according to international law indirect expropriation claims necessitate dispossession or material deprivation, as under Article 5(2) of the Argentina-France BIT. See Respondent's Counter-Memorial, at paragraph 493. Furthermore, Respondent argues

that Claimants have failed to show that the impairment caused by Respondent's measure was total, which they contend is necessary to establish expropriation. See Respondent's Rejoinder at paragraph 400.

439. Claimants further maintain their concession rights constitute an integral part of the their investment, and the Pre-Emergency Alterations and Emergency Tariff Measures must be deemed to have repudiated the Concession's Legal Framework so as to have, in the case of the latter, rendered the Concession Contract largely meaningless and deprived Claimants of their reasonable expectations of economic benefit.⁴⁴ See Claimants' Memorial at paragraphs 344-9. In addition, neither the Argentina-France BIT nor international law requires a showing of denial of justice. See Claimants' Post-Hearing Reply on the Merits, at paragraph 26.
440. Respondent instead argues that breaches of the Concession Agreement do not equate to expropriation, and the Claimants cannot cite specific behavior that amounts to expropriation under international law, such as a denial of justice. See Respondent's Counter-Memorial, at paragraphs 512-14.
441. Claimants also note the Emergency Tariff Measures not only ensued between 15 January 2002 (date of enactment) thru 30 March 2005 (date of Claimants divestiture), sharply cutting income and an ability to make infrastructural investment, but at the same time these measures also forced EDEMSA to abide fully by its obligations under the Concession Contract, resulting in fines for deficiencies in quality output. See Claimants' Memorial at paragraph 333.
442. Respondent's claim that the Claimants' decision to make capital reduction, an indebtedness policy, and a decision to withdraw from the concession prove that the Claimants are to be held liable for their damages. See Respondent's Rejoinder at paragraph 434.

⁴⁴ Claimants' legal expert, Professor Dolzer, opines that "the Argentine State's radical alteration of the pre-existing legal framework upon which Claimants based their investment decisions demonstrates that the Argentine State disregarded its contractual commitments. The Argentine State thereby repudiated its contract with EDEMSA in a manner that effected an indirect expropriation of the relevant contractual rights and of Claimants' return on their investment, since they had an effect 'similar to dispossession' with regard to Claimants' investment." Dolzer Expert Report, at paragraph 48.

443. Claimants take the position that there was no reasonable justification underlying the Emergency Tariff Measures to begin with, much less to maintain such an asymmetrical regime for over three years. The nature, severity, and duration of the Respondent's measures indicate that an expropriation has taken place. See Claimants' Memorial at paragraph 334-35.
444. Respondent replies that they were entirely within their rights to effectuate a devaluation of their currency. See Respondent's Rejoinder at paragraphs 437-41. The economic situation necessitated the exercise of Respondent's police power, whereby regulatory measures introduced for public necessity do not constitute expropriation. See Respondent's Counter-Memorial, at paragraph 544.
445. Claimants' case is that the expropriation was unlawful. It is alleged the Emergency Tariff Measures, being completely disproportionate in relation to its ostensible goals, did not serve a legitimate public purpose, were discriminatory against foreign investors, and were contrary to the Concession Contract, which Claimants press to be a concrete and legally binding specific commitment with respect to their investment. See Claimants' Memorial at paragraphs 355-72. Claimants contend Respondent imposed the pesification and freeze measures for purely political reasons and discriminatory motives, which serves to magnify the sever nature of the measures Claimants were subject to. See Claimants' Memorial at paragraph 334.
446. Respondent contends that a finding of bad faith requires a high degree of certainty, and it is necessary to presume that a Government acts regularly and validly, seen in the context of the extraordinary economic circumstances that the authorities of Mendoza and Argentina had to face. See Respondent's Rejoinder at paragraphs 456. Respondent asserts that the actions taken by Mendoza were lawful and consistent with the circumstances, and there is no evidence of bad faith or discrimination by the Province. See Respondent's Counter-Memorial, at paragraphs 491, 538.

C. AFFIRMATIVE DEFENSES

447. Respondent asserts six affirmative defenses which it claims absolve it from liability. The Tribunal groups these defenses as (i) contractual issues, (ii) double recovery, (iii)

Claimants' consent to the Emergency Tariff Measures, (iv) Article 3(2) of the Argentina-Luxembourg BIT, (v) Article 5(3) of the Argentina-France BIT, and (vi) Necessity under customary international law.

1. Contractual Issues (*Res Judicata* and *Litis Pendens*)

448. With respect to Claimants' claims based on Pre-Emergency Measures affecting the Concession, Respondent contends that Claimants are attempting to present contractual issues that are foreign to this Tribunal which in most cases are *res judicata* or subject to local remedies. See Respondent's Counter-Memorial at paragraphs 205-10.
449. Respondent argues that half of the pre-emergency measures are barred as *res judicata*, three are subject to *litis pendens* as not having been exhausted at the administrative level, one has been extinguished due to lack of prosecution, and one is simply groundless. Respondent's Counter-Memorial, paragraph 210, footnotes n. 229-231.
450. With respect to all pre-emergency claims, Claimants argue that they are not required to exhaust their claims at the local level before seeking adjudication before this Tribunal and that decisions rendered by Argentine courts have no *res judicata* effect on this Tribunal. To this effect, Claimants contend that Respondent's assertions would result in a "fundamental Catch-22" in which Claimants' treaty rights would be unenforceable at the international level due to the existence of possible local litigation. Claimants' Reply at paragraph 254.
451. As noted earlier, the Parties' numbering with respect to Pre-Emergency Measures affecting the Concession is not always consistent. Respondent speaks of ten (10) categories in paragraph 210 of its Counter-Memorial, but includes only nine (9) in the relevant footnote references (seeming to omit use of network fees), as opposed to the Claimants' original organization of seven (7) categories of what they refer to as regulatory abuse in their First Memorial at paragraphs 147 et seq.
452. For the sake of completeness, at this point the arguments will be summarized below according to Respondent's ten categories, although as indicated earlier the Tribunal

considers overlap to exist among various iterations resulting in essentially six (6) core groups of claims.

453. *Item 1. Use of Network Fees.* Respondent asserts that Claimants' claim relating to the modification of "Network Use" fees by way of Resolution 8/98 is "exclusively contractual" and that EDEMSA has recognized that the courts of the Province of Mendoza have jurisdiction over such issue. Respondent's Counter-Memorial at paragraph 730. Respondent contends that EDEMSA filed an administrative claim against Resolution No. 8/98 in 1998, and that EPRE dismissed the claim in May 1999 by way of Resolution No. 73/99. According to Respondent, EPRE concluded that Resolution No. 8/98 was passed due to the "unavoidable need of regulating the transition between two tariff systems" ⁴⁵ Respondent's Counter-Memorial at paragraph 740.
454. Respondent further contends that EDEMSA filed an administrative appeal against Resolution 73/99 before the Provincial Executive on 28 May 2000, and that the executive body dismissed the claim by way of Decree 2468 on 22 November 2000. Respondent's Counter-Memorial at paragraph 747. According to Respondent, who offers no citation to either the claim or dismissal decree, the executive body based its determination on the fact that "EPRE had legitimately exercised the regulatory powers granted to it and had protected users' rights through its actions." Respondent's Counter-Memorial at paragraph 747.
455. Respondent alleges that EDEMSA later challenged Resolution 8/98 and Resolution 73/99 through an administrative procedural action before the Supreme Court of Mendoza and that judgment was entered on this matter prior to the filing of Claimants' Memorial. ⁴⁶ Respondent's Counter-Memorial at paragraph 748. According to Respondent, this judgment consisted of the issuance by the Court of a "lapse of action", which closed the proceedings because, according to Respondent's witness, Mr. Rodriguez, EDEMSA "for no reason whatsoever failed to further the proceedings for a term beyond a year"

⁴⁵ Respondent offers no citation for its direct quote of Resolution 73/99.

⁴⁶ *Empresa Distribuidora De Electricidad Medoza S A Edemsa v. Ente Provincial Regulador Electrico Administrative Procedural Action, Supreme Court of Medoza, Dock No. 70715 (2005).*

Respondent's Counter-Memorial at n. 803; Witness Statement by Rodriguez at paragraph 16. Mr. Rodriguez notes that the "Court did not actually determine the merits of the case." Respondent's Counter-Memorial at n. 803; Witness Statement by Rodriguez at paragraph 16. Indeed, Respondent asserts that the closing of the proceedings took place with the admittance of EPRE's and the State Attorney's Office's motion for constructive abandonment. Respondent's Counter-Memorial at paragraph 749.

456. Respondent thus argues that the issue relating to the modification of "Network Use" fees is alien to this Tribunal's jurisdiction because such issue was determined by domestic courts on grounds of EDEMSA's own negligence. Respondent's Counter-Memorial at paragraph 751.
457. *Item 2. Town of Polvaredas.* Respondent further alleges that EDEMSA filed an Appeal for Revocation against EPRE's decision to incorporate the town of Polvaredas into the concession area, and that such claim was denied by way of EPRE Resolution No. 183/99. According to Respondent, the denial was based on the fact that power generation distribution in areas isolated from the Province of Mendoza is a public service and therefore part of EDEMSA's concession area.⁴⁷ Respondent's Counter-Memorial at paragraph 754.
458. The Parties agree that EDEMSA challenged Resolution No. 183/99 before the Supreme Court of Mendoza on 23 May 2002. See Claimant's Memorial at paragraph 161; Respondent's Counter-Memorial at paragraph 756. Respondent argues that the court denied EDEMSA's claim on 25 November 2008.⁴⁸ Respondent's Counter-Memorial at paragraph 756.
459. *Item 3. Scattered Market.* Respondent further contends that decisions by the Supreme Court of Mendoza with respect to the creation of the Scattered Market render the

⁴⁷ Respondent cites to Regulatory Framework, Art. 3 (A RA 14) and Regulatory Decree No. 196/98, Art. 2 (A RA 24).

⁴⁸ "EDEMSA C/ EPRE S./APA", SCJM [Supreme Court of Justice of Mendoza], Docket Number No. 74.105 (2008) (AL RA 146).

analogous claims in this proceeding alien to this Tribunal. Respondent's Counter-Memorial at paragraph 767.

460. Respondent argues that Claimants challenged Decree No. 2379/99, which created the Scattered Market, before the Supreme Court of Mendoza and that the Court denied this challenge on 19 October 2004.⁴⁹ According to Respondent, the Court held that users comprised in the Scattered Market were already included in the area of exclusivity defined in the concession. Respondent's Counter-Memorial at paragraph 762.
461. Respondent also alleges that EDEMSA challenged EPRE Resolution No. 192/03, which "established the procedures for quality control in the Collective Scattered Electrical Market Stage I."⁵⁰ Respondent's Counter-Memorial at paragraph 764. According to Respondent, in a decision dated 6 April 2005, the Supreme Court of Mendoza upheld its 19 October 2004 decision while holding that the Executive Power's ability to reformulate service quality requirements through renegotiation does not preclude its regulation of technical aspects of the provision of the public service. Respondent's Counter-Memorial at 765.
462. *Item 4. Optional T-2 Tariff.* Respondent claims that Claimants' allegations regarding the optional T-2 are *res judicata* because such allegations are contractual matters that have already been reviewed at a local venue. Respondent's Counter-Memorial at paragraph 775. In support of this contention, Respondent refers to a judgment rendered by the Supreme Court of Justice of the Province of Mendoza on 6 August 2008.⁵¹ Respondent details the enactment of the T-2 tariff and asserts that analysis of the regulation demonstrate that the values at stake and the need to protect users justify the Governor's exercise of its regulatory capacity. Respondent's Counter-Memorial at paragraph 774.

⁴⁹ "Empresa Distribuidora de Electricidad de Mendoza –EDEMSA- c/ Gob. de la Provincia s/ acc. de inc.", SCJM, Docket File No. 68.711 (2004) (AL RA 147).

⁵⁰ "Empresa Distribuidora de Electricidad de Mendoza –EDEMSA- c/ EPRE s/ acc. de inc.", SCJM, Docket No. 77.145 (2005) (AL RA 148).

⁵¹ "Emprea Distribuidora de Electricidad de Mza. S.A. –EDEMSA- c/Gobierno de la Provincia de Mendoza y Ot. S/ APA", Supreme Court of Justice of Mendoza, Docket No. 69.943 (2008), (AL AR 149).

463. *Item 5. Nihuil IV Claim I.* Claimants assert that on 20 November 2002, they filed a claim with the Supreme Court of Justice of Mendoza regarding Respondent’s alleged failure to reimburse Claimants for the purchase of more expensive power from the hydroelectric plant Nihuil IV between February and June 2000. Respondent’s Counter-Memorial at paragraph 777. Claimants further argue that after the provincial government opposed Claimants’ claim, the court reversed its decision to hear the claim on the grounds that EDEMSA had not exhausted the administrative procedure, and that this constituted a denial of justice. Respondent’s Counter-Memorial at paragraph 779, 782.
464. In response, Respondent argues that this decision shows that the court “tackled the matter” and that in order to file a claim in accordance with the Code of Administrative Procedure for the Province of Mendoza, Claimants must show that there has been a final administrative decision that is *res judicata*, or “tacit denial.” According to Respondent, Claimants failed to demonstrate both the existence of a decision that was *res judicata* and “tacit denial.” Respondent’s Counter-Memorial at paragraph 781-82.
465. Respondent thus claims that Claimants cannot make an assertion in the present proceedings that there was a denial of justice because it was only through Claimants’ own negligence that the judicial proceeding in Mendoza was unavailable. Respondent argues that Claimants’ decision to pursue its claim in the Supreme Court of Justice of the Province of Mendoza was misguided, as it is the highest court within the judicial system and only hears matters that have a final judgment passed by the highest relevant tribunal. Respondent’s Counter-Memorial at paragraph 783-84.
466. *Item 6 – Nihuil IV Claim II.* With respect to Claimants’ Nihuil IV claim for the period from August through June 2001, Respondent again argues that Claimants cannot assert that they were denied justice because the court rightly ruled that it lacked jurisdiction to review an interim review. See Respondent’s Counter-Memorial at paragraphs 786-88.
467. *Item 7. Lack of payment of subsidies and street lighting services.* Respondent further argues that Claimant’s claim concerning the Government of Mendoza’s failure to pay the amounts due to EDEMSA for subsidies and street lighting services is unsubstantiated. Respondent’s Counter-Memorial at paragraphs 789-90. Moreover, Respondent contends,

Claimants failed to file the Supreme Court's judgment that Claimants argue limited their rights.

468. *Item 8. Modification of the Subsidy System.* Respondent asserts that Claimants filed an action before the Provincial Supreme Court, for which Claimants failed to account in their Memorial, challenging a series of resolutions in opposition to the provisions in the agreement to subsidize electrical consumption to agriculture users for irrigation purposes. According to Respondent, such action opposed the resolutions that “subtract from the declared amounts any monies obtained in excess of the ‘Distributor Payment Tariff’ amount.” Respondent’s Counter-Memorial at paragraph 791, 796.
469. Respondent contends that the Supreme Court of Mendoza dismissed Claimants’ action, ordering EPRE to implement any measure necessary to reimburse users for amounts collected by EDEMSA in excess of the “Distributor Payment Tariff.” Respondent’s Counter-Memorial at paragraph 797. As such, Respondent argues that the subsidies issue is foreign to this Tribunal “given that its nature is essentially contractual and it has already been determined by the domestic courts.” Respondent’s Counter-Memorial at 798.
470. *Item 9. Stricter Conditions Regarding Quality of Service.* Respondent also assert that Claimants filed, but failed to reference in their Memorial, a claim before the Provincial Supreme Court challenging Provincial Law No. 6856, which Claimants argue established new procedures to users to bring claims against EDEMSA for failures in the electricity distribution system. Respondent’s Counter-Memorial at paragraph 800-801.
471. Respondent contends that the Provincial Supreme Court dismissed this claim on 10 August 2005 on grounds that the law was constitutional and did not damage or create a conflict with respect to EDEMSA’s interest.⁵² Respondent’s Counter-Memorial at paragraph 802. Thus, Respondent argues that Claimants have no basis in the present proceeding to claim that Provincial Law No. 6856 is unconstitutional or arbitrary. Respondent’s Counter-Memorial at paragraph 803.

⁵² “E.D.E.M.S.A. v. Province of Mendoza on Unconstitutionality Action,” Supreme Court of Mendoza, Docket No. 70905 (2005).

472. *Item 10. Quasi-Currency.* With respect to Claimants' claim regarding the Government of Mendoza's payment to EDEMSA using bonds ("quasi-currency"), Respondent alleges that such claim is groundless because the bonds could be used as payment of Provincial obligations and would mature in 2003 when their nominal value would be paid. See Respondent's Counter-Memorial at paragraphs 804-07. Earlier, at paragraph 210, Respondent mentions lack of "currentness" for this item, but without further explanation.

2. Double Recovery

473. As an additional defense, Respondent argues that adjudication of Claimants' claims by this Tribunal would result in a double recovery. See Respondent's Counter-Memorial at paragraph 211. Respondent notes that the Tribunal addressed this issue in its Decision on Jurisdiction by stating that "To the extent that the judicial process in Mendoza (pursuant to the forum selection clause) results in Claimants receiving compensation for their loss, recovery under the French and Luxemburg investment treaties would likely be barred." Respondent's Counter-Memorial at paragraph 211; Decision on Jurisdiction at paragraphs 219-20. (ICSID Case No. ARB/03/23).

474. Respondent contends that Annex II to the Letter of Understanding, as of 31 February 2005, demonstrates that EDEMSA and the Government of Mendoza agreed on a procedure to honor the outstanding payments due to EDEMSA with respect to the purchase of energy from Nihuil IV. Respondent's Counter-Memorial at paragraph 785, 788.

475. Respondent further argues that EDEMSA and the Government of Mendoza included the issue of the Agriculture Irrigation subsidies into their contractual renegotiation agreement.⁵³ Respondent's Counter-Memorial at paragraph 799.

476. Claimants do not address the issue of double recovery in their pleadings.

⁵³ In support, Respondent cites to Annex II to the Supplementary Memorandum to the Letter of Understanding: Reciprocal Debits and Credits, Art. 2 (Annex AR No. 170).

3. Consent to Emergency Tariff Measures

477. Respondent contends that Claimants consented to the National and Provincial Emergency Laws, including the declaration of public emergency, the provisions that invalidated the mechanisms of adjustment or indexation of prices in foreign currency, and the Executive Power authorization to renegotiate the public service contracts. See Respondent's Counter-Memorial at paragraphs 426-34; Respondent's Rejoinder at paragraphs 160-68; Respondent's Post Hearing Brief on Merits, at paragraphs 154-59.
478. Respondent argues that Claimants' experts acknowledge that Claimants consented to the Emergency Measures. See Respondent's Post Hearing Brief on Merits, at paragraphs 154-56. For example, Respondent contends that Mr. Nitrosso acknowledged that both parties recognized that the readjustment of the electrical framework was necessary in light of the emergency and wished to mitigate the effects on users. *Id.* at paragraph 154; Hearing on the Merits, Day 5, Tuesday 3 November 2009, p. 1332 (lines 9 to 17), statement by Bruno Nitrosso, English transcript.
479. In response, Claimants assert that they did not consent to the Emergency Measures. See Claimants' Post Hearing Reply on the Merits at paragraphs 64-66. Rather, Claimants contend that they entered into amicable negotiations with Argentina precisely because they objected to the Emergency Measures. *Id.* at paragraph 64. Claimants further demonstrate that Memorandum No. 1 states that "[T]he adoption of transitional measures in no way indicates assignment or waiver of rights or actions which may correspond to the Distributor in accordance with law, or recognition by the Provincial State of any right by virtue of their implementation." *Id.* at paragraph 65; Exhibit A RA 155, Art. 5. Lastly, Claimants contend that their experts in no way accepted that the Emergency Measures were necessary. See Claimants' Post Hearing Reply on the Merits at 66.

4. Article 3(2) of the Argentina-Luxembourg BIT

a) Treaty Framework

480. Respondent invokes Article 3(2) of the Argentina-Luxembourg BIT as an affirmative defense, asserting that this provision expressly authorizes measures necessary for the

maintenance of public order and thus precludes international responsibility. See Respondent's Counter Memorial at paragraphs 616-9.

481. Article 3(2) of the Argentina-Luxembourg BIT provides:

Sin perjuicio de las medidas necesarias para el mantenimiento del orden público, las inversiones gozarán de una seguridad y protección permanentes, con exclusión de toda medida injustificada o discriminatoria que pudiera obstaculizar de hecho o de derecho, su gestión, mantenimiento, uso, goce o liquidación.

In English, the provision reads:

Without prejudice to measures necessary to maintain public order, investments shall enjoy permanent security and protection, to the exclusion of any unjustified or discriminatory measure which could impede in fact or in law its management, maintenance, use, enjoyment or liquidation.

b) Parties' Contentions

482. Respondent argues that Article 3(2) excuses Respondent's conduct because the emergency measures enacted by the Argentine Republic were necessary to maintain public order. See Respondent's Counter-Memorial at paragraph 618; Respondent's Rejoinder at paragraphs 663-69; Respondent's Post Hearing Brief on Merits, at paragraphs 281-83; Respondent's Post Hearing Reply on the Merits at paragraphs 142-45. According to Respondent, the "measures necessary principally for the maintenance of public order include those aimed at ensuring internal safety, in the face of situations such as violent internal insurrections, riots, lootings and crimes, extended social tension, or the possibility that the fundamental order be disintegrated and the government lose effective control over the State's territory." See Respondent's Counter-Memorial at paragraph 617.
483. In response, Claimants principally argue that Article 3(2) is inapplicable to these proceedings. See Claimants' Reply at paragraph 631; Claimants' Post Hearing Brief on Merits, at paragraph 141; Claimants' Post Hearing Reply on the Merits at paragraph 49.

5. Article 5(3) of the Argentina-France BIT

a) Treaty Framework

484. Respondent further argues the emergency defense under Article 5(3) of the Argentina-France BIT, which provides:

Los inversores de una Parte Contratante cuyas inversiones hubiesen sufrido pérdidas a causa de una guerra o de cualquier otro conflicto armado, revolución, estado de emergencia nacional o rebelión ocurrido en el territorio o en la zona marítima de la otra Parte Contratante, recibirán de esta última un tratamiento no menos favorable que el acordado a sus propios inversores o a los de la Nación más favorecida.

In the French version, Article 5(3) states:

Les investisseurs de l'une des Parties contractantes dont les investissements auront subi des pertes dues à la guerre ou à tout autre conflit armé, révolution, état d'urgence national ou révolte survenu sur le territoire ou dans la zone maritime de l'autre Partie contractante, bénéficieront, de la part de cette dernière, d'un traitement non moins favorable que celui accordé à ses propres investisseurs ou à ceux de la nation la plus favorisée.

In English, the provision reads:

Investors of one Contracting Party whose investments have suffered losses owing to war or any other armed conflict, revolution, state of national emergency, or rebellion occurring in the territory or in the maritime zone of the other Contracting Party shall be accorded by the latter Contracting Party treatment no less favorable than that granted to its own investors or to those of the most favored Nation.

b) Parties' Contentions

485. Respondent argues that Article 5(3) of the Argentina-France BIT legitimizes the actions of the government of Argentina because Claimants' injuries were the result of a state of national emergency and Claimants were treated no less favorably than were other investors, both foreign and domestic. See Respondent Counter-Memorial at paragraphs 248-50. According to Respondent, the purpose of Article 5(3) "is to establish a minimum standard of protection in the face of a special situation, such as cases of national emergency." *Id.* at paragraph 252. "In such cases," Respondent explains, "the State is

only compelled to afford no less favourable treatment than that accorded to other investors in relation to the measures it adopts . . . without entailing a particular obligation to compensate foreign investors for the events occurred.”⁵⁴ *Id.*

486. Respondent contends that Article 5(3) is *lex specialis*, intended to override the remainder of the Treaty in times of national emergency. See Respondent’s Counter-Memorial at paragraph 256. According to Respondent, “the main purpose of BITs is to rule in normal situations and do not particularly address exceptional situations.” *Id.* at paragraph 258.
487. While the Argentina-France BIT does not define emergency,⁵⁵ Respondent asserts that Article 5(3) contemplates “a dangerous or disastrous situation (regardless of the cause) which calls for immediate action at a national level.” See Respondent’s Counter-Memorial at paragraphs 260-61. Respondent argues that a literal interpretation of Article 5(3) necessarily involves national emergencies caused by “[e]conomic, financial social or institutional situations . . .” *Id.* at paragraph 261. Respondent claims that Article 32 of the Vienna Convention on the Law of Treaties further supports this interpretation, by stipulating that supplementary means of interpretation, such as that put forth by Claimants, may only be sought in order to determine the meaning when a literal interpretation yields an ambiguous or absurd result. *Id.* at paragraph 263. According to Respondent, a literal interpretation of 5(3) includes national emergencies caused by economic crises.
488. In contrast, Respondent contends that the President of France’s message supports an interpretation that includes national emergencies caused by economic turmoil. See Respondent’s Counter-Memorial at paragraphs 263-66. In Respondent’s view, as the President of France stated that Article 5(3) is applicable in emergencies caused by “political events,” such as strikes, the provision must also apply to the Argentine situation, which included political and financial disorder. *Id.*

⁵⁴ In support of its defense, Respondent cites to *L.E.S.I S.p.A. and Astaldi S.p.A. v. Algeria*, in which the tribunal upheld the emergency defense pursuant to an emergency situations provision that was identical to Article 5(3) of the Argentina-France BIT. See Respondent’s Counter-Memorial, at paragraph 254; *L.E.S.I. S.p.A. and ASTALDI S.p.A. v. Republic of Algeria*, ICSID Case No. ARB/05/03, Award of 12 November 2008, at paragraph 18 (LA AR 190).

⁵⁵ Article 5(3) considers the “losses as a result of war or any other armed conflict, revolution, state of national emergency or uprising.” See Respondent’s Counter-Memorial, at paragraph 259.

489. Respondent further argues that Article 5(3) affords Argentina “a wide ‘margin of appreciation’ for the adoption of measures in times of national emergency or like situations.”⁵⁶ See Respondent’s Counter-Memorial at paragraph 270-74.
490. Respondent further argues that Article 5(3) is analogous to Article XI of the U.S.-Argentina BIT, which according to Respondent the *LG&E*⁵⁷ and *Continental Casualty*⁵⁸ tribunals interpreted as relieving Argentina of liability for particular measures enacted during the economic turmoil. See Respondent’s Counter-Memorial at paragraphs 131-37.
491. In response, Claimants seek support from the *Enron*, *Sempra*, and *CMS Gas*, which rejected the argument proposed by Respondent. See Claimants’ Post Hearing Brief on Merits, at paragraph 136. Moreover, Claimants assert that Article 5(3) “bears no resemblance whatsoever to Article XI, either textually or functionally.” Claimants’ Post Hearing Brief on Merits, at paragraph 137.
492. Lastly, Respondent concludes that the emergency measures were adopted in order to abate a national emergency, and that Claimants were not afforded less favorable treatment than that shown to other domestic or foreign investors. See Respondent Counter-Memorial at paragraphs 276-78, 282. Thus, according to Respondent, Article

⁵⁶ Respondent cites to *Continental Casualty v. Argentina*, in which the tribunal observed that “a significant margin of appreciation [must be afforded] for the State applying the particular measure: a time of grave crisis is not the time for nice judgments, particularly when examined by others with disadvantage of hindsight.” See Respondent’s Counter-Memorial at paragraph 270; *Continental Casualty*, at paragraph 181 (footnote omitted). In further support, Respondent also refers to Articles 8 to 11 and 15 of the European Convention of Human Rights, which permits States to adopt emergency measures “to the extent strictly required by the exigencies of the situation” and “necessary in a democratic society.” *Id.* at paragraph 272. Respondent further highlights the tribunal’s language in *Metalpar v. Argentina*, which reads, in part:

The authorities of the different countries must take very different measures on a daily basis. Except in obvious situations, at the time or even some time later, it is extremely difficult to determine whether the measures adopted were the best. In the instant case, trying to determine in the abstract whether the actions adopted by Argentina during the crisis were optimal is a difficult or impossible task, especially if intending to derive economic consequences from the conclusion reached.

Metalpar S.A. and Buen Aire S.A. v. Argentine Republic. ICSID Case No. ARB/03/05, Award of 6 June 2008, at paragraph 198 (LA AR 45).

⁵⁷ *LG&E Energy Corp. et al. v. Argentine Republic*, ICSID Case No. ARB/02/1 (Decision on Liability, 3 October 2006), at paragraph 259.

⁵⁸ *Continental Casualty Co. v. Argentina*, ICSID Case No. ARB/03/9 (Award of 5 September 2008), at paragraph 250

5(3) of the Argentina-France BIT precludes Respondent's liability with respect to Claimants' injury.

6. State of Necessity under Customary International Law

a) Overview

493. Respondent argues the circumstances surrounding the late 2001 economic turmoil in Argentina satisfy the elements of the "State of Necessity Defense" requiring claims based on the Emergency Measures to be dismissed. According to Respondent, where a host state has no other means of preserving an essential interest threatened by a grave and imminent peril, it may adopt conduct which would otherwise violate duties under international conventions. If sustained, the defense would thus excuse violation of such treaty obligations. See Respondent's Counter-Memorial at paragraphs 620 et seq.
494. Although suggesting that the State of Necessity Defense is historically controversial (Claimants' Reply at paragraph 541), in particular with respect to cases involving investment treaties (Dolzer Supplement Expert Report at paragraphs 69-75), Claimants main argument is that Respondent has not demonstrated that the defense applies under the facts of this arbitration.
495. As discussed below, the Parties' arguments about the matter take as their focal point the articulation of the defense found in Article 25 of the 2001 International Law Commission's Draft Articles on Responsibility of States for Internationally Wrongful Acts, drafted by the United Nations body established to "promote the progressive development of international law and its codification." United Nations General Assembly Resolution, A-RES-174(II) (21 November 1947). Both sides appear to accept that ILC Article 25 reflects the relevant standards with respect to this defense.
496. ILC Article 25 provides as follows:

Necessity

1. Necessity may not be invoked by a State as a ground for precluding the wrongfulness of an act not in conformity with an international obligation of that State unless the act:

(a) is the only way for the State to safeguard an essential interest against a grave and imminent peril; and

(b) does not seriously impair an essential interest of the State or States towards which the obligation exists, or of the international community as a whole.

2. In any case, necessity may not be invoked by a State as a ground for precluding wrongfulness if:

(a) the international obligation in question excludes the possibility of invoking necessity; or

(b) the State has contributed to the situation of necessity.

497. The Parties have also addressed ILC Article 27 which provides as follows:

The invocation of a circumstance precluding wrongfulness in accordance with this Chapter [Chapter V: Circumstances Precluding Wrongfulness] is without prejudice to:

(a) compliance with the obligation in question, if and to the extent that the circumstance precluding wrongfulness no longer exists;

(b) the question of compensation for any material loss caused by the act in question.

498. While contending that the ILC Articles are “not a binding document for any State” Respondent nevertheless seems to accept that “it reflects customary rules in most of its articles.” (Respondent’s Counter-Memorial, paragraph 635). Moreover, Respondent asserts that the defense applies within the context of investment treaty disputes. See Respondent’s Rejoinder at paragraph 670.

499. The Parties’ main disagreement relates to the way ILC Article 25 applies in the present case. Claimants contend that the Respondent has the burden of establishing that all of the elements of ILC Article 25 have been met. In this respect, Claimants cite the principle of *ei incumbit probatio qui dicit non qui negat*: the burden of proof lies with the asserting party, not the denying one. See Claimants’ Reply at paragraph 483-84.

500. Respondent asserts that it has established the elements of the State of Necessity Defense, and consequently, the burden has shifted to Claimants to refute the defense. See Respondent's Rejoinder at paragraph 631.
501. The Parties do not dispute the exceptionality of the State of Necessity defense as set forth in ILC Article 25. See Respondent's Rejoinder at paragraph 672; and Claimants' Reply at paragraph 542. Respondent's position is that the circumstances surrounding the enactment of the Emergency Measures amounted to an unprecedented situation that satisfies the elements of the State of Necessity defense. See Respondent's Counter-Memorial at paragraphs 634-35; Rejoinder at paragraph 672. Claimants' position is that Respondent has not satisfied the elements of the State of Necessity defense. See Claimants' Reply at paragraph 548.
502. Respondent asserts that the *LG&E* tribunal found that (i) Argentina did not contribute to the situation of necessity, (ii) the Emergency Measures were the only way to protect an essential interest, (iii) there was no serious impact on the essential interests of the community as a whole, the state or states to whom obligations exist, nor on the fulfillment of any *jus cogens* obligation, and (iv) there was neither discriminatory nor inequitable treatment of foreign investors. See Respondent's Counter-Memorial at paragraph 634. Respondent also cites to the *Continental Casualty* in support of its contentions with respect to the State of Necessity defense.
503. Claimants' expert Professor Dolzer opines that the *LG&E* and *Continental Casualty* cases are wholly inapplicable here because the controlling provision in those cases was Article XI of the BIT executed between the U.S. and Argentina, signed on 14 November 1991 and effective since 20 October 1994. See Dolzer Supplementary Expert Report at paragraph 95. According to Professor Dolzer, neither the Treaty nor the Argentina-Luxembourg BIT contains a clause that would be analogous to Article XI of the Argentina-U.S. BIT. See Dolzer Supplementary Expert Report at paragraph 95.
504. Article XI of the Argentina-U.S. BIT provides that that treaty "shall not preclude the application by either Party of measures necessary for the maintenance of public order, the fulfillment of its obligations with respect to the maintenance or restoration of

international peace or security, or the Protection of its own essential security interests.” Claimants argue that this standard is different from that one set forth in ILC Article 25, and that the *LG&E* and *Continental Casualty* tribunals found Argentina to have satisfied necessity pursuant to Article XI of the Argentina-U.S. BIT and not necessity under customary international law. See Claimants’ Reply at paragraph 545. According to Claimants, five out of seven tribunals that have reviewed Argentina’s State of Necessity defense against facts similar to those in this proceeding ruled that Respondent failed to meet the elements of ILC Article 25. See Claimants’ Reply at paragraph 544 (citing to *CMS Gas*, *Enron*, *Sempra*, *BG Group*, and *National Grid*).

505. In Respondent’s view, Article XI of the Argentina-U.S. BIT evidences centuries-old practice with respect to necessity, suggesting that the provision is an embodiment of international law. See Respondent’s Rejoinder at paragraph 671. Although it concedes that the *LG&E* and *Continental Casualty* tribunals applied the necessity doctrine as defined in the applicable treaty rather than customary international law, Respondent asserts that those tribunals analyzed ILC Article 25 in applying Article XI of the Argentina-U.S. BIT. See Respondent’s Rejoinder at paragraph 676.
506. Respondent asserts that the arbitral awards that Claimants cite do not represent a uniform position on the matter, and that “international case law, as auxiliary means, may not be invoked to set aside principles ruling on treaty law and international liability.” See Respondent’s Rejoinder at paragraph 625. Respondent adds that, whereas the *BG Group* and *National Grid* awards only discuss the State of Necessity defense in a few paragraphs, the *Continental Casualty* award provides a much more thorough and extensive review of the matter. See Respondent’s Rejoinder at paragraph 675.
507. According to Respondent, international case law and legal commentaries consider economic crises to fall within the scope of the State of Necessity defense. It follows that, for purposes of legitimate self-defense or self-conservation, states are excused from treaty obligations if observing such would prove to be self-destructive. See Respondent’s Counter-Memorial at paragraphs 622-631 (citing to inter alia the 17th-century case of *Affaire du Neptune*, as well as the early 20th-century cases of *French Company of*

Venezuelan Railroads, the *Russian Indemnity Case*, *Dickson Car Wheel Co.*, *Société Commerciale de Belgique*, and finally the more recent case of *Gabčíkovo - Nagymaros (Hungary/Slovakia)*, Judgment, I.C.J. Reports, 1997).

508. In response, Claimants contend that most of the cases cited by Respondent involve non-investment contexts and do not find economic conditions as grounds for sustaining the defense. See Claimants' Reply at paragraph 547.
509. In Claimants' view, ILC Article 25 presupposes five basic conditions that must be cumulatively satisfied: (i) that an "essential interest" of the state which is the author of the act conflicting with one of its obligations was at stake; (ii) that this interest must have been threatened by a "grave and imminent peril"; (iii) that the act must have been the only means of safeguarding that interest; (iv) that the act must not have seriously impaired an essential interest of the state towards which the obligation existed; and (v) that the state which is the author of the act must not have contributed to the occurrence of the state of necessity. See Claimants' Reply at paragraph 543, citing to *Gabčíkovo - Nagymaros*.
510. Claimants' expert, Professor Dolzer, argues that these rules must be construed in a strict and narrow manner for they operate as a limitation to the fundamental international legal principle of *pacta sunt servanda*. See Dolzer Supplement Expert Report at paragraph 71. Claimants further cite to comment 2 of ILC Article 25, which provides that "necessity will only rarely be available to excuse non-performance of an obligation and . . . it is subject to strict limitation to safeguard against possible abuse." See Claimants' Reply at paragraph 550.
511. Professor Dolzer adds that the fact that ILC Article 25 is formulated in the negative reflects the drafters' intent to substantially limit the application of the State of Necessity defense. See Dolzer Supplement Expert Report at paragraph 72; see also, Claimants' Reply at paragraph 551-53 (citing to *Gabčíkovo – Nagymaros*, *National Grid*, *Enron*, *Sempre*, *CMS Gas*, and *BG Group*). Professor Dolzer concludes that "[g]iven the strict interpretation of the rules on necessity, it would not be persuasive to argue that the rule

must be construed broadly so that its application is not unduly narrowed and hindered in its operation.” See Dolzer Supplement Expert Report at paragraph 73.

512. Additionally, Professor Dolzer opines that the applicability of the rules of the State of Necessity defense must be assessed in specific relation to the particular measures which form the subject of this proceeding. See Dolzer Supplement Expert Report at paragraph 74. Relying on *Continental Casualty*, Claimants argue that the Emergency Tariff Measures must have been of actual necessity. See Claimants’ Reply at paragraph 554.
513. Claimants also contend that Respondent provides no evidence that the Emergency Laws were of “actual necessity.” According to Claimants, Respondent sidesteps this requirement by jumping from the proposition that the failure of Argentina to take any action would have been socially detrimental, to the conclusion that the Emergency Laws were only to safeguard essential interests. See Claimants’ Reply at paragraph 555. Claimants’ expert, Professor Dolzer, supports the contention that whether or not the general policies adopted by Argentina were appropriate does not answer the question as to whether the specific measures that affected Claimants met the strict standards of the State of Necessity defense. See Dolzer Supplement Expert Report at paragraph 74.
514. Claimants further argue that Respondent is not the sole judge of whether the conditions underlying a State of Necessity defense have been satisfied. See Claimants’ Reply at paragraph 556. Claimants’ expert, Professor Dolzer, opines that, if the State of Necessity defense were self-judging, “then the exception — that is, ‘necessity’ — would swallow the rule” See Dolzer Supplement Expert Report at paragraph 75.

b) Essential Interest

515. According to Respondent, a government can rely on the State of Necessity defense to preserve the very existence of the state and its people in times of public emergencies, including those of an economic nature. Respondent asserts that the economic turmoil threatened the very existence of Argentina and its public order, and thus, the element requiring an essential interest to be at stake is satisfied. See Respondent’s Counter-Memorial at paragraph 663.

516. Respondent contends that the essential interest at stake was the survival of the Argentine state, public order, the viability of the economy, the prevention of hyperinflations, and the personal as well as property rights and obligations of the general public. See Respondent's Post-Hearing Reply on the Merits at paragraph 148. Respondent's economic experts, Messrs. Frenkel and Damill, opine that the abrogation of the Convertibility Law and the enactment of the Emergency Tariff Measures were aimed at halting increases in levels of poverty and hyperinflation. See Frenkel and Damill Expert Report at paragraph 191.
517. In response, Claimants argue that Respondent has failed to establish that an essential interest was at stake. See Claimants' Reply at paragraphs 576, 586. Claimants cite to comment 2 of ILC Article 25, which provides that "[necessity] arises where there is an irreconcilable conflict, between an essential interest on the one hand and an obligation of the State invoking necessity on the other." See Claimants' Reply at paragraph 576.
518. According to Claimants' expert, Professor Dolzer, "essential interest" is not a term defined in the U.N. ILC Articles but is an element of the State of Necessity defense that requires a thorough review of the facts. See Dolzer Supplement Expert Report at paragraph 78. Professor Dolzer opines that the traditional view of the State of Necessity defense "assumed that the very existence of the State and its people and the physical safety of the population had to be protected," and thus, "[i]nterests similar in nature and magnitude would also be covered." See Dolzer Supplement Expert Report at paragraph 79. In Professor Dolzer's view, "[w]hile the situation was grave in Argentina at the end of 2001 and the political circumstances unusual, it is difficult to see that an interest of this particular kind and gravity existed." Dolzer Supplement Expert Report at paragraph 79.
519. Claimants contend that the facts of this case confirm Professor Dolzer's conclusion. See Claimants' Reply at paragraph 578. First, Claimants contend that the ineffectiveness of the measures implemented in safeguarding the stated interests resulted in a lack of proportionality that shows there was no irreconcilable conflict between the objectives of protecting the poor and avoiding hyperinflation, on the one hand, and complying with international treaty obligations on the other. See Claimants' Reply at paragraphs 578 and

580. In this respect, Claimants' expert, Professor Arriazu, argues that the measures "not only do not have any sustainable macroeconomic justification, they are also not economically linked, in their means-end relationship, to the economic crisis." See Arriazu Supplement Expert Report at paragraph 5.
520. In response, Respondent asserts that the protection of indigent classes and the prevention of hyperinflation are not the only two essential interests which were at stake, and suggests that it is incorrect to assume that, just because two interests were served ineffectively, that the other interests were ineffectively served as well. See Respondent's Post Hearing Reply on the Merits at paragraph 148.
521. Second, Claimants contend that Argentina is a country accustomed to living under economic crises for over the course of its history has cumulatively been in a state of emergency for a longer period of time than in a state of non-emergency. See Claimants' Reply at paragraph 581 (citing to *LG&E*). Thus, that the economic turmoil must be viewed through such prism. *Id.* Claimants argue that while it is true that poverty rates and certain macroeconomics indices of Argentina rose sharply, the entirety of the economical, political and social incidents attendant to the crisis occurred within the framework of the Argentine Constitution. See Claimants' Reply at paragraph 581. There was no *coup d' etat* or institutional breakdown, no foreign invasion, civil war, nor other scenario which would warrant finding that an essential interest relating to the protection of the fabric of the state was at issue.
522. Claimants assert that the implications of Argentina's arguments should also be considered, for if the mere existence of a severe economic crisis or of a high level of poverty were by themselves sufficient to constitute an essential interest for purposes of the State of Necessity defense, there would be numerous countries in the world that would subsist in a quasi-permanent state of necessity. According to Claimants, the exceptional nature of the rule of necessity would consequently be degraded to a generic opt-out mechanism for countries to circumvent their international treaty obligations, since then every country with a risk of hyperinflation or other severe macroeconomic maladjustment as well as every country with a poverty level higher than 40% would be

exempted from international treaty obligations. Claimants thus argue that it is unreasonable to propose that sovereigns with a high country risk must be considered, almost by definition, to be in a state of necessity. See Claimants' Reply at paragraph 582.

523. Claimants assert that the other tribunals' awards, which have found Argentina's policy decisions to not have been tailored "to safeguard an essential interest," demonstrate a consensus that finding the conditions in Argentina to have been "severe" is insufficient to hold that a state of necessity existed, or to shield Argentina from liability for its treaty violations. See Claimants' Reply at paragraphs 583-84 (citing to *Enron*, *Sempra*, and *CMS Gas*).
524. According to Claimants, Respondent completely ignores these decisions. Instead, Respondent relies on *LG&E* and *Continental Casualty*, which found in favor of necessity only on grounds of Article XI of the Argentina-U.S. BIT, a provision with no analogue in the Argentina-France BIT. See Claimants' Reply at paragraph 585. With respect to *Metalpar*, Claimants argue that the award did not reach the State of Necessity defense. See Claimants' Reply at paragraph 585 (citing to *Metalpar S.A. and Buen Aire S.A. v. the Argentine Republic*, ICSID Case No. ARB/03/5).

c) "Grave and Imminent Peril"

525. Claimants further contend that the State of Necessity defense must fail on grounds that there was no grave and imminent peril. See Claimants' Reply at paragraphs 587 and 591. Claimants cite to comment 15 of ILC Article 25, which provides that the peril must be "objectively established and not merely apprehended as possible," and "in addition to being grave, [it] has to be imminent in the sense of proximate."
526. Although Claimants concede that the Argentine Economic Turmoil was profound, they contend that the survival of the state was never threatened and that there was never a significant institutional rupture, such as disintegration of the rule of law or of the constitutional order, that could have caused a state of ungovernability or anarchy. See Claimants' Reply at paragraph 588. Claimants argue that while there was an unusual succession of Presidents in a short time span in early 2002, such succession was done

entirely in conformity with relevant constitutional strictures. See Claimants' Reply at paragraph 588.

527. In this respect, Claimants' legal expert, Professor Dolzer, concludes that "[w]hile the situation was grave in Argentina at the end of 2001 and the political circumstances unusual, it is difficult to see that an interest of this particular kind and gravity existed." See Dolzer Supplement Expert Report at paragraph 79. Claimants back this view by contending that other tribunals have confirmed the lack of a grave and imminent peril. See Claimants' Reply at paragraphs 589-90 (citing to *Enron*, *Sempra*, and *CMS Gas*).
528. According to Respondent, Professor Dolzer's conclusion is not supported by authority other than the *CMS Gas*, *Enron*, and *Sempra* awards. Conversely, Argentina bases its assertions on the severity of Argentine Economic Turmoil, which is supported by evidence in addition to international decisions, including newspaper articles as well as reports by the U.N. See Respondent's Rejoinder at paragraphs 678-79.
529. Respondent argues that life, health, liberty and security of individuals, as well as the institutional continuity of the state, were seriously at risk—social unrest claimed the lives of several and a wave of lootings, kidnappings and vandalizing ensued, levels of unemployment and poverty sharply increased, and healthcare services experienced dire shortages in medicine resulting in the outbreak of diseases such as yellow fever, dengue, malaria, and tuberculosis. See Respondent's Rejoinder at paragraph 679.

d) The "Only Way" to Safeguard Essential Interests

530. Respondent asserts that enacting emergency measures was the only way to safeguard Argentina and its people's essential interests from a serious or imminent danger. It is Respondent's position that the enactment of the Emergency Laws, which mandated the renegotiation of public utilities agreements, including the Concession Contract, was necessary at both federal and provincial levels. See Respondent's Counter-Memorial at paragraph 647.
531. Respondent's expert, Professor Roubini, argues that Argentina attempted to implement other measures to overcome the economic turmoil. Many of the measures were

- recommended by international loan institutions, but proved insufficient. See Roubini Expert Report at paragraph 23.
532. Respondent cites to newspaper editorials authored by economists Paul Krugman and Michael Mussa to assert that the cause of the economic turmoil was the fact that much of Argentina's private debt is indexed to the U.S. dollar. Therefore, the only solution was the issuance of a decree cancelling said indexation. See Respondent's Counter-Memorial at paragraphs 649-50 and 655.
533. Respondent's experts, Messrs. Frenkel and Damill, opine that the Emergency Laws were a proportionate and reasonable solution to the economic turmoil. According to Messrs. Frenkel and Damill, the evolution of the Argentine economy since the enactment of the Emergency Laws supports this conclusion. See Frenkel and Damill Expert Report at paragraph 184. Messrs. Frenkel and Damill further argue that the fact that the level of economic activity in Argentina ceased to fall as of the second quarter of 2002 suggests a trend of recovery. See Frenkel and Damill Expert Report at paragraph 184.
534. Respondent's expert, Ms. de Riz, opines that the economic turmoil impoverished the people of Argentina due to budgetary and financial limitations suffered by the government. See de Riz Expert Report at paragraphs 25-30. Respondent's expert, Professor Roubini, agrees, stating that the enactment of the Emergency Laws became necessary and mandatory after the Argentine peso collapsed. See Roubini Expert Report at paragraphs 37-42.
535. Respondent asserts that other tribunals have acknowledged that Argentina was in a situation of necessity and that the enactment of the Emergency Laws was the only way to address the economic turmoil. See Respondent's Counter-Memorial at paragraphs 657-62 (citing to *LG&E*, *Continental Casualty*, and *Metalpar*).
536. According to Claimants, Respondent has failed to prove that the enactment of the Emergency Laws was the only way to safeguard an essential interest against a grave and imminent peril. See Claimants' Reply at paragraph 557. Claimants contend that Respondent not only misstates the relevant facts but also merely presents a general

- assertion regarding this particular element of the State of Necessity defense. Thus, Respondent fails to explain how the enactment of the Emergency Laws constituted the only way to protect social and political stability. See Claimants' Reply at paragraph 557.
537. Claimants contend that Respondent's reliance on *LG&E* to assert that an "economic recovery package" was the only means to respond to the economic turmoil is misplaced because there is a distinction to be made between the specific tariff measures which affected the Claimants' investment—the Emergency Laws—and macroeconomic measures—such as the repeal of the Convertibility Law as well as the freezing of bank deposits. See Claimants' Reply at paragraphs 557, 563.
538. According to Claimants, the relevant issue is not whether it was necessary for Respondent to adopt a general economic recovery package as the only way to respond to the economic turmoil, nor whether any particular macroeconomic measure constituted the only means. See Claimants' Reply at paragraphs 563, 566. Rather, Claimants contend the issue is whether the enactment of the specific measures which affected the legal framework, especially the provisions related to tariffs, were the only way to safeguard Argentina's social and political stability. See Claimants' Reply at paragraph 564. Furthermore, Respondent's reliance on *Continental Casualty* to assert that devaluing the Argentine peso was the only means available to Argentina is flawed. In Claimants' view, the relevant question is whether the enactment of the Emergency Laws, not devaluation of the peso, constituted the only way. See Claimants' Reply at footnote 877.
539. Claimants' expert, Professor Arriazu, opines that "Argentina and its experts refer generally to 'the measures adopted during the economic crisis' without making an analytical distinction between the various macroeconomic measures of a general nature, and the narrower, more specific ones of which EDEMSA was a victim." See Arriazu Supplement Expert Report at paragraph 46.
540. Respondent asserts that such a distinction is "confusing and irrelevant since what Claimants refer to as specific measures involve only general emergency measures applied to every sector of the economy in particular." See Respondent's Rejoinder at paragraph 626. Respondent asserts that pesification was a general measure applied to all public

utilities services, and thus, “it would be illogical to analyze the pesification only in the sector of public utilities services without considering the need for measures as part of a general policy to face a crisis affecting all sectors of the Argentine economy.” See Respondent’s Rejoinder at paragraph 626.

541. Claimants contend that the “only way” requirement must be interpreted strictly. See Claimants’ Reply at paragraph 558. Claimants contend that this element is not satisfied if ways to respond to situations of necessity with otherwise lawful means remain available, even if such means are more costly or less convenient. See Claimants’ Reply at paragraph 558 (citing to comment 15 to ILC Article 25, which provides that “[t]he plea is excluded if there are other (otherwise lawful) means available, even if they may be more costly or less convenient. . . . Moreover, the requirement of necessity is inherent in the plea: any conduct going beyond what is strictly necessary for the purpose will not be covered.”).
542. Claimants’ expert, Professor Dolzer, argues that strict interpretation of the “only way” requirement is in line with the general principle that the State of Necessity defense must be applied in only the most extraordinary of circumstances, “corresponding to the exceptional nature of necessity.” See Dolzer Supplement Expert Report at paragraph 81.
543. Claimants contend that the narrowness of the “only way” requirement has been reaffirmed by other tribunals addressing the same measures at issue in this case. See Claimants’ Reply at paragraphs 560-61 (citing to *Enron*, *Sempra* and *CMS Gas*). Claimants assert that all of these tribunals have concluded that a host state is free to make whatever economic policy decisions it sees fit, but that it must bear the consequences of those choices if they violate international legal obligations previously assumed by that state. See Claimants’ Reply at paragraph 560.
544. Claimants’ expert, Professor Dolzer, notes that even *LG&E* stated that the “only way” requirement implies “that it has not been possible for the State to avoid by any other means, even a much more onerous one that could have been adopted and maintained the respect of international obligations.” “The State must have exhausted all possible legal

means before being forced to act as it does.” See Dolzer Supplement Expert Report at paragraph 85 (quoting *LG&E*).

545. Claimants contend that the enactment of the Provincial Emergency Laws was not the only means available to Argentina, and that in reality rather it did very little to achieve Respondent’s stated objectives, particularly as compared to other options available at the time. See Claimants’ Reply at paragraph 565. Claimants’ expert, Dr. Arriazu, asserts that the Emergency Tariff Measures “were completely unnecessary and ineffective in their declared purpose of benefiting the neediest sectors of the population.” See Arriazu Supplement Expert Report at paragraph 5.
546. Claimants note that Argentina asserts that the measures enacted during the economic turmoil were designed to halt a dramatic increase in poverty and to avoid hyperinflation. See Claimants’ Reply at paragraph 567 (citing to Frenkel and Damill Expert Report at paragraph 191). Claimants contend that the measures in question were not the only way to address those stated concerns. Claimants’ Reply at paragraph 568.
547. In response, Respondent asserts that the protection of indigent classes and the prevention of hyperinflation are not the only two essential interests which were at stake, and suggests that it is incorrect to assume that just because two interests were served ineffectively the other interests were ineffectively served as well. See Respondent’s PH Reply at paragraph 148.
548. Claimants’ expert, Professor Arriazu, opines that the measures were totally ineffective in halting the increase in poverty because (i) the average nationwide residential consumption of electricity represents only 1% of total consumer spending, (ii) empirical evidence shows that the price for all essential products in fact increased considerably in Argentina following the emergency measures, harming the poorest sectors, (iii) aggregate consumption by low-income sectors represents less than 10% of the total electricity demand in the country, and (iv) empirical evidence shows that poverty in Argentina increased subsequent to Argentina adopting its measures. See Arriazu Supplement Expert Report at paragraphs 62-70.

549. Furthermore, Professor Arriazu opines that the measures failed to safeguard against hyperinflation as well due to the relatively small percentage that electricity and other utility services entail on the overall consumption basket. See Arriazu Supplement Expert Report at paragraph 91. Professor Arriazu concludes that “[i]t is not reasonable to argue that, in order to contain inflation, it is justifiable to freeze some prices that are not very representative of the consumption basket while allowing others that are much more representative of this basket, to increase.” See Arriazu Supplement Expert Report at paragraph 91.
550. Claimants contend that Argentina took no measures whatsoever to control the prices of other items that make up a larger proportion of the basket of expenses of the Consumer Price Index, and that would therefore have had a more significant dampening effect on inflation rates. See Claimants’ Reply at paragraph 569.
551. Respondent asserts that Claimants’ and Professor Arriazu’s position overlooks the impact that the price of electricity as well as other public utilities has on prices throughout the economy, on inflation, and on the perception of inflation. See Respondent’s Post Hearing Reply on the Merits at paragraph 149. Respondent adds that the Tribunal must also consider that Argentina had lost all support from international organizations, “as a consequence of which it had to face a major crisis without any other resources but the economic policy measures to which it had access.” See Respondent’s Post Hearing Reply on the Merits at paragraph 150.
552. According to Respondent, Claimants’ position also overlooks the impact that the devaluation of the Argentine peso had on the economy. In the view of Respondent’s economic experts, Messrs. Frenkel and Damill, under such circumstances there was no other possibility but to redefine the parameters for determining the tariff rates because otherwise performance of the Concession Contract would have been impossible. See Respondent’s Post Hearing Reply on the Merits at paragraph 147.
553. Messrs. Frenkel and Damill added during the hearing that pesification was applied to thousands of public and private contracts, including mortgages, leases, and insurance contracts, all of which performance thereof had become unfeasible, hence possibly

destructive on the economy if unregulated. See Transcript for Hearing on the Merits, Day 6 (Wed., 4 Nov. 2009), at 1791, lines 18-22; see also, Respondent's Post Hearing Reply on the Merits at footnote 235.

554. Professor Arriazu opines that comparing Argentina's situation with that of Uruguay during the same economic turmoil shows that abstaining from freezing tariffs would not have led to hyperinflation. See Arriazu Supplement Expert Report at paragraph 94. Professor Arriazu observes that "[t]he empirical experience of Uruguay under circumstances of devaluation similar to Argentina's confirms that not freezing prices in the Argentine electric power sector would not necessarily have resulted in an increase in inflation." See Arriazu Supplement Expert Report at paragraph 94.
555. As such, Claimants contend that not only has Respondent failed to establish that the measures adopted were the "only way" to address the stated goal of helping the needy and preventing hyperinflation, but also that the measures actually worsened the situation. See Claimants' Reply at paragraphs 570-71, 575.
556. Claimants' expert, Professor Arriazu, opines that there were other measures available to Respondent that would have been much more effective and yet at the same time that would not have violated Argentina's international treaty obligations, alternatives being the implementation of a "social tariff" which would have protected the neediest sectors of society without affecting the real value of their consumption basket, or the exemption of electricity consumption taxes for low-income consumers thereby granting a preferential tariff through the equivalent of a government subsidy. See Arriazu Supplement Expert Report at paragraphs 83-85.

e) "Not seriously impaired"

557. Moreover, Respondent asserts that situations in which the situation of necessity has its origin in a certain decision adopted by a state vis-à-vis third-party states must be distinguished from circumstances related to the administration and internal government of a sovereign state. See Respondent's Counter-Memorial at paragraph 642-43 (citing *Gabčíkovo-Nagymaros*).

558. According to Respondent, it has done nothing more than to adopt conduct expressly contemplated in the Argentina-France BIT, by maintaining public order, protecting the essential interest of security amidst popular unrest, and preserving the existence of a financial system and economy heading towards collapse. See Counter-Memorial at paragraph 667. As such, Respondent argues that essential interests of other contracting states to the relevant BITs were not affected by the Emergency Tariff Measures. See Respondent's Counter-Memorial at paragraphs 664-65 (citing to *LG&E*).
559. Respondent adds that foreign investors in Argentina were not treated differently vis-à-vis Argentine nationals, and neither were Claimants discriminated against vis-à-vis other foreign investors. See Respondent's Counter-Memorial at paragraphs 666 and 668 (the former quoting *Continental Casualty*). Claimants not only controvert Respondent's assertions that the Emergency Tariff Measures were not discriminatory, but also contend that equal treatment is not a component of the State of Necessity defense. See Claimants' Reply at paragraph 549.
560. However, Respondent notes that Claimants do not deny that the measures at issue did not affect the essential interest of other contracting states to the relevant BITs or of the international community at large. See Respondent's Rejoinder at paragraph 739.

f) Excluding the possibility of invoking necessity

561. Respondent asserts that the State of Necessity defense is neither excluded nor limited by the Argentina-France BIT, nor any other BIT invoked by Claimants. See Respondent's Counter-Memorial at paragraph 670.
562. Rather, Respondent asserts that Article 5(3) of the Argentina-France BIT, as well as Article 5(4) of the Argentina-Luxembourg BIT, only binds Argentina to treat foreign investors no less favorably vis-à-vis nationals or investors of the most-favored-nation. See Respondent's Counter-Memorial at paragraphs 671-72. As such, Respondent asserts that these provisions, far from excluding the possibility of invoking the State of Necessity defense, contemplate for "exceptional situations that may also fit such institute." See Respondent's Counter-Memorial at paragraph 671.

563. Respondent notes that Claimants do not deny that provisions excluding the application of the State of Necessity defense are absent from the relevant BITs . See Respondent’s Rejoinder at paragraph 740.

g) No contribution by Respondent

564. Respondent asserts that neither it nor the Province of Mendoza contributed to the creation of the situation of necessity. In this respect, Respondent asserts that not all forms of state contribution are actionable. See Respondent’s Counter-Memorial at paragraph 636-37. According to Respondent, the only type of contribution warranting legal consideration is one that is sufficiently substantial, rather than being merely incidental or peripheral. See Respondent’s Counter-Memorial at paragraph 638 (citing to U.N. ILC Report, 53d Session).

565. Respondent’s experts, Messrs. Frenkel and Damill, opine that the situation of necessity arose in Argentina due to several exogenous factors, including the rise in interest rates, the collapse of emerging markets, devaluation of the Brazilian currency, and the fall of exports-value, all of which Respondent did not contribute in any way. See Frenkel and Damill Expert Report at paragraphs 14-19; see also Respondent’s Counter-Memorial at paragraph 645 (quoting an academic article authored by the Nobel Laureate in Economics, Professor Joseph Stiglitz).

566. As such, Respondent concludes that it did not contribute to the occurrence of a situation of necessity so as to preclude the invocation of the State of Necessity defense, since it is “evident that it has not intended to provoke a situation that has the country as its own victim.” See Respondent’s Counter-Memorial at paragraph 646.

567. Claimants contend Argentina contributed to its own crisis. See Claimants’ Reply at paragraph 592. Claimants contend that this requirement is devised to prevent a party to take legal advantage of its own fault, and that contribution can materialize by act or omission. See Claimants’ Reply at paragraph 592 (relying on *Enron* and *Gabčíkovo – Nagymaros*).

568. Claimants contend that the contribution of external factors is not determinative nor particularly relevant to deciding whether Respondent itself contributed to the crisis irrespective of whether such external factors also played a role. See Claimants' Reply at paragraph 594.
569. Claimants' expert, Professor Arriazu, opines the cause of the economic turmoil to have been "the existence of a serious and growing fiscal deficit, prolonged over time, which was unsustainable under the pegged parity of the Argentine peso to the U.S. dollar. This occurred as a consequence of a series of mistakes by successive Argentine administrations during the period, in particular, the decision not to make any fiscal consolidation after the reform of the social security system and the adoption of mistaken measures to fight the fiscal deficit." See Arriazu Supplement Expert Report at paragraph 14. Professor Arriazu also notes that "in the economic literature on this subject, no one has asserted that the only cause of the Argentine economic crisis was the mere existence of . . . foreign crises. This argument would not withstand even the most rudimentary economic analysis and would defy logic as well." See Arriazu Supplemental Expert Report at paragraph 19.
570. Claimants contend that even Respondent's own economic experts concede to Argentina's contribution to the economic turmoil. See Claimants' Reply at paragraph 598. Claimants cite to paragraphs 21 and 22 of Professor Roubini's Expert Report, which provides that "After 1998, the fiscal deficit and debt accumulation was exacerbated by the increase in nominal and real interest rate for Argentina. That increase was driven by a combination of external and domestic factors: the sudden stop of capital flows to emerging markets in 1998; the worsening domestic fiscal position and the inability of successive governments to achieve primary surpluses large enough to stop an unsustainable debt dynamic."
571. Professor Roubini asserts that "[e]conomic theory suggests that a fixed exchange rate regime is eventually not consistent with severe and persistent recession, persistent fiscal deficits and debt accumulation: either a monetized deficit will lead to a loss of reserves eventually resulting in currency collapse, or budget deficits that are financed with debt will eventually lead to an unsustainable accumulation of public debt, domestic and

external, that will trigger a currency run as investors expect a credit event such as sovereign default.” See Roubini Expert Report at paragraph 21 -23, which concludes that Argentina’s attempts to address this fiscal chaos only exacerbated the situation that eventually led to the economic turmoil.

572. Claimants also cite to an economic publication authored by Respondent’s experts, Professors Frenkel and Damill, which concludes that one of the causes of the economic turmoil was an “intolerable debt burden” produced by “policy mistakes.” See also Claimants’ Reply at paragraph 599, citing to *The Argentinean Debt: History, Default & Restructuring*.
573. Claimants also cite to the *National Grid* case, which in turn cites to a report issued by the International Monetary Fund on the economic turmoil in reaching its conclusion that factors leading to the economic crisis were both internal and external, and that each was substantive and direct. See Claimants’ Reply at paragraphs 601, 605-6. This IMF report stated that “The measures surrounding the collapse of the currency board and public debt default— notably the capital controls and the asymmetrical pesification and indexation— have exacerbated the macroeconomic consequences of the crisis and complicated its resolution.” See *Lessons from the Crisis in Argentina*, IMF Report of 3 October 2003 at paragraph 77.
574. Claimants also contend that Respondent’s own president at the time, President Eduardo Duhalde, publicly acknowledged in newspaper articles Argentina’s own contribution. See Claimants’ Reply at paragraph 595; Claimants’ Post Hearing Reply on the Merits at paragraph 60.
575. Claimants also contend that the experience of other countries, such as Chile and Uruguay, reveal that Argentina’s conclusion is untenable. See Claimants’ Reply at paragraph 602. Claimants’ expert, Professor Arriazu, opines that “[t]he fact that other similarly-situated countries — whose economies did not collapse like that of Argentina — is evidence that the Argentine crisis was self-generated.” See Arriazu Supplement Expert Report at paragraph 4.

576. Professor Arriazu opines that “Argentina was the only country in the world that suffered the effects of such crises so disproportionately. If the sole and exclusive cause of the Argentine economic crisis had been the mere existence of foreign crises, as Argentina argues, then effects as devastating as those occurring in Argentina would have also occurred in other countries in the world, which did not happen. On the contrary, Argentina was the only country in the world to fall into default and suffer an economic crisis of such magnitude. We only have to compare the situation of neighboring countries such as Chile and Uruguay, for example, to see that the true cause of the Argentine economic crisis was the irresponsibility of national officials in fiscal management during the second half of the 90s, which caused an uncontrollable fiscal imbalance, unprecedented in the history of this country.” See Arriazu Supplement Expert Report at paragraph 19.
577. Professor Arriazu further opines that comparing the circumstances surrounding Argentina’s economy during an earlier crisis—the 1995 Tequila Crisis—to the economic turmoil in question, shows that during the former, Argentina carried only a moderate fiscal deficit and was thus able to maintain solid macroeconomic stability notwithstanding the impact of the Tequila Crisis, which was comparable in absolute terms to that of the foreign economic crises of 1998. See Arriazu Supplement Expert Report at paragraphs 24- 35.
578. Claimants contend that Respondent’s misplaced reliance on *LG&E* was also acknowledged by the *National Grid* award, which at paragraph 261 concluded “[t]he lack of an article in the Treaty equivalent to Article XI and the fact that the Tribunal considers it to be the burden of the Respondent to sustain its allegations may explain the different conclusion reached by the Tribunal.” See Claimants’ Reply at paragraph 607. Claimants contend that the awards rendered in the *CMS Gas*, *Enron*, and *Sempra* cases also support the conclusion that Respondent contributed to the economic turmoil. See Claimants’ Reply at paragraphs 608-09.

h) Temporal component of necessity

579. Claimants contend that even if a period of necessity had existed, Respondent still bears responsibility for harm caused before or after such period. See Claimants’ Reply at paragraph 611. Claimants cite to ILC Draft Article 27, which provides that “[t]he invocation of a circumstance precluding wrongfulness in accordance with this Chapter [“Circumstances Precluding Wrongfulness”] is without prejudice to . . . compliance with the obligation in question, if and to the extent that the circumstance precluding wrongfulness no longer exists.” See Claimants’ Reply at paragraph 613. Comment 1 to ILC Draft Article 27 states that “if the circumstance no longer exists the obligation regains full force and effect.”
580. Claimants’ expert, Professor Dolzer, opines that full compliance with an international obligation is required immediately upon termination of any period of necessity, and thus, any policies or actions by Argentina that continued after such period had ended and that were not in compliance with the Treaty would constitute violations of international legal obligations for which compensation is warranted. See Dolzer Supplement Expert Report at paragraph 90.
581. Claimants contend that this principle has been confirmed by the ICJ in *Gabčíkovo – Nagymaros*, which in paragraph 101 provides that “even if a state of necessity is found to exist, it is not a ground for the termination of a treaty. It may only be invoked to exonerate from its responsibility a State which has failed to implement a treaty. Even if found justified, it does not terminate a Treaty; the Treaty may be ineffective as long as the condition of necessity continues to exist; it may in fact be dormant, but—unless the parties by mutual agreement terminate the Treaty—it continues to exist. As soon as the state of necessity ceases to exist, the duty to comply with treaty obligations revives.” See Claimants’ Reply at 613.
582. Claimants contend that partial performance of treaty obligations is required when conditions preventing compliance gradually lessened, and thus, even if suspension of the contractually-mandated tariff regime had been briefly warranted by a state of necessity, a gradual restoration of the contract regime would have been required as soon as the

circumstances permitted it. See Claimants' Reply at paragraph 614 (citing to comment 2 of ILC Draft Article 27). As such, in Claimants' view nothing can justify Respondent's radical and seemingly permanent freeze, which continues to this day over seven years later. See Claimants' Reply at paragraph 614.

583. Claimants contend that, in the present case, it is impossible to determine a specific moment when *status quo ante* had to have been restored because there was never a real need for the Emergency Tariff Measures. See Claimants' Reply at paragraph 615. In any event, Claimants posit that a distinction must be made between, on the one hand, the concept of necessity as it is understood in international law, and, on the other, the duration of a state of emergency or crisis as they are understood in common parlance. See Claimants' Reply at paragraph 615.
584. Claimants' position is that the duration of any state of necessity in Argentina cannot be the duration of the whole "emergency" period, since such period has formally lasted now for over seven years. See Claimants' Reply at paragraph 616. Claimants add that the duration of any state of necessity may not be coextensive with the duration of the economic crisis itself because economic crises are foreseeable and recurrent under the cycle theory. See Claimants' Reply at paragraph 617.
585. Claimants argue that, under customary international law, the only relevant period during the economic turmoil which may be characterized as a situation of necessity was between 19 and 21 December 2001, the timeframe when the federal government declared a State of Siege pursuant to Article 23 of the Argentine Constitution. See Claimants' Reply at paragraph 618. According to Claimants, the fact that a State of Siege was declared for only three days suggests that the Government of Argentina itself considered that the only stretch of the crisis in which it felt a threat to the constitutional order, and during which it endured the type of circumstances that may be deemed to satisfy the State of Necessity defense, was during those three days. See Claimants' Reply at paragraphs 619-20.
586. As such, Claimants contend that, even if Respondent's failure to comply with its obligations under the Treaty were to be deemed not wrongful for purposes of customary international law due to a situation of necessity, its exemption would only apply during

the period of necessity itself, not before or after, thereby obligating Argentina to still responsibility for any violations of the Treaty occurring prior to 19 December 2001 and after 21 December 2001. See Claimants' Reply at paragraph 621. Claimants posit that damages arising from Pre-Emergency Measures affecting the concession all predate 19 December 2001, and that injury from the Emergency Tariff Measures postdates 21 December 2001 for it was enacted in January 2002, and hence, fall outside any period that could exempt Respondent from liability for violations of the Treaty. See Claimants' Reply at paragraph 622.

587. According to Claimants, Respondent has failed to demonstrate that any putative period of necessity extended for years following the brief three-day State of Siege declared between 19 and 21 December of 2001 so as to justify a continued failure to restore Claimants' contract as well as treaty rights. Claimants add that Respondent has also failed to establish that any situation of necessity existed with respect to the Pre-Emergency Measures affecting the concession. See Claimants' Post Hearing Reply on the Merits at paragraph 61.

i) Responsibility to Compensate

588. Lastly, Claimants contend that even if Respondent were able to satisfy all the elements of the State of Necessity defense, this would excuse Argentina only from a finding of wrongful conduct and not from the obligation to compensate arising for violations of international treaty obligations. In support, Claimants posit that ILC Article 27 aims at preventing the exclusion of compensation even if a situation of necessity is found to have existed. See Claimants' Reply at paragraphs 623, 628-29; Claimants' Post-hearing Brief on the Merits, paragraph 173.

589. ILC Article 27 provides:

Consequences of Invoking a Circumstance Precluding Wrongfulness

The invocation of a circumstance precluding wrongfulness in accordance with this chapter [i.e., Circumstance Precluding Wrongfulness] is without prejudice to:

- (a) compliance with the obligation in question, if and to the extent that the circumstance precluding wrongfulness no longer exists;
- (b) the question of compensation for any material loss caused by the act in question.

590. Claimants' legal expert, Professor Dolzer, opines that ILC Article 27's obligation to compensate irrespective of necessity is a well-established and long-recognized rule under international law. See Dolzer Supplement Expert Report at paragraph 92. Claimants back this view by citing to the drafting history of ILC Article 27, as well as various international decisions. See Claimants' Reply at paragraphs 624-26, 628.
591. Claimants also argue that the wording of ILC Article 25 is consistent with (Claimants' interpretation of) ILC Article 27 insofar as the former is not worded in terms of an exemption from liability, but rather in terms of "preclusion of wrongfulness"—in this respect, ILC Article 25 provides that "Necessity may be invoked by a State as a ground for precluding the wrongfulness of an act not in conformity with an international obligation" In Claimants' view, the drafters were careful not to formulate the State of Necessity defense in a manner that would automatically exonerate a host-state's duty to compensate, but rather only to enable such acts to be deemed lawful. See Claimants' Reply at paragraph 627.
592. Respondent additionally posits that all claims raised in this proceeding should be dismissed by virtue of the doctrine of necessity pursuant to customary international law ("Necessity defense"). See Respondent's Counter Memorial at paragraph 673. According to Respondent, the Necessity defense operates as a means to exclude illegality and to excuse any state responsibility which might result from situations where a state has absolutely no means but to act inconsistently with pre-existing international obligations in order to preserve an essential interest threatened by a serious and imminent risk. See Respondent's Counter Memorial at paragraphs 620-2.

D. QUANTUM OF DAMAGES

1. Claimants

a) Valuation Model

(1) LECG's DCF Method

593. Claimants assert that the valuation models submitted by Respondent are unreliable and that instead the Tribunal should use LECG's Discounted Cash Flow ("DCF") method as it follows the most realistic and conservative assumptions. Claimants' Post-Hearing Brief on Quantum, at paragraph 1.
594. Claimants assert that LECG's DCF model presents the most reliable set of calculations for a fair approximation of Claimants' damages. See Claimants' Post-Hearing Brief on Quantum, at paragraph 32.
595. Claimants argue that LECG's model is consistent with the Provincial Electricity Law, thus accounting for the investor's reasonable rate of return on their full investment. See LECG Report of 28 April 2005, at paragraph 112; see also LECG Supplementary Report of 30 April 2009, at paragraphs 6(f) and 58-89. LECG's DCF model starts with the assumption that Claimants are entitled to earn a return of the full amount of their actual investment, US\$ 209 million. See Claimants' Post-Hearing Brief on Quantum, at paragraph 32.
596. According to Claimants, LECG's DCF model reasonably shows that Claimants' investment lost all value following the enactment of the Emergency Measures, which caused dramatic reductions in the tariffs' dollar value.
597. Two years after no tariff adjustments and with no prospect for improvement, Claimants signed an agreement in 2004 to sell their shares in EDEMSA for US\$ 2 million. See Claimants' Post-Hearing Brief on Quantum, at paragraph 34. The deal closed in March 2005 and, according to Claimants, this was the fair market value at the time.
598. Claimants assert that the residual value left of Claimants' investment in EDEMSA was the actual sales price. Claimants underscore Respondent's estimation of zero equity

value in EDEMSA as of January 2005. According to Claimants, this shows Respondent's admission that the value left of Claimants' investment to be the actual sales price.

(a) LECG's Assumptions and Methodology

599. LECG's DCF method determines the firm value by calculating the present value of future cash flows, and then adding the residual value of the company at the last year of the concession, discounted at its cost of capital. See LECG Report of 28 April 2005, at paragraph 118.
600. LECG valuation takes into account the finite life of EDEMSA's Concession, thus factoring in cash flows only until the end of the concession. LECG adds at the very last year of EDEMSA's thirty-year (30) term, a "terminal or residual value" that considers the payment that EDEMSA is entitled to receive when its contract expires, which is equal to the unamortized portion of its investments. See LECG Report of 28 April 2005, at paragraph 119.
601. To determine the present value of the free cash flows, LECG uses a discount factor determined by the Weighted Average Cost of Capital (WACC), which represents a measure of the cost of raising funds from shareholders and lenders in a company operating in the industry at hand. See LECG Report of 28 April 2005, at paragraph 117.
602. The cost of raising funds from lenders is given by the interest rate at which they are willing to offer loans, called the cost of debt; whereas the cost of raising funds from shareholders is measured by the so-called cost of equity, which represents the expected rate of return (distributed in the form of dividends) on the equity contributions.
603. LECG calculates Claimants' damages by taking the difference in the value of Claimants' stake in EDEMSA as shareholder under the "but-for" and the "actual" scenarios. See LECG Report of 28 April 2005, at paragraph 126.
604. With respect to the requested valuation dates of 30 November and 31 December 2001, LECG advances its assessment as to what the values of EDEMSA and Claimants'

investments would have been in the absence of the Emergency Measures (referred to as the “but-for” scenario). See LECG’s Report of September 2010, at paragraph 10.

According to LECG, its DCF model makes the following underlying assumptions:

- LECG holds the macroeconomic conditions constant at the actual macroeconomic situation as known in 2005 in order to isolate the effect of the Emergency Measures on EDEMSA’s cash flow. From 2005 on, LECG’s macroeconomic projections are based on estimations by Estudio Broda, a specialized consulting firm. According to LECG, Estudio Broda’s estimations take into account the Argentine CPI and PPI, salaries index, as well as the nominal exchange rate and GDP growth rates;
- For operating and capital expenditures, LECG projects and annually adjusts the figures by accounting for the evolution of various inflation indices, CPI, PPI, salary index, tariff level and foreign exchange rate movements;
- As to energy-purchasing costs, LECG uses the actual electricity spot prices up to the end of 2004. From then on, spot prices are forecasted using a dispatch model, which takes into account the evolution of natural gas prices, as indicated in Decree No. 181/2004 and Resolution No. 208/2004 of the Ministry of Planning;
- Concerning the electricity-demand factor, LECG has taken into account the change, which it divides into two categories, (i) the evolution of the number of customers and (ii) evolution of consumption per customer. LECG projects the former by accounting for the increase in population growth whereas the latter by factoring in projections of demand price-elasticity and the general movement of the economy; and
- With respect to tariffs, LECG assumes that a “but-for” tariff review would have taken place in 2002, which would have allowed the company to recover the value of its tariff base over the life of the concession, at its cost of capital (as measured by its calculation the WACC). The new tariff level resulting from the but-for 2002 review takes into account the asset base as of the end of 2001 in U.S. dollars, which is the currency at which the investments were originally made.

605. With respect to the valuation date of 30 November 2001, LECG advances that it has made the following adjustments:

- The present valuation discounts all cash flows starting on 30 November 2001, meaning that cash flows corresponding to the month of December 2001 are also included in computing EDEMSA's value;
- The WACC rate used to discount as of 30 November 2001 has been adjusted to reflect the differences between November and December 2001 in the rate's fundamentals. In particular, LECG notes that the differing components are the risk-free rate and the standard deviations for the U.S. and Argentine equity markets. LECG has calculated the changes between these two dates to yield a WACC (in nominal terms) of 10.77 per cent as of November 2001 as opposed to 11.34 per cent as of December 2001; and
- With respect to EDEMSA's financial debt as of November 2001, LECG has discounted by one month EDEMSA's book value as of 31 December 2001, using EDEMSA's estimated cost of debt of 9.94 per cent.

606. In assessing both valuation dates, LECG defines fair market value as "the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of relevant facts." See LECG 2009 Supplemental Report, at footnote 10. Accordingly, LECG rules out the use of any discount rate that fails to capture a long-term view of the fundamental components of the firm value, regardless of the overall financial distress underlying the economy at the time.

607. As to the requested valuation dates as of 31 January 2002 and 31 January 2005, LECG understands such dates to concern assessment of EDEMSA's value in the presence of the Emergency Measures (referred to as the "actual" scenario). As stated in its Report of September 2010, LECG makes the following underlying assumptions:

- Macroeconomic conditions are assumed to be equal to those of the "but-for" scenario in order to isolate the effects of the Emergency Measures;
- As to general operating and capital expenditures, impact matrices as well as price indices are assumed to be equal across the two scenarios;
- Energy-purchasing costs are assumed to be the same as that under the "but-for" scenario;

- As a general matter, the electricity demand follows the same assumptions used in the but-for scenario. The demand level, however, is slightly higher, reflecting the impact of price-elasticity effects due to lower tariffs; and
 - With respect to tariffs, LECG assumes that a tariff scenario in which it could be expected that the Province would grant domestic inflation adjustments on tariffs from 2005 onwards.
608. Concerning EDEMOSA's financial debt, LECG asserts that, at the time of crisis, its book value as of 31 December 2001 fails to provide an adequate indication as to EDEMOSA's debt as of 31 January 2002. See LECG Supplementary Report on Quantum, at paragraph 74, Table XII. As a result, LECG has used the fair market value of EDEMOSA's debt at the time of valuation. LECG estimates the value of EDEMOSA's debt to be zero.
609. LECG has applied these assumptions to both valuation dates (i.e., as of 31 January 2002 and as of 31 January 2005). Accordingly, the cash flows for each year in both these valuations are identical, with only three differences between the two post-Emergency-Measures settings:
- Cash flows have been calculated from the valuation date onwards, and then discounted to that date. As a result, the January 2002 valuation includes three years of cash flows that are not taken into account in the January 2005 valuation date exercise;
 - With respect to the discounting methodology, the WACC rate has been calculated based on the rate's fundamentals as of each date, with the WACC as of 2002 estimated at 11.38 per cent and the WACC as of 2005 estimated at 10.41 per cent; and
 - For the January 2005 valuation date, LECG has used the actual information of EDEMOSA's debt after its complete restructuring (completed in March 2007), and then discounted back to the valuation dates using EDEMOSA's cost of debt.
610. As provided in Tables III and IV of LECG's Report of September 2010, LECG finds the firm value at both valuation dates to be negative, thereby yielding equity values of zero for both.

(b) LECG's WACC Calculation for December 2001

611. For its damages calculation, LECG adopted a WACC using a Relative Volatility Approach as a measure of country risk premium, with a debt/equity ratio representing expectations of the future optimal capital structure for an efficient economy. See Appendix B of LECG 2005 Report, at page 103, paragraph 28. LECG considers

$$\text{WACC} = 12.97\% * 75\% + 9.94\% * (1-35\%)* 25\% = 11.34\%$$

(i) Cost of Equity

612. LECG asserts that, to estimate the opportunity cost of equity, it is standard to use the Capital Asset Pricing Model ("CAP" Model). See Appendix B of LECG 2005 Report, at page 94, paragraph 5. In this connection, LECG finds that other methods, such as the Arbitrage Pricing Theory and Fama-French three Factor Model, tend to be more subjective and are not as widely used.

613. According to LECG, the CAP Model postulates that the opportunity cost of equity is equal to the return on risk-free securities, plus the company's systematic risk ("beta"), multiplied by the market price of risk (market risk premium). The equation for the cost of equity (kE) is as follows:

$$kE = rf + [E(rm) - rf] * (beta)$$

where:

rf = the risk free rate of return.

E(rm) = the expected rate of return on the overall market portfolio.

E(rm) - rf = the market risk premium.

beta = the systematic risk of the equity.

614. *Risk-free rate.* LECG defines the risk free rate as the return on a security or portfolio that has no default risk, and as a return completely uncorrelated with anything else in the economy. See Appendix B of LECG 2005 Report, at 96, paragraph 7. Thus, LECG finds that the risk free rate would be the return on a zero-beta portfolio.

615. LECG recommends the use of securities that match the duration of the cash flows being valued. In this connection, LECG finds that a 10-year U.S. Treasury Bond rate most closely matches the cash flows under consideration. According to LECG, the beta value from the 10-year rate is closer to zero than that of the thirty-year bonds (according to JP Morgan, thirty-year Treasury Bonds have a beta of 0.25).
616. *Market Risk Premium.* LECG defines the market risk premium to be the difference between the expected rate of return on the market portfolio and the risk free rate. See Appendix B of LECG 2005 Report, at 97, paragraph 8.
617. LECG advances that the main differences in the various approaches for calculating the market risk premium are (i) which historic time period should be used and (ii) whether an arithmetic or a geometric average should be calculated to arrive to the expected market risk premium.
618. LECG recommends the use of the largest historic period of data available, finding that the market risk premium follows a random walk. In contrast, LECG finds it inappropriate to use an arbitrary shorter historic period. In addition, LECG's position is that the geometric averages should be used when calculating a WACC for discounting a long-term free cash flow. According to LECG, stocks are negatively correlated over time, so the arithmetic mean likely overestimates the return. See LECG Report of April 2009, page 34, at paragraph 52.
619. Accordingly, LECG calculates the geometric average for the period from 1928 to 2001 to be 5.17%. See Appendix B of LECG 2005 Report, at 97, Table XIV.
620. *Betas.* According to LECG, data of beta assessments from developing countries' stock exchanges are highly volatile and unreliable. See Appendix B of LECG 2005 Report, at 98, paragraph 9. In addition, betas of several companies are often needed, as this makes the sample much more stable. LECG opines that it is often difficult to find local companies from the relevant industry valued in the local stock exchange.
621. LECG finds it more appropriate to estimate betas, and thus the cost of equity, for an equivalent company in a developed economy and then adjust to reflect the extra return

required for investing in a developing economy. See Appendix B of LECG 2005 Report, at 98, paragraph 10.

622. In this connection, LECG relies on the beta measurements provided by Ibbotson, which, according to LECG, is most widely used in practice. See Appendix B of LECG 2005 Report, at 98, paragraph 11. Ibbotson provides betas based on U.S.-based industries by Standard Industrial Classification (SIC) codes. The SIC code 4911 comprises 51 companies from the electricity generation, transmission and/or distribution industry, which LECG estimates as appropriate and comparable to EDEMSA's business.
623. The raw and levered beta obtained from Ibbotson Cost of Capital Yearbook 2001 is equal to 0.06. LECG then adjusts the beta for the "reversion to one" according to the following methodology:
- $$\text{Adjusted Beta} = (0.67) * \text{Raw Beta} + (0.33) = 0.37$$
624. LECG advances that this beta figure reflects the risk of a company with the average capital structure of the Ibbotson sample used. LECG posits that since typically the American and Argentine electricity sectors have different capital structures, the beta calculated above must be adjusted to reflect the appropriate leverage. The Ibbotson Yearbook 2001 provides the U.S. industry, average debt/ equity (D/E) ratio to be 84%.
625. Using these figures, LECG calculates the un-levered beta.⁵⁹ Before adding back the Argentine debt/ equity ratio, LECG implements adjustments for regulatory differences.
626. According to LECG, U.S. electric utilities are typically regulated under a rate of return regime, while Argentine utilities are regulated under price cap regimes. LECG argues that rate of return regimes are less risky for investors as their rate of return on investments are assured. LECG advances that business risk is higher on a price cap regime because, once tariffs are fixed, any future inefficiencies are precluded from passing through to tariffs. LECG further argues that the higher risk is evident by the higher expected returns for

⁵⁹ LECG calculates the un-levered beta using the following formula: $\beta_U = \beta_L / (1 + ((1-t)D/E))$

- investors regulated under price cap regimes. LECG posits that in previous tariff reviews, the Argentine regulator added a premium to the adjusted un-levered beta for this purpose.
627. After adding the regulatory premium, LECG re-levers the beta to reflect the expected debt/ equity (D/E) ratio for the Argentine industry. LECG's D/E ratio reflects its expectations on the future optimal capital structure for a local company. See LECG Report of April 2005, at page 100, Table XV.
628. LECG first calculates the debt / firm value (D/FV) for each year based on the D/FV ratios of several companies in the local industry. See Supplementary LECG Report of April 2009, at page 91, paragraph 172. Next, LECG calculates the market capitalization weighted average across several years to isolate any specific event that might have changed the ratio in any particular year. LECG then converts this D/FV average ratio into a D/E ratio. LECG calculates the average D/E, weighted by capitalization, to be 33.3% for the period 1994-2001.
629. Using these figures, LECG's calculation of the levered beta (adjusted to one) equals 60%.
630. *Country Risk Premium.* LECG advances that adjustments to equity return must be made to reflect the risk of investing in Argentina. See Appendix B of LECG 2005 Report, at page 100, paragraph 18. In this connection, LECG recommends the Relative Volatility approach as opposed to the Country Debt Spread approach.
631. LECG finds the Country Debt Spread approach unreliable in situations like the present case where high country risk figures are involved. See Appendix B of LECG 2005 Report, at page 101, paragraph 19. LECG finds that this methodology uses the country risk (spread between the local Government bond and US Treasury bonds) as a measure of risk, and simply adds this factor to get to the return on equity. LECG posits that using the sovereign debt spread as a measure of country risk poses difficulties. When countries are approaching default-like situations (like Argentina did in year 2001), the measure reaches high values, turning the proxy for country risk premium into an unrealistic measure for a cost of equity calculation. LECG further opines that when countries enter default, like

Argentina did in 2002 the sovereign debt spread becomes almost irrelevant, as the country no longer has access to sources of finance.

632. The Relative Volatility approach adds to the equity return a factor based on the ratio of the volatilities of the local and the reference stock exchanges. LECG describes this approach as using the ratio of the volatilities of the returns of a developed country stock exchange and those of the analyzed country as a measure of country risk. LECG obtains the volatility factor, expressed by its sigma, from Bloomberg for both stock exchanges.

633. In sum, LECG's calculation of the cost of equity for Argentina follows the following formula:

$$re = rf + \text{Beta} * \text{US Market Risk Premium} * (\sigma_{arg} / \sigma_{us})$$

634. Applying the figures, EDEMSA's cost of equity as of 2001 yields as follows:

$$re = 5.09\% + 0.60 * 5.17\% * (5.45\%/2.15\%) = 12.97\%$$

(ii) Cost of Debt

635. LECG calculates the cost of debt in a different way than by basing it on a developed world company (or industry), and then adding the country risk. Their justifications for not adopting such approach are that (i) in the present situation the country risk has an extremely high level, and (ii) local utilities get financing at rates the same as or lower than the government. See Appendix B of LECG 2005 Report, at page 102, paragraphs 23-24.

636. LECG instead recommends both analyzing the historic cost of debt and credit ratings at each time, and estimating the future cost of debt by estimating the company's future credit rating.

637. LECG's estimate of the future credit rating is the rating of mid 2001, before the collapse of the Argentine economy. According to LECG, at that time most utility companies had a credit rating similar to that of Standard & Poor's AA+ rating. This credit grading is used for calculating the 2001 WACC.

638. For the historic period, LECG uses the actual cost of debt for the AA+ ratings of sample local companies.
639. In order to arrive at the 2001 figure, the difference between the raAA+ of each year and the respective risk free rate is calculated. Then, a simple average of the differences is determined, and the 2001 risk free rate is added, with the final product yielding a cost of debt of 9.94%.

(iii) Other Assumptions Used

640. LECG applies the same discount rate (WACC rate of 11.34%) for both the actual and but-for scenarios. See LECG Supplementary Report of April 2009, at pages 88-89, paragraphs 162-65.
641. This is because LECG finds that the only difference considered between the two scenarios is the Emergency Measures affecting EDEMSA. LECG argues that the effects of such measures on EDEMSA's revenues and costs are already included in the company's cash flows and should not be double-counted by adjusting the discount rate.
642. Moreover, LECG advances that the Emergency Measures pertain to neither the macroeconomic effects of such laws enacted nor the pesification of the whole economy, but rather EDEMSA's tariffs.
643. Alternatively, LECG advances that if the discount rates were to be different in the two scenarios, the discount rate in the actual scenario should be higher, due to higher regulatory uncertainties, and the consequent increase in risks this causes.

(c) Asset Base and Circularity Argument

644. Claimants proceed with addressing Respondent's two primary critiques of the LECG model. See Claimants' Post-Hearing Brief on Quantum, at paragraph 35.
645. First, Claimants seek to undermine Respondent's argument that LECG's asset base should be limited to the official valuation amount rather than the actual purchase price. According to Claimants, there is no objective support for such position. Claimants cite to the Hearing Transcript and Argentina's expert submissions to show that Argentina's

expert, Dario Quiroga, had previously, in an almost identical case, taken the position that the purchase price, not the official valuation, should be included in the asset base. See Hearing Transcript of 6 November 2009, at page 2609, lines 4-18 (English) (Quiroga); see also MBG Cross-Examination Slide 22. Moreover, Argentina's expert, Mr. Bello, recognized at the merits hearing that nowhere in the SSB report was there a statement as to the investor's return being limited to the amount of the official valuation. See Hearing Transcript of 6 November 2009, at page 2558, lines 17-21 (English) (Bello). Rather, Mr. Bello admitted that the official valuation report repeatedly stated that the official valuation was merely designed to be a floor price. See Hearing Transcript of 6 November 2009, at page 2609, lines 9-16 (English) (Bello).

646. This finding is further supported by the fact that the official valuation decree⁶⁰ itself establishes the purpose of the official valuation figure to be a floor price for the bids, not a target amount. See Claimants' Post-Hearing Brief on Quantum, at paragraph 38. Moreover, both before and after issuance of the official valuation decree, the Government of Mendoza promulgated decrees specifically finding that the value of EDEMSA's concession should be based on the amount paid, while failing to make any mention of the official valuation. See Decree No. 197 (11 February 1998), Claimants' Exhibit 19; Decree No. 1176 (27 July 1998), Claimants' Exhibit 57; see also Claimants' Quantum Opening, Slides 7-8.
647. Second, Claimants seek to undercut Respondent's circularity argument. See Claimants' Post-Hearing Brief on Quantum, at paragraph 39.
648. Claimants assert that LECG's DCF model takes into account EDEMSA's performance including the penalties applied against it, as well as the effects of the financial crisis. Consequently, LECG calculates a 29.4 per cent drop in equity for EDEMSA between 1998 and 2001. See Claimants' Quantum Opening, Slides 2-15. Such decrease would not have been made if, as asserted by Respondent, the LECG model sought to maintain a

⁶⁰ See Articles 2 and 3 of Decree No. 901 of 16 June 1998, Claimants' Exhibit C-13 ("The official valuation for . . . 51% of [EDEMSA's] capital stock . . . is established to be AR\$122,197,000. Accordingly . . . no price offer shall be admitted that is lower than 70% of the official valuation, that is to say, AR\$85,587,900"); see also Claimants' Quantum Opening, Slide 6.

value that was equal to the price paid. According to Claimants, this percentage figure is comparable to the average decrease in value of analogous regulated companies on Argentina's stock market. See LECG Supplementary Report of 30 April 2009, at paragraph 134, Graph IX.

649. Claimants further argue that LECG's calculation of EDEMSA's equity value as of December 2001 is consistent with EDEMSA's financials, which were showing an increase in profitability. In support of their view, Claimants advance the Fitch credit rating that EDEMSA received as late as 27 December 2001, as well as Standard & Poor's as of 17 December 2001. This matter is further discussed below in connection with Claimants' response to Respondent's DCF method.
650. Contrary to Respondent's position that Claimants significantly overpaid for the EDEMSA shares, Claimants argue that no reasonable investor would have overbid given the terms of the applicable regulatory regime. This is so because the regulatory system established immutable tariffs for the first five years, with a tariff review at the end of such term and every five years thereafter. Accordingly, for the first five years, the investor was to receive no return at all on any amount that it may have overbid.
651. In this connection, Claimants argue that the investment would depreciate over the course of the fixed term and thus the amount depreciated would not be accounted for during the five-year tariff review.
652. Moreover, Claimants assert that investors would not have calculated the amount of their bid based on a possibility of future tariff increases to cover the amount of the bid. See Claimants' Post-Hearing Brief on Quantum, at paragraph 39.
653. Thus, Claimants' position is that no rational investor would have overbid knowing it would be subject to the five-year time lag before any tariff increase, at which point the asset would have depreciated. Claimants seek further support of their views from the conclusions rendered by the Argentine electricity regulators in a final decision involving a tariff review of the Argentine electricity transportation company called TRANSENER. Claimants' Post-Hearing Brief on the Merits, at paragraph 191. According to Claimants,

the regulators explicitly rejected this sort of circularity argument in their decision. See Claimants' Post-Hearing Brief on Quantum, at paragraph 39.

654. In addition, Claimants contests Respondent's argument that alleged overbidding was due to anticipation of synergies, asserting that there had been nothing in the record suggesting the existence of any synergies. In particular, Claimants underscore the fact that more than 99% of EDEMSA's activities were regulated ones, which inherently limits the scope of any potential synergies to almost nothing. In support, Claimants advance the testimony of Mr. Patrick Blandin, who had been the architect of the EDF bid. During the merits hearing, Mr. Blandin had testified that Claimants' bid for EDEMSA contemplated absolutely no amount for synergies. See Hearing Transcript of 2 November 2009, at 1027:7-12 (English) (Blandin); see also Hearing Transcript of 2 November 2009, at 1025:14-1026:2 (English) (Blandin). Moreover, Claimants advance that during the merits hearing, even Argentina's own experts initially admitted that the fair market value of Claimants' shares in EDEMSA was the price paid. See Hearing Transcript of 6 November 2009, at 2537:2-6 (English) (Bello).
655. In sum, Claimants assert that nothing in the bidding process or the regulatory framework purported to limit the investor's return on the EDEMSA investment to the official valuation amount. Rather, Claimants had a reasonable expectation that they would receive a return on their full investment. Moreover, there is no basis whatsoever to assume that Claimants overbid, whether due to expected synergies or for any other reason. In Claimants' view, the fact that other sophisticated investors bid similar amounts, which were also significantly in excess of the official valuation amount, confirms that the amount of Claimants' bid was reasonable.

(2) Claimants' View of MBG' Models

656. With respect to the models submitted by Respondent's Experts, Claimants point to three aspects which it finds to be fundamentally flawed. Claimants' Post-Hearing Brief on Quantum, at paragraph 5.

(a) EDEMSA Did Not Benefit From the Emergency Measures

657. Claimants critique the models presented by Messrs. Molina, Bello and González (MBG), experts testifying at the request of Respondent. Claimants challenge what they see as an illogical conclusion that EDEMSA somehow benefitted from the Emergency Measures. Claimants' Post-Hearing Brief on Quantum, at paragraph 4.
658. In support of their view, Claimants underscore the fact that almost all of EDEMSA's revenue came from tariffs while the impact of the Emergency Measures was to decrease the revenue of EDEMSA in dollar terms by 66%. Contrary to Respondent's assertion, the tariff levels assumed in LECG's model would have neither triggered a radical drop in the demand for electricity nor significantly increased theft and uncollectables. Claimants' Post-Hearing Brief on Quantum, at paragraph 5. As indicated by Claimants' quantum expert, Dr. Manuel A. Abdala of LECG, even a large increase in tariffs in absolute terms would have had less of an actual impact on consumers because wholesale costs increased 118% as a result of inflation during the relevant time period. See Hearing Transcript of 14 February 2011, at 192:8 – 193:17 (English) (Abdala)⁶¹. Moreover, as explained by Professor Pablo T. Spiller of LECG, the tariff increase would have affected only the DAV portion of the tariff, making the overall increase in tariffs a much lower percentage than that asserted by Respondent. See Hearing Transcript of 14 February 2011, at 337:11 – 338:4 (English) (Spiller). According to Professor Spiller, the increase felt by consumers would have been only 30% in real terms. See Hearing Transcript of 14 February 2011, at 339:8 – 14 (English) (Spiller). The effect of the tariff increase would have been further muted by the fact that electricity is a necessity good and thus has low demand elasticity. See Hearing Transcript of 14 February 2011, at 338:16 – 339:2 (English) (Spiller). Professor Spiller further posits that it is unrealistic to assume the occurrence of theft and uncollectables by every residential user, let alone business entities.

⁶¹ The Tribunal notes that the transcript incorrectly states that wholesale inflation was 180% rather than the correct figure, 118%.

(b) EDEMSA's Value as of 31 December 2001

659. According to Claimants, the MBG models are also flawed in that their calculation of zero value for EDEMSA in November and December 2001 is entirely at odds with common sense and the reality of the circumstances. Rather, as evidenced by the reports of credit rating agencies, EDEMSA's equity was not worthless as of December 2001. Claimants' Post-Hearing Brief on Quantum, at paragraph 6-7.
660. In particular, in late December 2001, Standard & Poor and Fitch gave EDEMSA BBB+ and A- ratings, respectively, which supports the conclusion that EDEMSA had firm capacity to repay its debts. According to Claimants, Respondent admitted at the 2009 hearings on the merits that Fitch's credit rating reports described EDEMSA as a company with "conservative" debt and increasing profitability. See Claimants' Post-Hearing Brief on Quantum, at paragraph 7-8 (citing to Hearing Transcript of 6 November 2009, at 2614:18 – 2615:18 (English) (Molina); Hearing Transcript of 6 November 2009, at 2627:10-15 (English) (Molina); Hearing Transcript of 6 November 2009, at 2563:12 – 19 (English) (Bello)). In Claimants' view, these reports indicate that one of the key components of EDEMSA's high ratings was the guaranteed cash flows it received as part of the Concession Agreement.
661. In contrast, Fitch's April 2002 report, which followed after the enactment of the Emergency Measures, no longer listed "flujo de fondos estables" (translated in English as "stable cash flow") as one of EDEMSA's strengths. Accordingly, EDEMSA's ratings were dropped to a CCC. Claimants' Post-Hearing Brief on Quantum, at paragraph 8.
662. Claimants proceed to address Respondent's argument about the significance of EDEMSA's A- rating by Fitch. Claimants' Post-Hearing Brief on Quantum, at paragraph 8-14.
663. According to Claimants, Respondent cannot seek support from the fact that Fitch provided high ratings even for other companies which later defaulted on their obligations. Not all of the companies listed by Respondent received a high rating from Fitch, whose valuations in fact ranged from AAA to D. Like EDEMSA, the regulated companies received high scores while some unregulated companies received extremely low ratings

in the period just before the Emergency Measures. In Claimants' view, the fact that these regulated companies defaulted on their debt would not be surprising at all if such companies, like EDEMSA, had assumed debt in U.S. dollars while receiving guarantee of payment also in dollars. This is because the pesification and freeze of the tariffs would have eliminated such assurance, thereby rendering it onerous to meet financial obligations.

664. With respect to Respondent's argument that the Fitch reports were merely domestic ratings so as to exclude consideration of macroeconomic changes, Claimants respond by underscoring the language of the 27 December 2001 Fitch report, which explicitly recognizes "the uncertainty of the macroeconomic context" contributing to EDEMSA's decrease in rating from A to A-. See Fitch Ratings Report (27 December 2001), Exhibit C263, at page 1. In further support, Claimants highlight the fact that the Argentina's quantum expert admitted in his later testimony that Fitch had taken macroeconomic conditions into account when rating EDEMSA. Claimants' Post-Hearing Brief on Quantum, at paragraph 11 (citing to Hearing Transcript of 14 February 2011, at 248:4 – 7 (English) (Molina)).
665. Although recognizing that the Standard & Poor rating as of December 2001 was lower than Fitch's, Claimants clarify that the former's rating was merely one ranking below, BBB+, which meant that EDEMSA had an "adequate financial risk profile." See Claimants' Post-Hearing Brief on Quantum, at paragraph 13 (citing to S&P rates Corp Banca bonds BBB+). In Claimants' view, ratings of either A- or BBB+ are incompatible with Respondent's assertions that EDEMSA's equity was zero at the end of December 2001.
666. Claimants further argue that, in any event, Respondent has failed to advance evidence of any international rating of EDEMSA that would undercut Fitch's analysis of EDEMSA's capacity to provide payment of principal and interest on its obligations. See Fitch Ratings Report (27 December 2001), Exhibit C263, at page 1.
667. Claimants further underscore the inconsistency of Respondent's position with respect to its valuation for November and December 2001. Although MBG testified in the merits

hearing that EDEMSA had experienced a significant drop in equity value between the end of November and the end of December 2001, their most recent calculations reflect no such decrease. Claimants' Post-Hearing Brief on Quantum, at paragraph 14. At the merits hearing, MBG testified that the early part of December and later part of said month were "very, very different" for purposes of valuation⁶², positing that EDEMSA's equity value was "probably . . . not 0 as of the 1st of December"⁶³ In contrast, MBG's recent submission takes a different position that EDEMSA's equity between November and December 2001 showed no decrease at all, rather asserting that the value as of each month was zero.⁶⁴

668. For the reasons stated above, Claimants conclude that the value of EDEMSA as of 31 December 2001 could not have been zero.

(c) Further Inconsistencies in Respondent's Methodology

669. The unreliability of the MBG models is further highlighted by the fact that said experts of Respondent abandoned their earlier model submitted during the merits phase of this proceeding. Claimants' Post-Hearing Brief on Quantum, at paragraph 15. The quantum phase model submitted thereafter by the same experts is inconsistent with the prior model in that key figures have been modified, including a 77% decrease in firm value; increase in the country risk premium by 3% (from 7% to 10%); and the addition of an EBITDA/sales cap, which is further discussed below in relation to the Respondent's SSB model.
670. In addition, a lack of methodological rigor by Respondent's experts is further exposed from the fact that Argentina's experts failed to take into account the investor's reasonable rate of return assured in Article 43 of the Provincial Electricity Law. Claimants' Post-Hearing Brief on Quantum, at paragraph 6.

⁶² Claimants cite to Hearing Transcript of 6 November 2009, at 2590:11 – 18 (English) (Bello).

⁶³ Claimants cite to Transcript of 6 November 2009, at 260:1 – 2 (English) (Bello).

⁶⁴ Claimants cite to MBG's Supplement Expert Report on Quantum, at paragraph 17.

671. Claimants seek to undermine Respondent's justification that the abovementioned calculation changes were implemented in accordance with the Tribunal's instructions. In Claimants' view, nothing in the Tribunal's instructions required a radical change in the valuation of EDEMSA as of 31 December 2001. Rather, the Tribunal simply requested that Argentina's experts explain what they had done in their previous model. See Claimants' Post-Hearing Brief on Quantum, at paragraph 17 (citing to the Tribunal's letter of 9 July 2010). Moreover, Claimants underscore that Argentina's experts have failed to advance any principled reason for their willingness to abandon the assumptions and results calculated in the merits phase.
672. In this connection, Claimants reiterate that the MBG models are wrong to assume that Claimants were entitled to a return only on the official valuation amount (Claimants' share being US\$ 107 million), rather than the amount of their actual investment (US\$ 209 million), which was approximately US\$ 100 million higher than the former figure. Claimants' Post-Hearing Brief on Quantum, at paragraph 3. Claimants highlight the fact that several sophisticated multinational companies bid far in excess of the valuation amount and that Argentina has failed to offer explanation as to why investors would have been willing to do that if the return on their investment would be limited to the official valuation amount. In Claimants' view, such restriction would have rendered it impossible for the investor to earn a return on its overall investment, and thus no rational investor would have done so.
673. Accordingly, Claimants request that the Tribunal completely disregard the MBG models as their underlying methods lack soundness. Claimants' Post-Hearing Brief on Quantum, at paragraph 15.

(3) Claimants' View of Salomon Smith Barney and Chase Manhattan ("SSB") Model

674. Claimants assert that the SSB model submitted by Respondent's experts is also unreliable for several reasons. See Claimants' Post-Hearing Brief on Quantum of 11 March 2011, at paragraph 20.

675. First, Claimants argue that, like Respondent's DCF calculations submitted by MBG, the SSB model fails to take into consideration whether an investor has earned a reasonable rate of return on its investment. See Claimants' Post-Hearing Brief on Quantum, at paragraph 20. Rather, the SSB model assumes that the initial 1998 tariff level would be kept constant in real terms throughout the whole life of the concession, with only two sources of adjustments, neither of which is based on the requirement to grant the investor the opportunity to obtain a reasonable rate of return on investment. See LECG's Report of September 2010, at paragraph 34.
676. In this connection, LECG finds the SSB model to operate by assuming that there would be an average annual tariff reduction of 0.12% per year, which is related to an efficiency factor. Although conceding that this is an accepted feature of price-cap regimes, LECG asserts that the SSB model does not explain how the magnitude of the expected efficiency gain is computed. See LECG's Report of September 2010, at paragraph 35.
677. Second, Claimants assert that the SSB model's inclusion of an ad hoc 25 percent EBITDA/sales cap is neither explained nor justified by Respondent's experts. See Claimants' Post-Hearing Brief on Quantum, at paragraph 21. Under this 25% EBITDA/sales cap, if at given tariff level the EBITDA exceeds 25% of revenues, a tariff reduction in real terms is implemented that year so that the resulting EBITDA would not exceed 25% of the adjusted revenues.
678. Advancing Professor Spiller's testimony made during the quantum hearings, Claimants argue that there is no basis for the EBITDA/sales cap. Although EPRE possessed authority to change tariffs in the event investor's profits were to become too high or otherwise unfair, the regulatory system did not allow the regulator simply to ignore Article 43 of the Provincial Electricity Law. See Hearing Transcript of 14 February 2011, at 127:11-129:3 (English) (Spiller) and 160:12-161:9 (English) (Spiller).
679. As explained by Professor Spiller, an EBITDA/sales ratio has nothing to do with determining whether an investor has received a fair rate of return. See Claimants' Post-Hearing Brief on Quantum, at paragraph 22. The EBITDA is basically sales less operating costs, so the higher the latter value, lower the EBITDA. See LECG Report of

April 2009, at paragraph 176, Table XI. Accordingly, companies with high operating costs would have a low EBITDA/sales ratio and vice versa.

680. In this connection, Claimants underscore that the changes in the cost of wholesale electricity, which was designed in the regulatory system to be entirely a pass-through to the consumer, could affect the EBITDA and therefore the EBITDA/sales ratio. See Claimants' Post-Hearing Brief on Quantum, at paragraph 23.
681. Claimants argue that Argentina's experts have failed to advance evidence of any instances in which the Argentine electricity regulator has used an EBITDA/sales cap. See Claimants' Post-Hearing Brief on Quantum, at paragraph 21. What is more, the 25 per cent figure is completely arbitrary and Respondent has failed to advance any justification for why the experts picked this particular percentage.
682. In further support, Claimants highlight the fact that Argentina's model of 29 January 1998, which purported to be the basis of the SSB model, did not contain an EBITDA/sales cap. See Claimants' Post-Hearing Brief on Quantum, at paragraph 26. Moreover, line 398 of the tab "Model" of that January 1998 model contains a line called "EBITDA/ingresos," which represents the EBITDA/sales ratio for each year of EDEMSA's operation. Importantly, 18 out of the 30 years of the concession assume a ratio of over 25%. For these reasons, Claimants assert that the cap was clearly not contemplated in the regulatory framework.
683. Claimants advance that, conceptually, the distributor's profit should be a percentage of the assets, rather than being linked to revenues. See Claimants' Post-Hearing Brief on Quantum, at paragraph 25.
684. Third, Claimants state additional reasons why they find MBG's SSB model unreliable.
685. As admitted at the quantum hearings, MBG had ignored the demand growth assumptions of the original SSB model and rather used the demand assumptions from their own DCF model. See Hearing Transcript of 14 February 2011, at page 253, lines 14-22 (English) (Bello); see also MBG Cross-Examination Slides 23-25. This in effect significantly decreased EDEMSA's value under MBG's SSB model because the demand growth

assumptions that MBG imported were slightly more than half of the growth assumed in the original SSB model.

686. According to Claimants, the unreliability of MBG's SSB model is further elucidated by MBG's admission that certain nominal terms from the original SSB model was directly imported into MBG's version, which was stated in real terms. See Claimants' Post-Hearing Brief on Quantum, at paragraph 29.
687. Claimants thus request that, regardless of the model adopted, the Tribunal decline to include in such model a feature fundamentally at odds with the relevant regulatory framework, which formed part of Claimants' legitimate expectations and were embodied in the applicable law. See Claimants' Post-Hearing Brief on Quantum, at paragraph 27.
688. In the event the Tribunal was inclined to rely on the SSB model, Claimants request that it use LECG's version, which excludes consideration of the EBITDA/sales ratio.

(4) Net Equity Analysis and Book Value Approach

689. Claimants' experts from LECG interpret the Tribunal's letters of 9 July 2010 and 4 August 2010 to request from the Parties a net equity analysis based on a book value approach. See LECG's Report of September 2010, at paragraph 4. The book value approach accounts for the value of the firm's assets, liabilities and equity as they are reflected in its accounting books.
690. LECG recognizes that this approach has the advantage of being objective, in the sense that it is based on accounting principles and proven figures. See LECG's Report of September 2010, at paragraph 5. When using the book value as an approximation of the fair market value of a company, however, LECG questions its reliability as an indicator of the actual value of investment that can be recovered through future cash flows. See LECG's Report of September 2010, at paragraph 6. This is because book-value figures may not provide a proper representation of fair market value given that intangible assets, such as patents and brands, might not be registered in the books. More importantly, LECG avers that the book value approach fails to reflect expectations about the company's future value generation capabilities from the commercial use of its assets.

Thus, Claimants' position is that the book value approach is not preferable when fair market value can be reasonably assessed through other methods, such as projections of expected cash flows. See LECG's Report of September 2010, at paragraph 6.

691. In particular, the book value of assets, following the Emergency Measures, fails to reflect the impact of the tariff pesification on the company's capability to generate cash flow, given that the regulated companies were not required to account for this effect. Specifically, LECG advances that, following the Emergency Measures, the depressed level of the DAV component of the tariffs eroded any possibility for EDEMSA to generate profits, a feature that would not have been captured in the books unless the company had voluntarily chosen to perform a write-off or an accounting impairment, which EDEMSA had not done as of January 2002 or January 2005. Consequently, LECG computation of damages under the book value approach was based on the market's expectations about the company's future stream of cash flows, resulting in an equity value of zero.
692. Similarly, the book value of debt may also fail to reflect its fair market value in that, if following the tariff pesification the company's ability to generate cash flow was insufficient to cover debt obligations, then the fair market value of the debt would have been below its book value.
693. LECG further highlights the presence of a large devaluation in proximity of the requested valuation dates, thereby finding that the book value of assets and liabilities will have drastic distortions with respect to their fair market values. See LECG's Report of September 2010, at paragraph 7.
694. Claimants underscore that, at the quantum hearings, both side's experts found the implementation of the book value approach to yield critical distortions. Claimants thus request that the Tribunal find such method inappropriate as the basis for calculating Claimants' damages. See Claimants' Post-Hearing Brief on Quantum, at paragraph 31.

695. In any event, Claimants have submitted LECG's calculation of the book value of equity at the four valuation dates requested by the Tribunal, using information from EDEMSA's financial statements. See LECG's Report of September 2010, at paragraphs 9-13.
696. The 31 December 2001 valuation had been directly extracted from EDEMSA's 31 December 2001 financial statement, which has recorded a total equity value of US\$ 426,327,595. Accordingly, LECG calculates the equity value of Claimants' investment to be US\$ 191,335,825.
697. With respect to the other valuation dates (30 November 2001, 31 January 2002 and 31 January 2005), LECG advances that they cannot be derived directly from EDEMSA's financial statements, which are reported on a quarterly basis. As such, the closing dates for the relevant period were on 31 March, 30 June, and 30 September. The annual close was on 31 December.
698. Given that the November and January dates do not exactly tally with any of the closing dates of EDEMSA's quarterly or annual financial statements, LECG has proceeded to adopt the following methodology.
699. To assess book value as of 30 November 2001, LECG looked to the corresponding book values of equity from the 30 September 2001 and 31 December 2001 financial statements. Given that the figures for both months were similar, LECG calculated the book value of equity as of 30 November 2001 by using a linear trend between the three months.
700. Similarly, the book value of equity as of 31 January 2005 was calculated by using a linear trend from the information based on EDEMSA's 31 December 2004 and 31 March 2005 financial statements.
701. For the valuation date of 31 January 2002, LECG found the linear trend approach not applicable given the large currency devaluation that took place in January 2002, which would not yet be reflected in the December 2001 financial statements. Accordingly, LECG used the value in Argentine pesos as observed in EDEMSA's financial statement of 31 March 2002, finding this report to be the best approximation as to what the book

value of equity might have been as of January 2002. LECG had then converted such figure to US dollars at the foreign exchange parity observed as of 31 January 2002.

b) Claimants' Calculation

702. As discussed in detail above, Claimants request that the Tribunal rely on LECG's DCF method.
703. LECG calculates Claimants' damages by taking the difference in the value of Claimants' stake in EDEMSA as shareholder under the "but-for" and the "actual" scenarios. See LECG Report of April 2005, at paragraph 126.
704. Following the Tribunal's determination on the appropriate model, Claimants advance the following methodology in calculating Claimants' damages: (i) apply the but-for scenario from the relevant model; (ii) choose the date of valuation; (iii) subtract from the valuation the amount received by Claimants as a result of the sale of their shares in EDEMSA in 2005, expressed in dollars as of the chosen date of valuation; (iv) add those damages concerning the Pre-Emergency Measures affecting the Concession (which Claimants refer to as "historical damages"); and (v) add interest to account for the time value of money between the valuation date and the date of payment.

(1) Valuation Date and Amount

705. Claimants request that the Tribunal use 31 December 2001 to determine the value of Claimants' shares immediately before the Emergency Measures. See Claimants' Post-Hearing Brief on Quantum, at paragraph 45.
706. With respect to LECG's DCF calculations, Claimants assert that LECG's method takes the purchase price of EDEMSA's shares only as a starting point. The 2001 regulatory asset base is calculated taking the purchase price and adding the investments (net of depreciation) of the 1998-2001 period, as well as the 2001 stock of working capital. See Claimants' Post-Hearing Reply on the Merits, at paragraph 72.
707. LECG calculates EDEMSA's firm value by taking into account this asset base as well as the market risks faced by the concessionaire, including diminution in value of the shares

as a result of the Argentina recession. LECG's DCF calculations yield a firm value of US\$ 448,855,587 as of 31 December 2001.

708. To determine the value to all shareholders, LECG subtracts EDEMSEA's financial debt as of 31 December 2001 from the firm value. LECG uses the book value of the financial debt as of 31 December 2001, which totals US\$ 119,644,020. See LECG Supplementary Report on Quantum, at paragraph 24, Table II.
709. Thus, LECG has calculated EDEMSEA's equity value at US\$ 329.211,567 million as of 31 December 2001. Accordingly, based on their 44.8% interest in EDEMSEA, Claimants' value in EDEMSEA equals US\$147.8 million, equivalent to AR\$ 147.8 million in 2001. See LECG's Report of 15 November 2010, Appendix D, at Table VI.
710. Alternatively, Claimants suggest that the Tribunal use the amount offered by the second highest bidder for the EDEMSEA's shares. When comporting to such assumption, LECG's calculations yield an equity value of US \$125.2 million as of 31 December 2001. See Claimants' Post-Hearing Brief on Quantum, at paragraph 46.

(2) EDEMSEA's Value Following the Emergency Measures and the 2005 Sales Price of Claimants' Shares

711. Claimants assert that the residual value of their investment is equal to the sales price as of 2005. As established in Article 3.1 of the Stock Purchase Agreement of 30 June 2004, the price had been US\$2 million.
712. Claimants advance that there is no evidence contradicting Claimants' position that the actual sale price of US\$ 2 million was the fair market value of EDEMSEA at the time. See Claimants' Post-Hearing Brief on Quantum, at paragraph 48. In this connection, Claimants take the position that subsequent tariff increases should have no bearing on assessment of the market price at the time of the sale because no such increase had yet been materialized, with no prospect in the foreseeable future.
713. Specifically, Claimants assert that the announcement made by the Province in February 2005 is irrelevant. This is because there was no basis to believe that the announced tariff increase would actually take effect in that it was simply made by the executive branch

and thus subject to further approval by the provincial parliament. Furthermore, at that point, the sale contract had already been signed by EDEMSA in June 2004. Alternatively, Claimants advance that even if the tariff increase of 38.05%, which had finally been approved in 2006, had been taken into account, LECG's calculations would still show that EDEMSA's valuation was zero.

714. Accordingly, Claimants request that the Tribunal subtract from the valuation amount (US\$ 147.8 million) the sales price as discounted as of 31 December 2001 (US\$ 1.3 million). See Claimants' Post-Hearing Brief on Quantum, at paragraph 47.

(3) Pre-Emergency (Historic) Damages

715. Besides the damages caused by the Emergency Measures, Claimants assert that additional injury resulted from other provincial actions implemented in relation to the Pre-Emergency Measures affecting the Concession. See Claimants' Memorial, at paragraph 478. In this regard, Claimants seek recovery with respect to five sets of measures, which have been quantified by LECG.

716. With respect to those five categories, Claimants initially calculated a total of US \$ 8,058,161 as of December 2001. This amount has been updated to a total amount of US\$ 7,202,196 million.⁶⁵

717. Accordingly, Claimants request that the Tribunal add historic damages of US\$ 7.2 million to the net value calculated above (i.e., \$147.8 million less \$1.3 million). As a result, Claimants' calculations yield a total amount of US \$153.6 million as of December 2001.

(4) Interest

718. Claimants request that the Tribunal add interest to the damages calculated above (US \$ 153.6 million). See Claimants' Post-Hearing Brief on Quantum, at paragraph 55.

⁶⁵ See Claimants' Closing Statement, Table VII, at page 3; see also Hearing Transcript of 6 November 2009, at 2359:12-18 (English) (Spiller) ("We detect a couple of small errors in the historical damage section that correcting for these errors reduces the historical damages by \$307,920 as of 31 December 2001. So our prior assessment of historical damages that were \$7.5 million, are now \$7.2 million").

719. According to Claimants, both side's experts agree that the applicable interest rate for the relevant period after 2005 should be the U.S. risk-free rate.
720. With respect to the 2001-2005 period, Claimants contend that the applicable interest rate should be the WACC because this rate is equivalent to Claimants' opportunity cost for their invested amount during their operation of the concession.
721. Claimants further request that the Tribunal apply a compound interest rate. See Claimants' Post-Hearing Brief on Quantum, at paragraph 56. In support of their view, Claimants cite to several prior awards.⁶⁶ Claimants assert that both as a matter of law and economics, simple interest is not sufficient. Claimants' Reply of 30 April 2009, at paragraph 702. As one commentator has observed, "in the last 10 years tribunals have predominantly awarded compound interest." Sergey Ripinsky with Kevin Williams, DAMAGES IN INTERNATIONAL INVESTMENT LAW 384 (citation omitted). Since 2000, numerous international tribunals have awarded compound interest in investor-state disputes.⁶⁷
722. Claimants further argue that, from an economic standpoint, compound interest is necessary to compensate Claimants fully. Claimants' Reply of 30 April 2009, at paragraph 704. In this connection, Claimants advance LECG's expert opinion, positing that "[i]n the real world, all interest is compound interest." See Supplemental LECG Report of 2009, at paragraph 125. LECG elaborates that "compound interests reflect the economic reality that a dollar foregone could have otherwise been invested, and that the income on that investment could have been reinvested, so that funds grow at a compound rate." *Id.* According to Claimants, the same reasoning was applied in *Compañía del Desarrollo de Santa Elena, S.A. v. Republic of Costa Rica*, ICSID Case No. ARB/96/1, (Award, 17 February 2000), at paragraph 104.

⁶⁶ Claimants cite to *inter alia* *Compañía del Aguas del Aconquija, S.A. and Vivendi Universal, S.A. v. Argentina*, ICSID Case No. ARB/97/3, Award (20 August 2007); *Enron v. Argentina*, Award (22 May 2007).

⁶⁷ Claimants cite to *inter alia* *Semprav. Argentina*, (Award, 28 September 2007); *LG&E Energy Corp. et al. v. Argentina*, (Award, 25 July 2007); *Enron v. Argentina*, (Award, 22 May 2007); and *PSEG v. Turkey*, (Award, 19 January 2007).

723. Claimants underscore that LECG follows a relatively conservative approach in that it compounds interest annually, rather than on a semestral or quarterly basis as several past tribunals have done.⁶⁸ Claimants' Reply of 30 April 2009, at paragraph 705.
724. To fully account for the time value of money that Claimants could have put to productive uses, Claimants request that the Tribunal grant post-award interest up to the date of payment of the Award. Claimants' Reply of 30 April 2009, at paragraph 706. Particularly in light of the long delay by Argentina in honoring the award issued against it in the *CMS Gas* case, Claimants consider it appropriate for the Tribunal to order that Respondent pay post-award interest, compounded monthly until the date of payment.
725. In Claimants' view, there is ample precedent in the jurisprudence and doctrine for the application of compounding on a monthly basis, particularly in the post-award phase.⁶⁹
726. Applying LECG's calculations, Claimants request that the Tribunal award damages in the amount of US \$ 270,988,417 through 30 November 2010, plus compound interest through the date of the payment of the Award. See Claimants' Post-Hearing Brief on Quantum, at paragraph 57.

(5) Costs and Fees

727. Claimants assert that they are entitled to all costs and expenses of these proceedings, including attorneys' fees, arbitrator fees, and expenses of the Centre. In support of their position, Claimants advance several ICSID awards.⁷⁰
728. Claimants believe an award of costs is particularly appropriate in this case. Claimants assert that they experienced long delays throughout the arbitral proceeding as a result of the Respondent's vexatious litigation tactics. As an example, Claimants advance that Respondent caused long and evidently tactically-motivated delays in challenging former

⁶⁸ Claimants cite to *inter alia* *PSEG v. Turkey*, (Award, 19 January 2007); *Enron v. Argentina*, (Award, 22 May 2007); and *Sempra v. Argentina*, (Award, 28 September 2007).

⁶⁹ Claimants cite to *inter alia* *CMS Gas v. Argentina*, (Award, 12 May 2005), at paragraph 471; *Occidental Exploration v. The Republic of Ecuador*, (Award, 1 July 2004), at paragraph 471.

⁷⁰ Claimants cite to *inter alia* *AGIP Company S.p.A. v. Government of the People's Republic of the Congo*, ICSID Case No. ARB/77/1, (Award, 30 November 1979), at paragraph 115; *Southern Pacific Properties (Middle East) Ltd. v. Arab Republic of Egypt*, ICSID Case No. ARB/84/3, (Award, 20 May 1992), at paragraph 257.

Tribunal member Mr. Fernando de Trazegnies, as well as Tribunal member Ms. Gabrielle Kaufmann-Kohler. See Claimants Reply of 30 April 2009, at paragraph 707.

729. In its Reply Memorial, Claimants have stated that they will submit their full request for such costs and expenses at the close of the arbitration.

2. Respondent

a) Valuation Models

(1) MBG's DCF Method

730. Respondent states that MBG, the group formed by Federico Molina, Fabian Bello, and Daniel Gonzalez, took into account the regulatory framework established for EDEMSA. They thus include relevant variables like sales or costs, making it more accurate than the LECG report that does not account for such factors. See Respondent's Post-Hearing Brief on Quantum, at paragraph 60.
731. MBG performed valuations for the dates of 30 November 2001, 31 December 2001, 31 January 2002, and 31 January 2005. Respondent also provides information for 31 January 2010. See Report of 23 September 2010 on Issues Raised by the Tribunal at paragraph 2.
732. In the November 2001 and December 2001 valuations the main assumptions used by MBG are that the economic emergency measures were not implemented with respect to EDEMSA and that the average distribution tariff is expressed in U.S. Dollars. For the other three valuations, the main assumptions are that the economic emergency measures were adopted and are in force, and that the average distribution tariff is in Argentine Pesos. See MBG Report of September 2010, at paragraphs 42-44.
733. It is also important to note that in the November 2001 and December 2001 valuations MBG used the same baseline information and projected the variables with the same hypotheses and calculation methods. The December 2001 valuation, however, assumed a greater impact on EDEMSA's demand in 2002 in order to reflect that the economic crisis had grown. The cash flow projections for their valuations are thus different and discounted at similar discount rates. See Report on Issues Raised by the Tribunal, at paragraph 45.

734. Respondent's MBG value assumed actual macroeconomic data for the 2002-2009 period, which entails assuming conservative scenarios. The projection for the 2010-2028 period is the result of projections developed under the assumption of a stable macroeconomic situation. See Report on Issues Raised by the Tribunal, at paragraphs 25-6.
735. The valuation used by MBG is a variation of the general discounted cash flow method, known as the adjusted present value. See Report on Issues Raised by the Tribunal at paragraph 28. Under this method the value of EDEMSA's equity is calculated as the difference between the value of the business and its financial debt. See Report on Issues Raised by the Tribunal, at paragraphs 28-9.
736. Under the adjusted present value method it is assumed that the company is financed exclusively with its own equity. The present value of a company is reached by adding up two values: (i) the present value of a company's free cash flow discounted by the cost of unlevered equity, and (ii) the present value of the tax savings related to financial interest which may be deducted from the tax base for income tax discounted at the cost of unlevered equity.
737. Next, a residual/terminal value is determined for values (i) and (ii) above. This reflects the value that the company's shareholders would obtain at the end of the concession. This value is calculated through a perpetuity at the cost of unlevered equity on each of the cash flows for 2028. See Report on Issues Raised by the Tribunal at, paragraph 31.
738. Finally, the sum of values (i) and (ii) is the value of the business. See Report on Issues Raised by the Tribunal, at paragraph 32.
739. It is also important to note that the MBG report uses projections based on the information in EDEMSA's latest financial statements for each year. The November 2001 valuation, the December 2001 valuation, and the 2002 valuation are based on EDEMSA's financial statements for 31 December 2001, and the 2005 and 2010 valuations are based on EDEMSA's financial statements as of 31 December 2004 and 2009. See Report on Issues Raised by the Tribunal, at paragraphs 35-6.

740. In addition, the MBG reports avers that using the company's latest available information to project its main variables helps to achieve more accuracy, and better reflects the situation of the company as of the valuation date. See Report on Issues Raised by the Tribunal, at paragraph 37.
741. Respondent describes the main assumptions used by LECG and MBG within their evaluations of EDEMSA's and Claimants' assets and equity for 30 November 2001, 31 December 2001, 31 January 2002, and 31 January 2005. See Respondent's Post Hearing Brief on Quantum, at paragraphs 58-9.

(a) General Assumptions Made in MBG's Valuations

742. Respondent asserts that MBG's report in regards to the counterfactual valuations for 30 November 2001 and 31 December 2001 takes into account EDEMSA's regulatory framework, whereas LECG's valuations instead places the value of the company as practically equivalent to the tariff base, which means that relevant variables like sales and costs have no impact on the results they obtain. See Respondent's Post Hearing Brief on Quantum, at paragraph 60.
743. The next general characteristic of the valuations is that MBG's actual valuations for 31 January 2002 and 31 January 2005 factor in the pesification, but assumes increases in the DAV, making it more accurate. LECG's valuations, however, assumes initial tariffs in Argentine Pesos that remain frozen until 2005. See Respondent's Post-Hearing Brief on Quantum, at paragraph 61.
744. In regards to the cost of energy assumed by the valuations, Respondent states that the MBG model uses a mean tariff for energy purchases, the quotient between the amount of money paid by the company to purchase energy and the volume of energy purchased each year. This mean tariff is adjusted differently in valuations before and after the emergency economic measures. See Respondent's Post-Hearing Brief on Quantum, at paragraph 64. In order to calculate the cost of energy, the volume of energy purchased is then multiplied by the mean tariff for energy purchases. LECG, however, uses spot prices until 2004 and its dispatch model from 2005 to 2011, and then from 2012 onwards they adjust it on the

- basis of the Argentine CPI. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 65-6.
745. Respondent notes that in assumptions about operating, administration, and commercialization costs, the MBG report uses a polynomial formula that seeks to reflect the actual evolution of the company's costs to adjust the operating, administration and commercialization costs. These use different weighing factors for each valuation, and for the evolution of the Domestic Wholesale Price Index ("IPIM"), the salary variation coefficient, and the Peso/Dollar exchange rate. See Respondent's Post-Hearing Brief on Quantum, at paragraph 67.
746. Also, MBG's model projects that annual investments in fixed assets will equal 4% of existing fixed assets, minus all accumulated depreciation. When the company does not have enough funds available to invest this much, MBG's model assumes that the company will invest at least 1/3 of projected assets (which is equal to 4% of existing fixed assets minus all accumulated depreciation) and pay the rest the next period. By contrast, LECG's model assumes the same adjustment in all valuations, both before and after the Emergency Measures. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 69-70.
747. Assumptions regarding tariff rates change depending on the valuation date, especially depending on whether the valuation was performed before or after the emergency measures. See Respondent's Post-Hearing Brief on Quantum, at paragraph 71.
748. For the efficiency factor assumptions, Respondent asserts that its MBG report adjusts EDEMSA's annual revenues based on a 0.5% efficiency factor per annum, which shows the productivity improvements. Respondent also states that in international regulatory practice, that as an efficiency factor is usually applied tariffs are reduced and the company thus becomes more efficient. This also lowers the value of the company. Such a method is superior to LECG's model which does not take into account the efficiency factor. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 73-7.

749. In addition, the MBG model uses an EBITDA/sales ratio cap of 25% per annum. This means that the DAV increases arising from annual and five-year adjustments in the years between tariff reviews have a maximum limit that is then triggered when the EBITDA/sales margin reaches 25% per year. The assumption is that if the margin was above such, then the company would be generating excess cash flows, leading to a review process that would reduce tariffs. Respondent's Post-Hearing Brief on Quantum, at paragraph 78. Their model is logical in that it takes into account the reduction in revenues in Dollars due to the economic crisis. See Respondent's Post-Hearing Brief on Quantum, at paragraph 80. In addition, this model is in accordance with the provincial regulatory framework and the Concession Agreement. See Report on Issues Raised by the Tribunal at paragraph 34.
750. Finally, in regards to the financial debt, Respondent states that MBG uses the nominal value of the debt. However, when the company's value is lower, the value of the debt is equal to the value of the company in the valuation. See Respondent's Post-Hearing Brief on Quantum, at paragraph 81.

(b) DAV Rates

751. Respondent states that in order to simplify the valuations, the MBG model sets a mean tariff for energy sales. The initial DAV is calculated as the difference between the "mean tariff for energy sales" (the quotient between the amount represented by energy sales and the volume of energy sold each year) and the annual "mean tariff for energy purchases" (quotient between the amount represented by energy purchases and the volume of energy purchased each year). See Report on Issues Raised by the Tribunal, at paragraphs 46-51.
752. The MBG report assumes that the variance in the price of energy EDEMSA purchases is directly reflected in the sale price of energy, as provided for in the regulatory framework. See Report on Issues Raised by the Tribunal, at paragraph 52.
753. In addition, the MBG report assumes that as a result of the economic crisis the rate increase in Argentine Pesos causes a reduction in the volume of energy EDEMSA sells, an increase in energy theft, and higher levels of uncollectibility. Furthermore, between November and December of 2001 different estimations on demand, uncollectibility and

- non-technical losses are assumed because of the economic crisis. See Report on Issues Raised by the Tribunal, at paragraphs 53-5.
754. Therefore, due to the crisis, the MBG report assumes that the sharp rate increase leads to an 8% reduction in demand, an 8% rate of uncollectibles, and incremental non-technical losses of 15% during 2002. The December 2001 valuation, however, assumes that the rate increases caused a 10% reduction in demand, a 10% rate of uncollectibles, and incremental non-technical losses of 20% during 2002. See Report on Issues Raised by the Tribunal, at paragraphs 56-7.
755. Respondent's MBG report asserts that it is reasonable to assume that the Provincial Electricity Regulatory Entity of Mendoza would correct rates and reduce them as part of a tariff review. This is because of the sharp tariff increase in terms of the Argentine Pesos in 2002, the fact that only a small portion of EDEMSA's expenses are adjusted as per the fluctuations of the U.S. dollar, and that most of EDEMSA's expenses followed the behavior of local currency. See Report on Issues Raised by the Tribunal, at paragraph 61.
756. On account of such, Respondent's MBG report assumes an extraordinary tariff review for 2002 in accordance with the provisions of the regulatory framework. Also, it is assumed that after the reduction of the DAV and the recovery of demand, the uncollectibility issues and the non-technical losses were corrected. See Report on Issues Raised by the Tribunal, at paragraph 62. Therefore, both valuations estimate demand increased by 5% in 2003 and later increased at progressively lower rates, so that in the least years of the concession the annual growth rate was 2%. See Report on Issues Raised by the Tribunal, at paragraph 64.
757. In this connection, the projections for non-technical losses are put at 10% in 2003 and 5% in 2004, and then no longer considered, and the projections for uncollectibles are placed at 5% in 2003 and 2.5% in 2004, and no longer considered from 2005 on. See Report on Issues Raised by the Tribunal, at paragraphs 65-6.
758. The 2002 valuations assume that in 2002 and 2003 EDEMSA's DAV in Argentine Pesos is the same as late 2001, and is translated into U.S. dollars. See Report on Issues Raised

- by the Tribunal, at paragraph 67. Also, the report considers that from 2004 tariffs increase consistently with domestic inflation, so that 20% annual temporary increases of the DAV are assumed from 2004 to the end of 2008. See Report on Issues Raised by the Tribunal, at paragraph 68.
759. The first five-year tariff review is considered in early 2009, and it is assumed that EDEMSA's DAV is constant from 2001 to late 2003 in Argentine Pesos, which means that a 6% annual increase in demand is assumed between 2002 and 2004, and that, as from 2005, those increases stabilize at 3.5%. See Report on Issues Raised by the Tribunal, at paragraphs 70-2.
760. Then, in 2005 EDEMSA's DAV increased by 38.05%, as announced by EPRE in 2004. In 2006 and 2008, the MBG report assumes 20% annual DAV increases. See Report on Issues Raised by the Tribunal, at paragraphs 74-5.
761. Respondent's MBG report also states that it assumes EDEMSA's demand increases from 2005 until it stabilizes with annual increments of 2%. See Report on Issues Raised by the Tribunal, at paragraph 78.
762. In addition, the MBG report also assumed that the accounting information for 2009 incorporates the adjusted revenues and costs as are relevant at the end of the agreement renegotiation process, as well an increase in EDEMSA's DAV from 2010-13 due to inflation, and a tariff review in 2014. See Report on Issues Raised by the Tribunal, at paragraphs 80-3.
763. In regards to the DAV adjustments for each five-year tariff review, a polynomial formula is used to reflect the evolution of the company's costs. Three different indices are used to reflect this evolution: the Salary Variation Coefficient ("CVS"), the IPIM, and fluctuations in the nominal exchange rate ("TCN"). See Report on Issues Raised by the Tribunal, at paragraphs 87-8.
764. In this connection, the cost categories used to make the valuations are operating costs, administration and commercialization costs, and labor costs. These are then adjusted in

proportion to the CVS, IPIM, and fluctuations of the TCN, in accordance with actual behavior. See Report on Issues Raised by the Tribunal, at paragraphs 89-91.

765. The MBG further reports that the DAV is subject to an EBITDA/sales limit of 25% per annum. See Report on Issues Raised by the Tribunal, at paragraphs 99-102

(c) Discount Rates

766. According to Respondent's MBG report the Advisory Consortium uses different discount rates for each of its three scenarios: 11% in the low scenario, 10% in the medium scenario, and 9% in the high scenario. See Report on Issues Raised by the Tribunal, at paragraph 164.
767. MBG asserts that in order to reflect the higher risk the Company faced in 2002 compared to the date of privatization, it is necessary to adjust the discount rates. Thus, the before and after valuations the cash flows projected are discounted at higher WACC rates. See Report on Issues Raised by the Tribunal, at paragraph 165.
768. Respondent's MBG report asserts that in order to ensure that the estimated values are both rational and consistent, regardless of the methodology used, they are calculated based on the relationship between the cost of levered and unlevered equity. See Report on Issues Raised by the Tribunal, at paragraph 211.
769. MBG's calculation method consisted of calculating the cost of unlevered equity for each of the dates the Tribunal requested, and then using such to estimate the cost of levered equity. The cost of unlevered equity is then estimated further to the CAP Model, and a risk premium is also added. See Report on Issues Raised by the Tribunal, at paragraph 213-4.
770. Since there is no local company that is comparable to EDEMSA, a bottom up technique was used. The selected companies for such were American Electric Power Co. Inc., Entergy Cop., PPL Corp., Allegheny Energy inc., Wisconsin Energy Corp., and TECI Energy Inc. See Report on Issues Raised by the Tribunal, at paragraph 216.

771. In addition, the beta coefficient was adjusted so as to evolve towards the market median over time. In addition, it was correcting so as to reflect differences in regulatory risk. See Report on Issues Raised by the Tribunal, at paragraph 218.
772. Also, the market risk premium was calculated as the differential between the market historic performance and the risk-free rate, which yielded a value of 7.6%. In this connection, the country risk was calculated for the historic premium at 7% for the post-default periods, and 10% for the default and pre-default periods. See Report on Issues Raised by the Tribunal, at paragraphs 219-20.
773. Respondent's MBG report contends that their method to calculate the cost of levered equity is appropriate because EDEMSA's excess indebtedness had a strong impact on the cost of debt. Shareholders, however, transfer losses from such potential risk to creditors in advance. In addition, since EDEMSA provided a regulated utility, illiquidity costs is not easy to determine in the medium or long term. See Report on Issues Raised by the Tribunal, at paragraph 227.

(2) Salomon Smith Barney ("SSB") Model

774. According to Respondent, in 1998 the Salmon-Chase Consortium (Salomon Smith Barney, Chase Manhattan Bank, and HaglerBailly & Esudio Q) estimated EDEMSA's value between US\$188.9 and US\$269.6 million, with a middle value of US\$224.6 million. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 1-2.
775. The consulting firm hired by Claimants, LECG LLC (Manuel A. Abdala and Pablo T. Spiller) used the same valuation method and model and estimated the EDEMSA's value between US\$263.1 and US\$314.4, with a middle value of US\$287.4 million. See Respondent's Post-Hearing Brief on Quantum, at paragraph 3.
776. Respondent suggests that given the fixed exchange rate system established by Convertibility Law No. 23928, the amounts in U.S. dollars estimated by the SSB is the same in local currency; the value on 31 January 2010, given the Peso/Dollar exchange rate of ARS 3.82 for each Dollar, means that EDEMSA's estimated middle value is

estimated by LECG at ARS 1,098 million. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 7-8.

777. Respondent also avers that in the valuations both before and after the economic emergency measures MBG adjusts the SSB's projection to reflect EDEMSA's real performance during 1999-2001. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 83-6.
778. In regards to any inconsistencies in Respondent's reports, Respondent's witness Mr. Reos states that a continuous analysis and feedback process occurred, in order to gradually improve the quality of the analysis. Thus, technical document files available that were prepared during this process might include versions with different data that have some content variations. Thus should be the case regarding and differences noted by Mr. Abdala and Mr. Spiller between the report versions delivered to the Argentine Republic to the Tribunal and the Claimants compared with the final version adopted by the Province of Mendoza for tariff charts and valuations of the company. See Supplementary Witness Statement of Cesar Hugo Reos of 10 November 2010, at paragraphs 14-5.
779. Respondent contends that their report is more accurate because LECG ignores EDEMSA's historical performance during the 1998-2001 and assumes, despite the economic crisis, that the EBITDA/sales ratio will grow more than it does in the Salomon-Chase Consortium model. See Respondent's Post-Hearing Brief on Quantum, at paragraph 87. Also, in its After scenario, LECG uses a negative average EBITDA/sales ratio, inconsistent with the positive return EDEMSA got during the 2002-2010 period. See Respondent's Post-Hearing Brief on Quantum, at paragraph 89.
780. In regards to the macroeconomic context, MBG's model is superior because they use actual macroeconomic data up to an including 2009 projections for 2010-2028. LECG, however, assumes no economic crisis took place in their "before" scenario, and in the "actual" scenario they use actual data until 2009 and Estudio Broda's projections from then until 2028. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 90-1.

781. Respondent states that MBG's use of the official SSB valuation utilizes a mean tariff for energy purchases, adjusting it differently for Before and After evaluations. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 92-4.
782. Respondent contends that the MBG report is accurate in that it takes into account operation, administration, and commercialization costs by using a polynomial formula that reflects the actual evolution of the company's assets. See Respondent's Post-Hearing Brief on Quantum, at paragraph 95.
783. Respondent contends that LECG's investment projections from 2002 onwards are reduced by a nominal 28% each year until the end of the Concession, which means the projections are almost one third lower than the investments originally estimated by the Salomon-Chase Consortium. This is despite the fact that historically because of factors like inefficient management EDEMSA had to invest more than projected. MBG, however, keeps investments in fixed assets at a constant. This means that projections would have to be corrected to grow nominally. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 97-98.
784. Respondent avers that MBG's report based on the SSB model assumes that in the Before scenario an extraordinary tariff review is made in 2002, and that five-year reviews are implemented as from 2008. In the After scenario, five 20% annual increases are applied. Five year tariff reviews are then implemented as from 2009 and between the reviews that DAV is adjusted according to variations of the Argentine CPI and the IPIM. See Respondent's Post-Hearing Brief on Quantum, at paragraph 100-1.
785. According to Respondent, MBG adjusts EDEMSA's annual revenues based on an efficiency factor of 0.12%; LECG also uses 0.12% to account for efficiency in both scenarios. See Respondent's Post-Hearing Brief on Quantum at paragraphs 104-5. Furthermore, this efficiency cap is reasonable, and is a low value that would have increased the estimated value of the company before bids were submitted. See Respondent's Comments on Quantum, at paragraphs 40-1.

786. Respondent states that MBG uses the 25% EBITDA/sales cap used by the Salomon-Chase Consortium. See Respondent's Post-Hearing Brief on the Merits, at paragraph 106.
787. In regards to financial debt, Respondent asserts that MBG uses the nominal value of the debt, and when the value of the company is lower, the value of such debt equal the value of the company obtained in the valuation. See Respondent's Post-Hearing Brief on Quantum, at paragraph 108.
788. Respondent asserts that MBG's report with the Salomon-Chase Consortium model appropriately uses the 25% cap to the EBITDA/sales ratio included in the Salomon-Chase evaluation, which is both reasonable and reflects the regulatory framework. LECG's report, however artificially increases EDEMSA's value in their assessments by modifying the 25% cap to the EBITDA/sales ratio used by the Salomon Chase Consortium in their but-for scenario and replacing it with a 34% cap. This is thus a deviation from the Salomon-Chase Consortium Model that Claimants claim to apply. See Respondent's Post-Hearing Brief on Quantum at paragraphs 110-111, 126-7; Respondent's Comments on Quantum, 35-6.
789. Respondent asserts that for Capex (investments) MBG keeps investments in fixed assets constant. In the after scenario LECG, however, uses EDEMSA's actual data until 2009 and the investment per user is kept constant from 2010. In regards to tariff calculations, MBG and LECG both use different assumption for the valuations before and after the measures. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 120-3.
790. Finally, MBG corrected LECG's estimation of EDEMSA's value according to the SSB model as of 31 December 2010 by analyzing LECG's nominal projections of the DAV in Pesos. They converted the value from real Argentine Pesos into nominal Pesos by dividing those values by the deflator used by LECG, and then comparing these values with the adjustment that should have been applied to the DAV based on the increase granted by EPRE. It was concluded that LECG's projections showed lower values than they should have. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 130-2.

791. Thus, according to Respondent, they properly adjusted LECG's assessment of EDEMSA's value, and established an appropriate, higher, value for the company. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 130-8.
792. Respondent further contends that the SSB-HBQ valuation follows the regulatory framework and clearly outlined the expectations of the Province and of any possible bidder in connection with the Concession framework. Such is because the Province had a specific interest in the valuation being high, because it was the official value of the government-owned company that was about to be privatized. See Respondent's Comments on Quantum, at paragraphs 22-8.
793. Respondent also argues that it is incorrect to use the bid submitted by the winning consortium to calculate future tariffs. In addition, only the official valuation prior to privatization was considered to calculate tariffs, but the price paid was never used for such a purpose. See Respondent's Comments on Quantum, at paragraphs 29-32.

(3) Book Value Methodology

794. Respondent's MBG report first notes the different interpretation that it and Claimants came to regarding the book value method. When the Tribunal requested the parties perform a Net Equity Analysis ("NEA") Respondent understood it to be separate from a book value approach. See MBG Report of November 2010, at paragraphs 3-7.
795. MBG calculated the NEA by subtracting EDEMSA's debt from the value of the company, which was obtained under a discounted cash flow method. See MBG Report of 10 November 2010, at paragraphs 3-6.
796. LECG, however, simply used the book value as the NEA. Respondent contends that such an approach is faulty, as the book value is a well-known method. If the Tribunal had wanted such a calculation, they would have asked for it instead of the NEA. See MBG Report of November 2010, at paragraph 7.
797. In addition, Respondent's MBG report contends that the book value is an inadequate calculation method as it fails to address questions of expectations about the future

evolution of a business. See Report on the Valuations Prepared by LECG of 10 November 2010, at paragraph 7.

798. According to MBG, the book value is an unreliable barometer. The values obtained using this method do not reflect the future expected values of the company, which is what investors look at when buying or selling assets. Furthermore, the book value does not take into consideration the market value of the company. Instead, the accounting standards used in Argentina value a company based on historical cost. This method is superior because the value of capital contributions by shareholders of a company remains stable in accounting terms, regardless of outside factors that may affect a company's business. See MBG Report of November 2010, at paragraphs 8-11.
799. MBG also suggests that in reality the assets and equity value of a company change as the conditions of the company's business change. Under the book value method, however, the value of a company and its equity erroneously remain without substantial modifications. See Report on the Valuations Performed by LECG, at paragraph 11.
800. Overall, Respondent's MBG report asserts that the book value is a useless method because the value of a company and its equity are directly dependant on a company's accounting standards, so it reflects values that bear no relationship to market values. See MBG Report of November 2010, at paragraph 14. Thus, LECG's *ad hoc* constructions on the book value method are arbitrary and unjustified, and should be rejected, never mind the fact that no variation of the book value method is adequate to assess the value of a company. See Report on the Valuations Performed by LECG, at paragraph 20.

(4) Criticism of LECG's DCF Method

801. Respondent's report by MBG asserts that LECG does not determine the value of EDEMSA using the DCF method as they contend to. Instead, LECG simply argues that the value of the company is equal to the accounting value of its assets during the beginning of the first period of operations. See Report on the Valuations performed by LECG, of 10 November 2010, at paragraph 2.

802. MBG does, however, agree with LECG that the DCF method is the most appropriate tool for which to calculate the value of the company. See MBG Report of November 2010, at paragraph 51.
803. Respondent's MBG report asserts that in the case of EDEMSA it is necessary to estimate the value of EDEMSA's equity in order to determine damages compensation. It is not appropriate to calculate an equilibrium tariff that has the ability to compensate the investor for all the risks assumed by participating in the privatization. See MBG Report of November 2010, at paragraph 53.
804. In addition, LECG does not use the DCF method to determine the value of the company in their counterfactual valuations. Rather, they only use the DCF method to calculate the equilibrium tariff on the basis of the tariff base they arbitrarily establish. Instead of calculating the value of the company they calculate the tariff necessary for cash flows to equal the amount paid for EDEMSA's shares. See MBG Report of November 2010, at paragraph 54.
805. Respondent contends LECG's only sensitive variable is the tariff base, which they falsely determine. Their model makes all adjustments through tariff changes; it is an inappropriate method to assess the value of EDEMSA before the emergency measures, and it is an inappropriate method to assess alleged damages. See MBG Report of November 2010, at paragraph 55.
806. Overall, Respondent asserts that LECG uses the DCF method to calculate the tariff adjustment needed in 2002 to recover the price paid by the shareholders during privatization, rather than to assess the value of EDEMSA. See MBG Report of November 2010, at paragraph 56.
807. Respondent also avers that LECG uses practically the same WACC rate in all their valuations. See MBG Report of November 2010, at paragraph 122.
808. Respondent further states that LECG includes the expected component in the calculation of all their discount rates. This is then compensated with the inflation forecasted in cash

flows, which are expressed in nominal terms. See MBG Report of November 2010, at paragraph 123.

809. Further, Respondent asserts that discount rates always reflect the return expected by an investor and are used to discount projected cash flows and establish their present value, therefore determining the value of the company, and then the value of equity. Under LECG's valuations however, a single WACC rate is used to discount all the projected periods, and this rate reflects the average discount rate for the whole period under analysis. See MBG Report of November 2010, at paragraph 127.
810. Respondent contends that nominal WACC rates LECG uses are inconsistently low and do not reflect the risk faced by a potential investor in Argentina. In addition, Respondent states that the difference between January 2002 and January 2005's nominal WACC rate is only 1%, but the risk differential between them was much higher, and the real WACC rates determined by LECG based on the method used by the Advisory Consortium entail nominal WACC rates higher than those used by LECG in their own evaluations. See MBG Report of November 2010, at paragraph 128.
811. The validity of these objections can be demonstrated by looking at the evolution of the country risk, which Respondent states is only one of the components that determine the return expected by an investor. For example, when an investor defines the discount rate he will apply to determine the value of a company; he takes into account his desire for a return that can cover the risk-free rate plus a risk premium. This risk premium will then consist of several factors, including the country risk premium. See MBG Report of November 2010, at paragraphs 129-30.
812. Respondent also states that they do not agree with LECG's production of discount rates that range from 10.4% to 11.4%, with the average country risk coming in at 24%. See MBG Report of November 2010, at paragraph 136.
813. According to Respondent LECG also uses unlevered betas in their model that range from 0.06 to 0.15. These are unreasonably low; a cursory review of the data of utilities that are publicly traded in the United States stock market provides an average value of 0.65, for

instance. Such is important to note, as the using such low betas leads to a significant decrease in the market premium. See MBG Report of November 2010, at paragraph 137.

814. Therefore, LECG's valuations use WACC rates that are similar to those calculated by Advisory Consortium in 1997, when the economic and financial situation in Argentina from the second half of 2001 was completely different. See MBG Report of November 2010, at paragraph 139.
815. Further, Respondent states that the values of the company obtained by LECG in their own valuations are all negative, but LECG uses positive financial debt values in each of those scenarios to determine the value of equity. See MBG Report of November 2010, at paragraphs 140-1.
816. According to Respondent, LECG argues that the financial debt values taken into account are based on the value of the restructured debt of US\$ 62.6 million (as of 31 December 2006) and that the debt values 31 January 2002 and 2005 was US\$ 41 million and US\$ 52 million, as obtained by discounting the debt value at a rate of 9.94%.
817. However, the value of the financial debt of a company can never be higher than the value of a company. LECG fails to take such into account in their calculations. See MBG Report of November 2010 at paragraphs 142-4.
818. Finally, Respondent states that if LECG's contentions are right that the value of EDEMSA's assets were nothing in January 2005, then company managers and creditors would not have agreed on a 61% debt reduction. Instead the company would have been transferred to creditors. Thus, contrary to what LECG states, the assets of the company have always had a positive value, both before and after the economic emergency measures. See MBG Report of November 2010, at paragraphs 147-8.

(5) Respondent's WACC Rate

819. Respondent's MBG report uses a WACC rate of 18.6% for both the before and after valuations in their discount rate calculations. This number is used as a way to adjust the

discount rates to reflect the higher risk that the company faced in 2002 compared with the date of privatization. See MBG Report of September 2010, at paragraphs 166-7.

820. Respondent also uses an unlevered beta value of 0.864 for the before calculations, and 0.861 for the after calculations. See MBG Report of September 2010, at paragraphs 166.
821. Respondent's MBG report states that the value of a company lies in its economic and financial fundamentals, and therefore should not vary depending on the valuation method used. See MBG Report of September 2010, at paragraph 211.
822. In order to ensure that estimated values are both rational and consistent, regardless of the methodology used, MBG calculated the discount rates according to the relationship between the cost of levered and unlevered equity. See MBG Report of September 2010, at paragraph 211.
823. MBG also asserts that the most obvious difference between the adjusted present value methodology and the WACC is how the tax consequences brought about by the debt are treated. The adjusted present value incorporates the tax effects in the cash flows and WACC includes them in the discount rate. See MBG Report of September 2010, at paragraph 212.
824. MBG's discount rate calculations consisted of calculating the cost of unlevered equity for each requested date, and then with this basis estimating the cost of levered equity. Also, they further estimated the cost of unlevered equity to the capital asset pricing model; since EDEMSA operates in an emerging market, a country risk premium was added as well. The equation therefore looks like this:

$$K_u = R_f + \beta_u \text{ERP} + R_p$$

K_u = unlevered equity

R_f = the risk free rate

β_u = the sensitivity of the share to market performance

ERP = Equity Risk Premium, the differential of the market historic

performance on the risk free rate.

R_p = the country risk

825. The R_f was calculated based on the performance of thirty year treasury bonds. MBG calculated β with information provided by U.S. companies operating in the same sector as EDEMSA, since no comparable companies can be found locally in Argentina. Such is known as the bottom-up technique, and MBG used information from the same companies as in previous reports, such as Entergy Corp., Allegheny Energy Inc., or TECO Energy Inc. Further, the β coefficient for each of these selected companies has been calculated based on public information on shares and indices. See MBG Report of September 2010, at paragraphs 215-6.
826. Such information became the source for a linear regression analysis between the performance of the adjusted price of each share and the S&P 500 index, and the slope of this linear regression was then calculated (β coefficient). See MBG Report of September 2010, at paragraph 217.
827. MBG next adjusted the β coefficients according to the adjusted beta, the capital structure adjustment, and the regulatory framework adjustment. See MBG Report of September 2010, at paragraph 218.

(a) Adjustment of Beta

828. Respondent's MBG report states that as time goes by companies tend to grow in size, diversify their risk exposure, and generate more stable cash flows. Thus, their risk profile of market risk exposure is configured (with β being equal to 1). This assumption is based on past empirical studies. See MBG Report of September 2010, at paragraph 218.
829. The adjustment was done according to the following relationship:

$$\text{Adjusted } \beta = 0.67\beta + 0.33$$

830. MBG asserts that since the levered betas were influenced by the capital structure of each of the companies for which data was used, MBG corrected them and calculated the unlevered betas. Such was done according to the following relationship:

$$\text{Levered } \beta = \beta_u [1 + D/E(1-t)]$$

831. The debt value used corresponds to book value, and the equity value was calculated as the price of the share multiplied by the number of shares issued. See MBG Report of September 2010, at paragraph 218.
832. In terms of the regulatory framework adjustment, MBG states that because Argentina uses a price cap methodology, and the United States typically adopts a rate of return methodology, the β coefficient is corrected to reflect the differences in regulatory risk. See MBG Report of September 2010, at paragraph 218.

(b) Calculation of other factors

833. MBG calculated the market risk premium as the differential between the market historic performance and the risk-free rate, and obtained a value of 7.6%. In addition, the country risk was determined as a structural historic premium of 7% for the post default periods, and 10% for the default and pre-default periods. See MBG Report of September 2010, at paragraphs 219-20.
834. MBG further elaborates that the country risk was estimated as a historic average using the EMBI+ Argentina index. Such is adjusted to remove the effects of the crisis that forced the Argentine government to recognize the need to default on its public debt as from 2001. According to MBG, such circumstances have impacted the measurements of the country risk index, which started to show ever increasing values as the investors expected a reduction in equity. See MBG Report of September 2010, at paragraphs 221-2.
835. According to the MBG report, country premiums were excessive when the performance of a bond was calculated against its par value. Thus, MBG imposed a 10% ceiling to their historical average (from the value in the 2001 and 2002 valuations). In addition, in order to consider the average country risk premium for the month when the valuation is performed when calculating the discount rate, it is necessary to take a premium of 27.68% as of November 2001, of 44.38% as of December 2001, and 43.75% as of January 2002. See Report on Issues Raised by the Tribunal, at paragraph 223.

836. MBG states that the reason their valuations capture deterioration of the projected cash flow profit expectations is because when default is imminent, investors make gradual correction in the economic performance estimation and of the sectors to which they have allocated funds as they get new information from the market. See Report on Issues Raised by the Tribunal, at paragraph 224.
837. The cost of equity (k_e) was obtained by releveraging the β coefficients, and taking into account EDEMSA's shareholders' equity structure for each of the dates assessed. See Report on Issues Raised by the Tribunal, at paragraph 225.
838. The cost of debt and levered equity was calculated based upon a few different situations: See Report on Issues Raised by the Tribunal, at paragraph 226.

a. Instances where there is no possibility of benefitting from the tax advantages of debt, so that the cost of equity, both levered and unlevered, is equal to the weighted average cost of equity and debt. This yields the following formula,

$$K_u = (E/D+E)K_e + (D/D+E)K_d$$

b. Instances where tax benefits are incorporated in the discount rate, as suggested by the WACC methodology. Since there are then no illiquidity costs, the cost of debt can be inferred from the first relationship, and used in the second relationship to calculate the levered cost of equity. This yields the following equation,

$$K_{wacc} = (E/D+E)K_e + (D/D+E)K_d (1-t)$$

839. The report suggests using the second method because (i) EDEMSA's excess indebtedness greatly affected the cost of debt. However, shareholders transferred the losses resulting from this potential risk to their creditors in advance; this is indicated by the shareholders' benefits that came out of the company's debt restructuring, and (ii) the service provided by the company is a regulated utility, so the presence of illiquidity costs is not easy to determine in the medium or in the long term. See Report on Issues Raised by the Tribunal, at paragraph 227.
840. MBG estimated a debt-to-equity ratio of 22% which is consistent with the values reported in 2001, 2002, and 2010. See Report on Issues Raised by the Tribunal, at paragraph 229.

841. Further, the Ku and the WACC rates obtained are used to discount the projected cash flows in the “medium” scenarios. The “low” and “high” scenarios use rates that result from increasing and reducing the Ku and WACC rates by 10%. See Report on Issues Raised by the Tribunal at paragraph 231.

b) Respondent’s Calculations

842. Respondent asserts the importance of avoiding double recovery, in the event that the Argentine Republic is found to have violated a BIT. See Respondent’s Post-Hearing Brief on Quantum, at paragraphs 40, 44.

843. Respondent suggests that three facts be taken into account in order to avoid such double recovery. First, both Claimants and LECG acknowledge that EDEMSA’s value is higher today than before privatization, despite the economic crisis. Second, Mendoza users are currently paying tariffs that are over 225% higher than the ones before the emergency measures, with inflation rates reaching 142%. Third, neither Mendoza nor Argentina derived any benefit from Claimants’ sale of their interest in EDEMSA. See Respondent’s Post-Hearing Brief on Quantum, at paragraphs 41-3.

(1) Valuation Date and Amount

844. Respondent contends that the only way to avoid double recovery is for the Tribunal to only award compensation for the potential temporary damages sustained by shareholders between 2002 and 2005. See Respondent’s Post-Hearing Brief on Quantum, at paragraph 45.

845. According to Respondent, it is necessary to estimate the dividends that the shareholders would have received had the measures not been adopted, if the Tribunal considers the economic emergency measures to be a breach of the BIT. Such a method would be consistent with the one used in *LG&E*. See Respondent’s Post-Hearing Brief on Quantum, at paragraphs 45-6.

846. Respondent avers that the method of calculating compensation based on the payment of potential dividends is consistent with a compensation scheme based on payment of interest, which was mentioned by Pablo Spiller during the last hearing of 14 February

2011. In such a scheme, the period of compensation would be between January 2002 and March 2005, the period between the challenged measures and Claimants' sale of their interest in EDEMSA. See Respondent's Post-Hearing Brief on Quantum, at paragraphs 47-8.
847. Furthermore, the exclusion of the emergency period would have to be further analyzed. See Respondent's Post-Hearing Brief on Quantum, at paragraph 48.
848. In this connection, as the dividends that shareholders would have expected if the emergency measures not been adopted are estimated, measures that benefitted EDEMSA, like the suspension of service quality requirement, would also have to be excluded in the counterfactual scenario. See Respondent's Post-Hearing Brief on Quantum, at paragraph 49.
849. Respondent also states that valuing a company entails calculating the present value of projected cash flows. Such should not include the tariff base. The projections that do factor in are a reduction in tariffs, a drop in the number of physical units sold, an increase in investments, or an increase in the WACC rate. The higher the expenses forecasted, the lower the value of the company. See Report on the Valuations Performed by LECG, at paragraphs 57-61. In LECG's valuation method, however, the value of a company changes little despite changes in these factors. See Report on the Valuations Performed by LECG, at paragraphs 63.
850. Therefore, LECG's model is clearly wrong, as their model used to assess the value of EDEMSA restores the balance by simply increasing the tariff level in order to keep the value of the company unaltered. See Report on the Valuations Performed by LECG, at paragraphs 63-4.
851. In terms of numerical damage calculations, Respondent determined the value of EDEMSA and its equity as of 30 November 2001, 31 December 2001, 31 January 2002, and 31 January 2005. It then prepared these with the point of view of what a potential investor would be willing to pay for EDEMSA as of those dates, thus taking into account the information available as of such date, except regarding the future evolution of a few

- macroeconomic variables such as inflation or exchange rate. See Report on Issues Raised by the Tribunal at paragraph 6.
852. Respondent therefore suggests that as of 30 November 2001 the Business Value 100% is US\$23.72 million; as of 31 December 2001 US\$12.22 million, 31 January 2002 US\$75.86 million; 31 January 2005 US\$127.20 million; 31 January 2010 US\$162.69 million. The equity value 100% as of 31 January 2010 is US\$94.19 million. Claimants' equity value as of 31 January 2010 is US\$ 42.27 million. See Report on Issues Raised by the Tribunal at paragraph 7.
853. In Argentine Pesos, the business value 100% as of 30 November 2001 is 23.72 million ARS; as of 31 December 2001 12.22 million ARS; as of 31 January 2002 155.52 million ARS; as of 31 January 2005 371.93 million ARS; as of 31 January 2010 623.91 million ARS. The equity value 100% as of 31 January 2010 is 361.22 million ARS. Claimants' equity value as of 31 January 2010 is 162.12 million ARS. See Report on Issues Raised by the Tribunal at paragraph 7.
854. Next, Respondent determined the value of EDEMSA and Claimants' interest in the company's equity as of 31 December 2001 and 31 January 2002, which are the before and after valuations. The Tribunal requires adjustment of the official valuations for these dates, considering the economic performance of the company during the 1998-2002 period. The business values 100% are as follows: before (31 December 2001), the low value is US\$-28.42 million; the medium value is US\$-28.31 million; the high value is US\$-27.36 million. After (31 January 2002), the low value is US\$10.38 million; the medium value is US\$22.73 million; the high value is US\$40.44 million. See Report on Issues Raised by the Tribunal at paragraph 9.
855. Respondent then determined the value of EDEMSA and its equity as of 31 January 2002, 31 January 2005, and 31 January 2010, with two values calculated for each date. The first was prepared as if the economic emergency measures had not been applied (referred to as "but-for valuations") and the second was prepared with the emergency measures in mind (referred to as "actual valuations"). The business values 100% are as follows: for actual valuations as of 31 January 2002 the low value is US\$54.3 million; the medium value is

- US\$64.73 million; the high value is US\$78.64 million. The but-for valuations as of 31 January 2002 is a low value of US\$-26.77 million, the medium value is US\$-26.98 million, and the high value is US\$-26.62 million. See Report on Issues Raised by the Tribunal at paragraph 11.
856. The business values 100% for January 31 2005 is as follows: the actual valuations produce a low value of US\$103.15 million, a medium value of US\$119.76 million, and a high value of US\$141.22 million. The but-for valuations produce a low value of US\$-15.45 million, a medium value of US\$-13.19 million, and a high value of US\$-9.86 million. In addition, the equity value 100% puts the high value as of 31 January 2005 at US\$12.33 million, and a high Claimants' equity value at US\$5.53 million. See Report on Issues Raised by the Tribunal at paragraph 11.
857. Furthermore, on 31 January 2010 the Actual scenario places EDEMESA's value at US\$148.53 million for the low value, the medium value is US\$170.8 million, and a high value of US\$198.72 million. The but-for valuations produce a low value of US\$18.97 million, a medium value of US\$24.01 million, and a high value of US\$30.5 million. In addition, the actual valuation equity value 100% is placed at US\$78.76 million for the low value, US\$101.03 million of the medium value, and \$128.95 million as a high value. Claimants' Equity value for the actual valuation as of 31 January 2010 is US\$35.35 million for the low value, US\$45.34 million for a medium value, and US\$57.87 million as a high value. See Report on Issues Raised by the Tribunal at paragraph 11.
858. Thus, Respondent asserts that the economic emergency measures helped EDEMESA's shareholders, in that without the company would have been worth much less in 2002, 2005, and 2010. See Report on Issues Raised by the Tribunal, at paragraph 11.
859. Respondent also provides the value of EDEMESA's debt in 2002, as they assert that the nominal value of EDEMESA's debt exceeded the value of its assets as of 31 January 2002. Therefore the company's financial debt as of such date must be considered equivalent to the value of its assets. The values of EDEMESA's financial debt arising from the 2002 valuation and from the after valuation, both performed in 31 January 2002, are as follows: the assets value in the 2002 valuation is US\$75.9 million, and US\$22.7 million

in the after valuation. The debt value is calculated as US\$75.9 million in the 2002 valuation and US\$22.7 million in the after valuation. Finally, the equity value is calculated as 0 in the 2002 valuation and 0 in the after valuations. See Report on Issues Raised by the Tribunal, at paragraph 14.

860. Overall, therefore, Respondent asserts that Claimants' equity in EDEMSA had no value at the time immediately preceding the adoption of the economic emergency measures. EDEMSA's poor operating performance until late 2001, high debt levels, and the economic crisis before the adoption of the emergency measures meant a dilution in Claimants' investment in late 2001. See Report on Issues Raised by the Tribunal, at paragraph 19.
861. Thus, Respondent contends that the Argentine Government's adoption of the economic emergency measures is thus what saved Claimants' equity from suffering an even greater depreciation. See Report on Issues Raised by the Tribunal, at paragraph 19.

(2) Damages Caused by Law No. 25,561 and Subsequent Provincial Measures

862. Respondent contends that EDEMSA's average value in January 2010 was 28% higher in U.S. Dollars than before privatization, which demonstrates that the emergency measures did not damage EDEMSA. See Respondent's Post-Hearing Report, at paragraph 6.
863. In this connection Respondent avers that EDEMSA's value is also higher in real terms in 2010 than before the privatization. To prove such, Respondent takes into account U.S. inflation rates when doing their calculations. The results of such demonstrate that even after adjusting at constant value, investment in EDEMSA has maintained its value despite the economic crisis. See Respondent's Post-Hearing Report, at paragraphs 11-7.
864. Respondent then goes on to suggest that EDEMSA's value is higher than the one put forth by Claimants because LECG makes a significant methodological error in their calculations. EDEMSA received a tariff increase of over 50% in August 2009, but LECG incorrectly projects cash flows for the subsequent years as if the increase was around 20%. See Respondent's Post-Hearing Report, at paragraphs 20-1. Such is because LECG

uses the 2009 annual value, which is lower since the tariff increase happened at the end of the year. See Respondent's Post-Hearing Report, at paragraph 23.

865. Using LECG's corrected calculations, valuations show that before the privatization (valued in U.S. dollars as of January 2010) EDEMSA had a median value of US\$301,744,372. As of January 31 2010, EDEMSA's median value was US\$428,240,390; the percentage difference is thus 41.9%. See Respondent's Post-Hearing Report, at paragraph 25.
866. Thus, Respondent argues that the only conclusion is that EDEMSA was not damaged by the emergency measures, since the value today is higher than the value before privatization. In addition, any temporary fluctuation in the value of the company, or nonexistent potential damage, would be justified by the severity of the economic crisis. See Respondent's Post-Hearing Report, at paragraphs 27-30.

(3) Interest

867. Respondent asserts that only a simple interest should be applied to losses alleged by Claimants. See Respondent's Rejoinder, at paragraph 875.
868. They contend that this position is confirmed by international case law, as well as legal scholars. In this connection, Claimants' position that the developing trend is that compound, as opposed to simple, interest is applied is false, and would require departing from general public international law. See Respondent's Rejoinder, at paragraph 876.
869. According to Respondent, the Argentina-France BIT clearly states that an "appropriate" interest rate is to be applied. Claimants' claim that the update rate should be the WACC rate is unreasonable, and not consistent with the treaty. The only purpose of using such a rate would be to artificially and spectacularly increase the amount claimed. See Respondent's Rejoinder, at paragraphs 876-9.
870. In light of the treaty provisions a reasonable rate would be the interest rate of the U.S. Treasury Bills interest rate or the London Inter Bank Offered Rate (LIBOR). Respondent argues that such is more appropriate, since the Argentina-France BIT calls for an

“appropriate” interest rate. Also, there are no reasonable grounds in arbitral practice for the kind of interest applied by LECG in their calculations. See Respondent’s Counter-Memorial at paragraph 726.

(4) Attorneys’ Fees, Costs of Arbitration and Administrative Expenses

871. Respondent argues that Claimants should pay all expenses and costs for this proceeding, as they are at fault for any damage to their investment, and any objections raised were legitimately made according to Respondent’s rights under Article 57 of the ICSID Convention, and therefore are not a reasonable means by which to hold Argentina liable for Claimants’ expenses and costs. See Respondent’s Rejoinder, at paragraphs 880-81.
872. In addition, Respondent asks for Claimants to pay interest on the costs and expenses incurred by the Argentine Republic. See Respondent’s Post Hearing Brief on the Merits, at paragraph 306.

(5) Claimants’ Bad Business

873. Respondent asserts that Argentina is not at fault for any damage to Claimants’ investment. This is because Claimants decided to sell their interests in EDEMSA as part of a global policy that had nothing to do with Argentina, and resulted in “fire-sale prices.” See Respondent’s Post-Hearing Brief on Quantum at paragraph 31, 34.
874. This sale happened despite the fact that by the time the sale was concluded a 38.05% tariff increase had already been announced. This increase was followed by additional tariff increases of 51% and 56%. See Respondent’s Post-Hearing Brief on Quantum at paragraphs 31-2.
875. According to Respondent Mendoza, Respondent, and the users of the local distributor did not benefit from the withdrawal of Claimants as shareholders of EDEMSA. They also did not benefit from the huge profits IADESA made in buying EDEMSA from Claimants and subsequently selling it to Andes Energia PLC. They also have not benefitted from Andes Energia PLC’s current success. See Respondent’s Post-Hearing Brief on Quantum at paragraphs 35-9.

876. Respondent suggests that Claimants may have made a bad deal in deciding to sell EDEMSA before its debt was restructured, before the tariff increases occurred, and before the recovery of the economy. Claimants cannot, however, use BITs to compensate for their bad business choices. See Respondent's Post-Hearing Brief on Quantum at paragraphs 38-9, 57.

(6) Pre-Emergency (Historic) Damages

877. With respect to quantum for pre-emergency (historic) damages, Respondent does not appear to propose any figures which contrast with those offered by Claimants' experts. However, with respect to the Polvaredas claim, Respondent seems to suggest that some compensation might be due, although without any precision on the amount. See Respondent's Rejoinder at paragraph 791.

E. COSTS

1. Claimants

878. On 16 February 2012, Claimants filed their Costs Submission in accordance with the Tribunal's request of 30 January 2012 and the extension of time it granted on 8 February 2012. Claimants' indicated total costs of US\$ 15,786,490.54, including *inter alia* the fees and expenses of international and Argentine counsel, fees of Claimants' experts, and payments made to ICSID.

2. Respondent

879. On 16 February 2012, Respondent filed its Planilla de Costos in accordance with the Tribunal's request of 30 January 2012 and the extension of time it granted on 8 February 2012. Respondent indicated costs in the total amount of US\$ 3,640,566.77. including *inter alia* expenses of the Legal Team from the Procuración del Tesoro de la Nación, fees of Respondent's experts, and payments made to ICSID.

IV. PRAYERS FOR RELIEF

A. CLAIMANTS

880. Claimants' seeks the following relief:

- declaration that Respondent has violated its treaty obligations under the Argentina-France BIT by failing to provide to Claimants and their investment (i) Fair and Equitable Treatment, (ii) treatment equivalent to that afforded to nationals; (iii) prompt and adequate compensation for indirect expropriation; and/or (iv) full protection and security;
- declaration that Respondent has violated its duty under the Treaty's MFN Clause by failing to (i) abstain from enacting discriminatory, arbitrary, unreasonable or unjustified measures; and/or (ii) respect specific commitments undertaken in connection to Claimants' investment;
- finding that neither the "necessity" doctrine under customary international law nor any treaty provision or principle of domestic or international law excuses Argentina from its obligation to compensate Claimants for breaches of the Argentina-France BIT;
- award of damages for (i) US\$ 7.2 million at interest representing injuries caused by the Pre-Emergency Measures affecting the Concession ; and (ii) at least US\$ 123.9 million at interest representing injuries caused by the Emergency Laws and ensuing failure of the Renegotiation Process. The Tribunal notes that Claimants' Post-Hearing Brief on Quantum, at paragraphs 45 thru 47, states that the damages would be US\$ 147.8 million based on their own bid for EDEMESA, or US\$ 125.2 million on the assumption that Claimants had paid the amount offered by the second highest bidder for the EDEMESA. In either event, Claimants would subtract the actual price received from IADESA on sale of EDEMESA on 30 March 2005, which is to say US\$ 2 million discounted to US\$ 1.3 million as of 31 December 2001; and
- order directing Respondent to bear at interest the full costs and expenses of this proceeding, including attorneys' fees.

B. RESPONDENT

881. Respondent seeks the following relief:

- the complete dismissal of all claims filed by Claimants; and
- an order directing Claimants to bear at interest the full costs and expenses of this proceeding, including attorneys' fees.

V. TRIBUNAL'S ANALYSIS

A. APPLICABLE LEGAL NORMS

1. Argentina-France BIT

882. Although common ground that the Tribunal must look to the terms of the Argentina-France BIT, Respondent urges that the Argentina-Luxembourg BIT also becomes relevant as to claims derived through shares at one time owned by Claimant León, a Luxembourg company.
883. In particular, Respondent asserts applicability of Article 3(2) of the Argentina-Luxembourg BIT, which provides that investments shall enjoy protection and security, but without prejudice to “measures necessary for the maintenance of public order.”
884. The Tribunal notes that Claimants do not base their substantive request for relief on the Argentina-Luxembourg BIT, except to the extent of provisions that might be incorporated by reason of the Most Favored Nation clause in the Argentina-France BIT. See Claimants’ Post-Hearing Brief on the Merits at paragraph 59.
885. While Claimants did invoke the Argentina-Luxembourg BIT in their Request for Arbitration, as well as certain subsequent pleadings, they did so only insofar as that BIT might have been relevant to claims by León. Claimant further noted that the relevant interests were held at the outset entirely by French companies.
886. At present, French investors again own all of the shares considered by the Tribunal in its findings of liability and quantum, including any which for a time were owned by León. Crédit Lyonnais (incorporated in France) was the initial owner of the relevant shares, which were subsequently transferred to León, its wholly-owned subsidiary. Ultimately those shares were acquired by EDFI, at which point all of León’s rights to the ICSID claim were ceded to EDFI, a French investor which now possesses all relevant rights. See Claimants’ Post-Hearing Brief on the Merits, paragraphs 59-60.
887. Accordingly, Claimants’ claims may be decided solely on the basis of the Argentina-France BIT.

888. Had the Tribunal decided to grant relief on the basis of Article 3(2) of the Argentina-Luxembourg BIT, then indeed the “public order” defense of that provision might have had consequences. Such is not the case, however.
889. Consequently, the Tribunal need take no position on whether the Argentina-Luxembourg BIT might apply in the abstract to the “public defense” question. It is enough to note that relief granted rests on the Argentina-France BIT,⁷¹ and more significantly, that the recovery ordered by this Tribunal in no way implicates Article 3(2) of the Argentina-Luxembourg BIT. Thus Argentina’s reliance on that provision becomes moot.
890. As discussed more fully below, the Tribunal has granted recovery to Claimants based only on (i) Article 3 of the Argentina-France BIT (Fair and Equitable Treatment) and (ii) Article 4 of the Argentina-France BIT (Most Favored Nation Treatment) as it brings into consideration the so-called “umbrella clauses” of Argentina’s BIT’s with Germany and Luxembourg, requiring respect for the commitments undertaken with respect to investors.⁷²

2. Vienna Convention

891. The Tribunal looks to the 1969 Vienna Convention on the Law of Treaties in interpreting both the Argentina-Luxembourg and Argentina-France BITs.
892. Article 31 (“General rule of interpretation”) of the 1969 Vienna Convention provides as follows:

1. A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.

⁷¹ Claimants’ principal Memorial of 2 May 2005 states in footnote 142, at pages 138-39, that the Luxembourg BIT will be invoked only to the extent the Tribunal determines that León’s “substantive claims are more appropriately invoked under the Argentina-Luxembourg BIT.” As indicated in the Tribunal’s analysis, however, recovery has been based on the Argentina-France BIT, either by virtue of Articles 3 (Fair and Equitable Treatment) or 4 (Most Favored Nation). Any reference to a BIT other than the one concluded between Argentina and France becomes relevant only as incorporated into Argentina’s duty pursuant to Article 4 of the Argentina-France BIT, which imposes treatment no less favorable than that treatment accorded to investors of the most favored nation.

⁷² The Tribunal need take no position on the “umbrella clause” in the contested Argentina-Greece BIT, given that the analogous provisions of the German and Luxembourg treaties provide sufficient basis for analysis of Claimants’ prayers for relief.

2. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes:

(a) any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty;

(b) any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty.

3. There shall be taken into account, together with the context:

(a) any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions;

(b) any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation;

(c) any relevant rules of international law applicable in the relations between the parties.

4. A special meaning shall be given to a term if it is established that the parties so intended.

893. Article 32 (“Supplementary means of interpretation”) of the 1969 Vienna Convention reads:

Recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, in order to confirm the meaning resulting from the application of article 31, or to determine the meaning when the interpretation according to article 31:

(a) leaves the meaning ambiguous or obscure; or

(b) leads to a result which is manifestly absurd or unreasonable.

894. Article 27 (“Internal law and observance of treaty”) of the 1969 Vienna Convention prescribes as follows:

A party may not invoke the provisions of its internal law as justification for its failure to perform a treaty. This rule is without prejudice to article 46.

895. Article 53, which is titled, “Treaties conflicting with a peremptory norm of general international law (‘jus cogens’)”, provides:

A treaty is void if, at the time of its conclusion, it conflicts with a peremptory norm of general international law. For the purposes of the present Convention, a peremptory norm of general international law is a norm accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character.

3. Consideration of Other Arbitral Awards

896. The Parties have cited prior decisions or awards rendered in other investment arbitrations, either to support their own contentions or to distinguish persuasive authority suggested by the other side.
897. Although not bound by previous decisions of other international tribunals, the Tribunal has given them due consideration with the aim of enhancing consistent interpretation of comparable treaty language as applied to similar fact patterns, thereby promoting the legitimate expectations of both host states and foreign investors.

4. The Interaction of Argentine Law and International Law

898. It is common ground that Treaty Article 8(4) imposes a choice of law as follows:
- The arbitration organization shall rule based on the provisions of this Agreement, on the laws of the Contracting Party that is a party to the dispute [Argentina] —including rules relating to conflicts of laws—and on the terms of any special agreements made in connection with the investment, and on the principles of International Law on the subject.
899. The Parties also agree that lacunae in the Treaty must be supplemented by international law. In this respect, the Tribunal provisionally concluded in paragraph 65 of its Decision on Jurisdiction that “[i]n the merits phase of the arbitration the Tribunal may well need to supplement this treaty framework with consideration of additional sources of law or principles of construction.”
900. The Parties diverge, however, with respect to the role of Argentine law in determining international responsibility.
901. Claimants contend the Argentina-France BIT and customary international law define the nature and scope of their rights as well as the standards against which the Parties’

conduct will be assessed. In this connection, the Tribunal notes the Expert Report by Dr. Alberto Bianchi which opines that the Argentine Constitution ranks treaties as superior to and overriding inconsistent local laws. Bianchi Report, paragraph 70.

902. Thus Claimants consider Argentine law relevant only as it relates to the factual matrix of the case. In support of their position (Claimants' Reply at paragraph 248-49) Claimants cite *LG&E* (Decision on Liability, 3 October 2006) as well as *Azurix v. Argentina*, ICSID Case No. ARB/01/12 (Award, 14 July 2006). The latter case suggests at paragraphs 67 that "the law of Argentina should be helpful in the carrying out of the Tribunal's inquiry into the alleged breaches of the Concession Agreement to which Argentina's law applies, but it is only an element of the inquiry because of the treaty nature of the claims under consideration"
903. By contrast, Respondent argues that Argentine law is essential in determining the nature and scope of Claimants' treaty-based rights as well as in deciding whether a breach of such rights has occurred.
904. After due consideration of the Parties' arguments, the Tribunal finds that in the context of its mandate under the Argentine-France BIT, the terms of that treaty provide the lodestar for decision. It may well be that a national court deciding analogous issues would come to a different conclusion. However, in the present dispute the BIT supplies the primary foundation and framework for the Tribunal's consideration of investor protection.
905. The Tribunal finds support in its view from the provisions of Article 27 of the 1969 Vienna Convention, which precludes a state from "invok[ing] the provisions of its internal law as justification for its failure to perform."
906. In addition, Article 3 of the 2001 International Law Commission's Draft Articles on Responsibility of States for Internationally Wrongful Acts provides that the characterization of an act of a State as internationally wrongful "is not affected by the characterization of the same act as lawful by internal law."
907. Thus the legality of Respondent's acts under national law does not determine their lawfulness under international legal principles. The fact that the Argentine Supreme

Court has vested Respondent with robust authority during national economic crises does not change the Tribunal's analysis.

908. The Tribunal notes that arbitrators in other cases have reached a similar conclusion. The *LG&E Decision on Liability* at paragraph 94 finds that “[i]nternational law overrides domestic law when there is a contradiction[,] since a State cannot justify non-compliance of its international obligations by asserting the provisions of its domestic law.” Similarly, in the *Decision on Liability in Suez v. Argentina*, the tribunal stated, “Argentina may not avoid its treaty commitments with respect to the treatment to be accorded the Claimants by invoking the provisions of its internal law, regulations or administrative acts.” See paragraph 65, *Suez, Sociedad General de Aguas de Barcelona S.A. and Vivendi Universal S.A. v. The Argentine Republic*, ICSID Case No. ARB/03/19, *Decision on Liability*, 30 July 2010.

5. Human Rights

909. It is common ground that the Tribunal should be sensitive to international *jus cogens* norms, including basic principles of human rights. As defined by Article 53 of the Vienna Convention, such norms include standards “accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted.”
910. The Parties, however, disagree over the application and scope of those norms. In Respondent's view, the Emergency Tariff Measures guaranteed free enjoyment of certain basic human rights such as life, health, personal integrity and education, which were directly threatened by the socio-economic crisis suffered by Argentina.
911. By contrast, Claimants argue that no *jus cogens* norms were threatened. According to Claimants, commonly recognized examples of *jus cogens* norms include prohibitions against genocide or slave trading, not a right of Argentine citizens to consume electricity at reduced prices.
912. The Tribunal does not call into question the potential significance or relevance of human rights in connection with international investment law. However, regardless of any

political wisdom in a temporary pesification or provisional freeze of tariffs during the period of crisis, no showing has been made that Argentina was not able to comply with the relevant treaty provisions later, through a rectification of the economic equilibrium which had been disrupted by the Emergency Measures.

913. The imbalance of EDEMSA's economic equilibrium, as compared with the Claimants' legitimate expectations pursuant to the Currency Clause, persisted beyond the end of the third quarter 2002, when economic indicators in Argentina showed a stable trend toward recovery. See Claimants' Post-Hearing Brief on the Merits, at paragraph 179 (citing to Arriazu's Supplementary Expert Report, at paragraphs 100-109).
914. In short, no evidence persuades the Tribunal that Respondent's failure to re-negotiate tariffs in a timely fashion, so as to re-establish the economic equilibrium to which Claimants were entitled under the Concession Agreement's Currency Clause, was necessary to guarantee human rights.

B. DISCRIMINATORY INTENT AS PREREQUISITE TO RECOVERY

915. Respondent argues that this Tribunal has set forth a requirement that Claimants must prove discrimination in order to recover. In this connection, Respondent cites to paragraph 146 of the Tribunal's Decision on Jurisdiction of 5 August 2008, which states as follows:

To establish treaty breaches, Claimants must prove that Respondent's enactment and implementation of the Emergency Measures constituted discriminatory behavior as defined in the French and Luxembourg investment treaties. The Tribunal would need to examine *inter alia* Respondent's motives and the impact of the Emergency Measures, and whether they constituted an attempt to deprive Claimants of their rights simply because they were foreign investors.

916. When read in context, the quoted language does not require discrimination as a necessary pre-requisite to recovery. Rather, the relevant language addressed Respondent's jurisdictional objection pursuant to Article 25(1) of the ICSID Convention.

917. In that connection, the Tribunal had to consider whether Claimants had demonstrated *prima facie* that the present dispute bore a direct relationship to their investments. Decision on Jurisdiction of 5 August 2008, at paragraph 142.
918. In finding that such a relationship existed, and for that purpose alone, the Tribunal noted Claimants' allegations about a pattern of discriminatory conduct.
919. The Tribunal then went on to say that Respondent would be given an opportunity to test such contentions, with Claimants bearing the burden of proving the alleged discrimination.
920. The Tribunal laid down no general requirement of discrimination as a basis for liability under relevant treaty provisions, but simply stated that any allegations of treaty breach based on discrimination would need to be proven by Claimants.

C. CLAIMS AND DEFENSES

1. Specific Commitments: MFN Incorporation of Umbrella Clauses

a) MFN Provisions

921. Pursuant to the MFN Clause in Article 4 of the Argentina-France BIT, each Contracting Party shall provide to the investors of the other Party, with respect to their investments and activities associated with such investments, "a treatment no less favorable than that accorded to . . . investors of the most favored Nation."
922. Claimants' assert that by virtue of the MFN Clause they are entitled to any substantive protections in third-party investment treaties which might be considered more favorable than those contained in the Argentina-France BIT. In particular, Claimants seek protection of their specific commitments under the so-called "umbrella clauses" in other bilateral investment treaties entered into by Argentina.⁷³

⁷³ In support of their argument, Claimants advance expert report of Dr. Dolzer, wherein he opines that specific commitments undertaken in connection with Claimants' investment in EDEMSA are "contained in the national and provincial regulatory framework, and in the Concession Agreement." Supplementary Report of Dr. Rudolf Dolzer, at paragraph 189.

923. In this connection, Claimants invoke Article 10(2) of the Argentina-Luxembourg BIT, which provides as follows: “Each of the Contracting Parties shall respect at all times the commitments it has undertaken with respect to investors of the other Party.” In addition, Claimants invoke Article 7(2) of the Argentina-Germany BIT, which reads: “Each Contracting Party shall comply with any other commitment undertaken in connection with the investments made by nationals or companies from the other Contracting Party in the former’s territory.”
924. Respondent sets forth a multi-tier defense against incorporation of the “umbrella clauses” through the MFN Clause.
925. First, Respondent asserts that the principle of *ejusdem generis* effectively bars Claimants from invoking substantive protections of a kind not explicitly contained in the Treaty itself. In Respondent’s view, “umbrella clauses” constitute exceptions to the fundamental principle of customary international law that a breach of domestic law does not give rise to international responsibility. Respondent argues that such exceptions by their very nature must be considered to be specifically negotiated.⁷⁴
926. In support of its position, Respondent cites *inter alia* to Article 9(1) of the U.N. Draft Articles on the MFN Clause, which reads as follows: “Under a most-favoured-nation clause the beneficiary State acquires, for itself or for the benefit of persons or things in a determined relationship with it, only those rights which fall within the limits of the subject matter of the clause.”
927. Respondent further argues that even if the scope of the MFN Clause is found to incorporate “umbrella clauses,” the Concession Agreement was signed with EDEMSA, and thus that Claimants lack contractual privity.
928. Finally, Respondent contends that applying “umbrella clauses” to enforce provisions set forth in the Concession Agreement would lead to the forum selection clause contained

⁷⁴ In this connection, Respondent further argues *inter alia* that “umbrella clauses” are (i) consensual obligations arising independently of investment treaties rather than covering general requirements imposed by the law of the host state; (ii) not entered *into erga omnes* but with regard to particular persons; and (iii) obligations that do not transform into something else.

therein, which grants exclusive jurisdiction to the administrative courts of the City of Mendoza.

929. After due consideration of the Parties' arguments, the Tribunal concludes that the MFN clause does in fact permit recourse to the "umbrella clauses" of third-country treaties, which leads to arbitration rather than the administrative courts of the City of Mendoza.
930. In this connection, it is necessary to reject Respondent's argument based on the forum selection clause in Article 40 of the Concession Agreement. Claimants were not party to that Concession. Their claim rests on breach of investment treaties, which as such clearly fall within the Tribunal's jurisdiction.
931. There is nothing mysterious about the fact that the same acts may constitute both a contractual breach and a violation of relevant treaty obligations. This Tribunal's competence rests on the alleged violation of the "umbrella clause" in the relevant investment treaties as incorporated through the MFN clause in the Argentina-France BIT.
932. To ignore the MFN clause in this case would permit more favorable treatment to investors protected under third countries, which is exactly what the MFN Clause is intended to prevent.
933. The Tribunal finds unconvincing a narrow interpretation of Article 8(1) of the Argentina-France BIT which seeks to restrict the application of the MFN clause. The dispute in question clearly arises under the Argentine-France BIT even though that treaty, by its terms, incorporates some provisions from other conventions. To interpret the BIT otherwise would effectively read the MFN language out of the treaty. Such a result cannot be what the two countries intended by the treaty language.
934. Nothing in Article 9(1) of the ILC Draft Articles on the MFN Clause changes this result. In giving effect to the MFN provisions, the Tribunal does not in any way accord investors anything other than "those rights which fall within the limits of the subject matter of the clause."

935. The Tribunal recognizes that a divergence of opinion exists with respect to application of MFN clauses. In particular, many arbitral tribunals hesitate in looking to jurisdictional and procedural terms of third-country treaties, as contrasted to more substantive provisions. Opinion remains particularly divided with respect to wholesale importation of third-country treaty dispute resolution mechanisms.
936. The Tribunal need take no position on this debate about the interaction of MFN clauses with jurisdictional and procedural provisions. Our current decision simply brings into consideration the clearly substantive provisions requiring respect for explicit host state undertakings such as concession agreements.
937. The Tribunal thus concludes the MFN Clause in Article 4 of the Argentina-France BIT permits Claimants to incorporate the “umbrella clauses” from the Argentina-Luxembourg or Argentina-Germany BITs.

b) Scope of Umbrella Clauses

938. The “umbrella clauses” in question are broadly worded. A clear and ordinary reading of these dispositions covers commitments undertaken with respect to investors, or undertaken in connection with investments. The Tribunal notes that Article 10(2) of the Argentina-Luxembourg BIT covers commitments “undertaken *with respect to investors*” while Article 7(2) of the German BIT, even broader in scope, covers “commitment *undertaken in connection with the investments.*”
939. Concession agreements granted to foreign investors for specific investments, such as those at issue in this arbitration, fall within the protection of an “umbrella clause.”
940. This does not mean that all contractual breaches necessarily rise to the level of treaty violation. However, the serious repudiation of concessions obligations implicated by failure to respect the currency clause (Concession Anexo II, Subanexo 2) must clearly be seen as a violation of “commitments ... undertaken with respect to investors” (Article 10(2), Argentina-Luxembourg BIT) and “a commitment undertaken in connection with the investments made by nationals or companies from the other Contracting Party” (Article 7(2), Argentina-Germany BIT).

941. The present case clearly implicates governmental acts. The regulatory changes implemented by the Republic of Argentina and the Province of Mendoza include the freeze of tariff rates, change in operative exchange rates, and regulation of the distribution of electricity. Respondent has admitted that the Pre-Emergency Measures affecting the Concession were exercises of the Province's sovereign capacity. See Respondent's Counter-Memorial, at paragraph 727.
942. The Tribunal notes that Article 12 of the Concession Agreement makes explicit mention of shareholders. That provision prohibits shareholders from transferring EDEMSA shares without prior consent from EPRE. Respondent itself mentions at paragraph 231 of its Counter-Memorial that "the Concession Agreement required authorization by the Executive Power for the transfer of EDEMSA's majority shareholding 'only' during the first 5 years of the agreement's effective date."

c) Risk Allocation

943. The Concession Agreement constitutes a concrete commitment to the Claimants' investment. Consistent with Professor Dolzer's view, the Tribunal finds that the relevant "umbrella clauses" oblige Argentina to abide by its commitments in the Concession Agreement.
944. In addressing Respondent's conduct in connection with the Concession Contract, the Tribunal does not act as a judge of contract questions, but rather as a tribunal considering treaty matters, in particular the specific commitments protected by the "umbrella clause."
945. In the Tribunal's consideration of the Concession Agreement through the lens of the applicable "umbrella clauses", particular attention must be paid to Anexo II, Subanexo 2, titled Calculation of Tariff Schedule Parameters (Cálculo de los Parámetros del Cuadro Tarifario). This provision provides in Section I, "All the aforementioned costs shall be calculated and recalculated in U.S. dollars. The recalculated or resulting Rate Structure shall be expressed in Argentine pesos (\$) at the time it is applied to the user invoices, at the peso conversion rate established in National Decree 2128/91, Article 3, and under the conditions established in [Federal] Law [No.] 23,298 [text corrected by hand to read: "23.928"]."

946. The Currency Clause's cross-references to the Convertibility Law point to a federal legislation and its implementing executive order, respectively passed and issued in March and October of 1991, seven years prior to the signing of the Concession Agreement, as part of a national policy on economic reform instituted in the late-1980's and early-1990's. Upon its implementation, the Convertibility Law pegged the Argentine peso to the U.S. dollar at a foreign exchange rate of one to one (1:1), which lasted until 6 January 2002.
947. The Currency Clause operates pursuant to a mechanism elaborated in Article 43(c) of the Provincial Electricity Law. Tariff rates invoiced to consumers must reflect EDEMSA's costs of purchasing and distributing electricity as described in the first paragraph of Section I of Sub-Annex 2, namely, costs representing the purchase of electricity from the Electricity Wholesale Market as well as the transportation, distribution and commercialization of electricity. These costs are then coupled with the concessionaire's return on capital to make up what is referred to as the DAV, which passes the costs of distributing electricity through to the consumer.
948. Thus the Currency Clause operates both in relation to the component of the tariff which compensates the distributor and the cost of the electricity bought by the distributor in the wholesale market which gets passed through to the end-users.
949. The Currency Clause prescribes the calculation of these costs in terms of U.S. dollar currency for purposes of assessing the ultimate tariff rate to be invoiced to consumers. Subsequently, user invoices would be expressed in Argentine pesos in accordance with the monetary policy and exchange rate contemplated for in the Convertibility Law.
950. The Currency Clause's reference to "recalculation" of costs concerns the periodic adjustment of tariff rates to account for the inflation of electricity distribution costs. In this connection, Section IV of Sub-Annex 2 establishes the Cost-Adjustment Clause, which in pertinent part provides:

The Actual Distribution Costs and the Marketing Costs shall be recalculated each year to coincide with the updating of the Wholesale Energy and Power Prices for the seasonal period beginning in November

each year and shall be in effect for the twelve (12) months following the recalculation. The following expression shall be used for the annual recalculation:

951. The Currency Clause represents a clear allocation of risk as between the host state and the foreign investor as to matters covered by that clause. The Concession Agreement, by incorporating provisions of the Provincial Electricity Law, sets forth the terms and conditions granted to EDEMSA, including mechanisms to protect the concessionaire against risks related to fluctuation of the Argentine currency.
952. Respondent's position seems to be that neither the Concession Agreement nor the Regulatory Framework supplied appropriate means to restore the balance between the rights of the concessionaire and those of the users during the Argentine Economic Turmoil. Respondent thus asserts that the tariff system contemplated under the Concession Agreement was inapplicable both from economic and legal perspectives. Enforcing the Concession would have caused serious damages to the Province and the users. In support, Respondent cites to *inter alia* the report of Professor Ismael Mata, who opines that in a scenario where the Convertibility Law was repealed the tariff system under the Concession Agreement became "impractical and impossible for service users." Report of Ismael Mata, at paragraph 220.
953. Upon review of the legal framework and contractual commitments summarized above, the Tribunal finds that the Currency Clause, by establishing the calculation and recalculation of tariffs in U.S. dollar terms, allocated to the Province of Mendoza risks associated with fluctuations between the U.S. dollar and the Argentine peso.
954. Such a finding imposes itself in light of the fact that many investment costs, such as the purchase of equipment available only outside Argentina, and assumption of debt in U.S. dollars, required payments in non-Argentine currency. In particular, assuming debt in U.S. dollars allowed long-term financing from the international capital markets at lower interest rates than available through borrowings of Argentine currency.
955. To protect the investor from inflation risks, the Cost-Adjustment Clause provided for a mechanism to maintain the real value of tariffs constant. As set forth in the Cost-

Adjustment Clause, electricity distribution costs were to be recalculated in accordance with an index combining variations in the U.S. producer and consumer price indices. This in effect afforded Claimants the protection against inflation risks as the costs and expenses could be adjusted annually.

956. Under the Provincial Electricity Law Respondent explicitly guaranteed long-term political and regulatory stability for the Concession Agreement. The tariffs were to be determined in a way that afforded the concessionaire sufficient income to cover all costs associated with the distribution of electricity as well as to obtain a reasonable return on any investments made in that connection.
957. What is more, the Concession Agreement contemplated tariff schedules of five-year terms subject to interim modification only on grounds of extraordinary variations in the cost structure of the distributor caused by unforeseen events beyond the control of the parties, and at the expiration of such term, subject to revision only in conformity with predetermined procedures in order to augment the stability of the Regulatory Framework.
958. In paragraphs 177 thru 181 of its Counter-Memorial, Respondent to some extent acknowledges the apprehension of foreign investors with respect to currency fluctuations. Respondent suggests that it was reckless for Claimants to take on foreign currency debts, given that Claimants themselves suspected that the fixed convertibility regime would be abandoned. Respondent asserts that “[i]n the year when SODEMSA was awarded the concession, Argentina went into a recession and the possibility of currency devaluation was strong and increasing.” Respondent’s Counter-Memorial, at paragraph 179.
959. Taking Respondent’s allegation on face value, the conclusion would favor Claimants. If indeed there was a fear of fixed convertibility being abandoned, then it would be natural for foreign investors to seek some mechanism to protect against currency risk. Contemplation that the fixed-exchange regime would end would lead logically to reliance on something such as the Currency Clause.
960. Had the Currency Clause been conditioned on the Convertibility Law, the contract provision could have said so. Moreover, it would have been unnecessary for Respondent

to have repealed the Currency Clause or Cost-Adjustment Clause through the Emergency Tariff Measures.

961. Logic as well as specific Concession language run counter to any suggestion that Claimants' rights to calculate tariffs in U.S. dollars were to depend on survival of the Convertibility Law.
962. The Tribunal finds persuasive Claimants' quantum expert, LECG, to the effect that "[t]he use of individualized contracts, as opposed to simply using regulatory frameworks based on general legislation, grants investors an additional protection against governmental opportunistic behavior, as general regulatory frameworks can be changed by new legislation, while changing contracts require, in principle, the agreement of both parties to the contract." Expert Report of LECG dated 28 April 2005, at paragraph 46.
963. Accordingly, the Tribunal finds that the very purpose and effect of the Currency and Cost-Adjustment Clauses were to protect the actual value of the tariffs from the likelihood of devaluation or depreciation of the local currency.
964. The Currency Clause refers to the Convertibility Law because the exchange rate at the time of contract was established by that Law. In the event the Convertibility Law were to be repealed, the conversion from dollars to pesos would have to apply a new official exchange rate, if existent, or the then-current market rate.⁷⁵
965. Such finding is further supported by the text of the Currency Clause, requiring the recalculated costs to be expressed in pesos "at the time it is applied to the user invoices." As explained by Dr. Bianchi, the phrase "at the time" implies that the contracting parties "foresaw that the exchange rate might not be known in advance at the time of billing,

⁷⁵ This view is supported by Claimants' expert, Dr. Bianchi, who opines as follows:

There is no reason preventing the continued validity of the right granted to the concessionaire once the Convertibility Law was extinguished[,] . . . this right would acquire economic meaning if the peso was rated below the dollar, for example, 2 AR\$ = 1 US\$. Similarly, and from the hermeneutics point of view, it is more reasonable to maintain that the contract has no lacunae, and therefore the repeal of the Convertibility Law shall not produce the loss of the clause, but its substitution with another, in this case the substitution of the parity fixed by the Convertibility Law with another parity or different exchange rate. See Supplementary Report of Dr. Alberto B. Bianchi, at paragraph 30.

which can occur only with floating exchange rates.” See Supplementary Report of Alberto B. Bianchi, at paragraph 35.

966. The Tribunal has considered, but cannot subscribe to, Respondent’s view that only a change in the exchange rate itself would be taken into account for purposes of currency stability. In support of its position, Respondent cites to EDF’s “Plan Directeur” dated 31 March 1998, stating in pertinent part:

Risques.- Le risque de change paraît faible, la formule de convertibilité dans les tarifs permet d’exprimer les coûts de distribution en dollars américains lesquels sont actualisés chaque année au 1^{er} novembre suivant deux index de l’inflation américaine. Le prix au client final est converti en Peso au moment de la facturation suivant le décret 2128/1991.

Tant que la convertibilité US\$/Peso est garantie par la loi, la formule d’indexation couvre correctement le risque de change. En revanche dans un scénario de crise du Peso, le décret 2118/1991 pourrait alors être amendé. Dans ce cas, la formule ne prévoit pas le risque du taux de change réel du peso, phénomène qui se produit normalement après un subite dévaluation (« effet tequila »).

967. The Tribunal interprets the quoted paragraphs as expressing concern with respect to the peso’s real exchange rate. As recognized in that paragraph, repeal of the convertibility law would expose the concessionaire to risks from the real exchange rate by way of a sharp devaluation followed by sharp inflation: the so-called “tequila effect” in that context.⁷⁶
968. In any event, the Tribunal reads the Currency Clause itself as clearly intended to protect the concessionaire from the effects of peso devaluation. Costs would be calculated in U.S. dollars to that end. The secondary material in the “Plan Directeur” does not change the protections granted by the Currency Clause.

⁷⁶ The Tribunal need take no part with respect to the Parties’ slight disagreement on the proper rendering of the final sentence of the French text. Respondent speaks of a “risk of modification” of the real exchange rate of the peso while Claimants translate the sentence to read “risk of appreciation” of the real exchange rate of the peso. Both translations purport to discuss the so-called “tequila effect,” a phrase originally coined to describe the impact of the 1994 Mexican economic crisis on the South American economy, when a sudden devaluation in the Mexican peso caused other currencies in the region to decline.

969. If only the Convertibility Law were repealed, the Currency Clause would protect the concessionaire from being negatively affected by a subsequent change such as a floating US\$/ARS exchange rate of 1 to 3. The cost calculation in U.S. dollars would allow the concessionaire to collect three times more pesos than before.⁷⁷

d) Emergency Measures and Concession Agreement

970. The Tribunal is convinced that the pesification and freeze of tariffs pursuant to the Emergency Measures breached Respondent's obligation to respect its contractual commitments.

971. Claimants assert that Respondent has violated the specific commitments undertaken in connection with Claimants' investment by breaching the terms of the Concession Agreement. In support, Claimants cite to several ICSID decisions that have ruled in the investor's favor in this regard, including the *Sempra*, *Enron* and *CMS Gas* cases.⁷⁸

972. In defense, Respondent argues that under Argentine law every concession involving a public utility must search for and materialize, to the extent possible, an equilibrium between the advantages agreed upon and the burdens imposed on the concessionaire, thereby guaranteeing by way of the principle of fair and reasonable tariffs, the original contractual equivalence and the defense of the economic interests of users. Respondent further argues that the Emergency Measures not only helped EDEMSA's economic and financial position but also were legitimate and reasonable means to maintain tariffs at fair and reasonable rates that allowed, in time, for the gradual economic and social recovery which would benefit all constituents.

⁷⁷ Even the writings of Respondent's regulatory expert, Mr. Sruoga, recognize that the Currency Clause served as a general protection against peso devaluation. See C234, Alejandro Sruoga, *El Proceso de Cálculo de los Cuadros Tarifarios de Empresas Distribuidoras de Electricidad*, Asociación de Distribuidores de Energía Eléctrica de la República Argentina (ADEERA), Buenos Aires, September 2000, at 81 (translating the Spanish original text in English, the relevant text reads, "With respect to the currency risk: if the tariffs have been established in dollars in the concession contract, the margin of 'country risk' that might have otherwise corresponded in that regard does not exist.").

⁷⁸ *Sempra v. Argentina*, (Award of 28 September 2007); *Enron v. Argentina*, (Award of 22 May 2007); *CMS Gas v. Argentina*, (Award of 12 May 2005).

973. As an initial matter, the Tribunal notes the double-edged nature of Article 43 of the Provincial Electricity Law when the privatization framework was initially established. On the one hand, this provision endorses a policy of fair and reasonable rates to consumers. On the other hand, the law allows transmission companies and distributors to cover relevant costs and to obtain a reasonable rate of return.

974. Article 43, in pertinent part, provides as follows:

The rates charged by electricity transmission companies and distributors shall be fair and reasonable and shall be subject to the following principles: (a) Rates shall afford transmission companies and distributors . . . the opportunity to derive sufficient income to cover any operating, maintenance and expansion costs and taxes applicable to the services, and to obtain a reasonable rate of return defined pursuant to the provisions of Article 46 of this law; (c) For distribution rates, the electricity sale price shall include the specific distribution costs inherent in the distribution business recognized to the concessionaire, and a term representative of the cost of electricity purchased in the wholesale electricity market, in a manner such that any variations in this market may be reflected in the rates applied to the respective users; (d) Ensure the minimum reasonable cost to users, compatible with the security of supply, service quality and rational use of energy[.]

975. Consistent with industry practice, reference to “specific distribution costs” in Article 43 connotes a term of art recognized in the electricity sector as including the cost of capital. See Supplementary Report of Carlos Bastos, at paragraph 22.

976. In light of the standard provided under Article 43, the Tribunal finds unconvincing Respondent’s argument that maintenance of the Currency Clause and related provisions of the Concession Agreement would have extinguished the principle of fair and reasonable rates. To the contrary, the Currency Clause permitted the distributor to cover costs and receive a reasonable rate of return.

977. As admitted by Respondent, even the Argentine Constitution recognizes that tariffs must allow account for costs of the services provided as well as the distributor’s profitability. See Respondent’s Counter-Memorial at paragraph 386-87. Under Article 45 of the Provincial Electricity Law, tariff rates are in fact capped at levels allowing for a rate of

return that is compatible with the risk level characterizing the electricity transmission and distribution businesses as well as other industries of comparable risk.

978. The evidence shows that by virtue of the price cap system in Articles 13, 22 and 23 of the Concession Agreement operating collectively, the only way Claimants could increase profitability was by reducing costs and increasing efficiency, rather than through an escalation of tariff rates.
979. The facts of the present case do not indicate that any unreasonable excess in profit would have resulted from EDEMSA's operation. Rather, following the enactment of the Emergency Measures, the investor's profitability was zero.
980. Despite Article 29 of the Concession Agreement requiring strict adherence to the approved tariff schedules, Respondent abrogated the Concession Agreement provisions that incorporate substantive terms set forth in the Regulatory Framework at the time of privatization.
981. No evidence suggests that the Emergency Measures benefited EDEMSA's economic and financial position. Rather, the measures not only affected EDEMSA's profitability, but also drastically changed the tariff regime so as to fundamentally alter the economic equilibrium of the Concession Agreement.
982. In particular, the Tribunal finds that the Emergency Tariff Measures caused a *de facto* freeze on the tariffs, thus depriving Claimants from their protection under the Cost-Adjustment Clause, as well as pesification of the tariffs so as to require the conversion of the dollar-denominated tariffs into peso-denominated tariffs at a ratio of 1 to 1.
983. The Concession Agreement's terms were effectively modified by the Emergency Measures. Prior to enactment of the Emergency Laws, consumer invoices were calculated in U.S. dollars and then converted to pesos for purposes of billing. Pursuant to the fixed 1:1 exchange ratio established by the Convertibility Law, the nominal figures between the costs calculated in U.S. dollars and the converted amount in pesos would be equal.

984. Following the repeal of the Currency Clause, however, such formula was skewed so as to force the same billing invoice amount in peso terms, even though the fixed convertibility system had been scrapped. The peso was consequently devalued three-fold. Accordingly, the billed amount to consumers was worth only a third of what it had been prior to 2002, which in effect deprived Claimants of its protection against currency risks.
985. As a result, Claimants experienced significant decline in their revenue, which in turn reduced the cash flows to a level insufficient to cover operational costs, commercial debt, taxes and interest payments, as well as to improve infrastructure. EDEMSA's equity value depreciated. What is more, EDEMSA experienced sharp increases in costs due to inflation, resulting in further imbalance between the revenue and operational expenses.
986. The financial equilibrium of EDEMSA was never restored. The imbalance of EDEMSA's economic equilibrium persisted beyond the end of the third quarter 2002, when economic indicators in Argentina showed a stable trend toward recovery. See Arriazu's Supplementary Expert Report, paragraphs 100-109, discussed in Claimants' Post-Hearing Brief on the Merits at paragraph 179.
987. The Emergency Measures required EDEMSA to abide by its contractual obligations, thereby creating an asymmetry that further exacerbated injury to Claimants' investment during the thirty-eight (38) months the Renegotiation Process took place. All the while, the Province of Mendoza failed to raise tariffs in a timely manner such as to restore the economic equilibrium to its original balance when rates were set in U.S. dollars.
988. Although the Government of Mendoza had eventually agreed to a series of DAV increases, the adjustments took effect only after Claimants had decided to withdraw their investments by executing a sales contract with IADESA on 30 June 2004.
989. The failure to renegotiate takes on significance by virtue of Respondent's outright breach of the Currency Clause under Anexo 2, Subanexo 2, Section 1, which expressly required tariff calculations in U.S. dollars. The breach by Respondent might well have been temporary if Argentina had made timely efforts to raise tariffs to a reasonable level, in which case the liability for breach would have been only theoretical.

990. Claimants, however, waited more than three years following the Emergency Measures before selling their investment in an attempt to mitigate damages. Pursuant to Article 5 of Provincial Decree No. 487/2002, the Renegotiation Commission was initially required by law to complete new concession terms within 180 days. The Renegotiation Process, however, was repeatedly delayed by local authorities, which continued to extend the deadline while maintaining the tariff freeze during the 38 months the Renegotiation Process took place.
991. On the other hand, the sale of the investment was negotiated, executed and performed in the context of an open renegotiation process. This circumstance and the consequences thereof are addressed *infra* in determining the quantum of damages.
992. Respondent asserts that Claimants are at fault for EDEMESA's loss in value. According to Respondent, such losses were due to Claimants' overbidding of the purchase price, which was caused by defective due diligence and faulty macro-economic forecasts, as well as to Claimants' poor performance of EDEMESA's operations, and dangerous policies on debt financing and capital reduction.
993. In the Tribunal's view any overbidding by Claimants does not bear on the alleged violations of Respondent's obligations under the Argentine-France BIT, which exist regardless of how much Claimants paid for their investment. Any impact of the overbidding process is addressed in connection with quantum, that is, in determining the amount of the investment for which Claimants should be compensated.

2. Fair and Equitable Treatment

994. Under the facts of this arbitration, Respondent's breach of certain obligations under the applicable umbrella clause operates in tandem with breach of Article 3 of the Argentine-France BIT, providing a duty to accord Fair and Equitable Treatment.
995. Within a reasonable time following the state of emergency, Respondent should have moved to re-establish the economic equilibrium provided by the Concession Agreement following which had been pushed aside by failure to calculate tariffs in U.S. dollars as required by Concession Agreement Anexo II, Subanexo 2, discussed *supra*. That balance

was never restored during the time Claimants owned their Argentine investment, notwithstanding three years in which Respondent had an opportunity to do so.

996. Rather, Respondent waited to restore the equilibrium until EDEMSA had been transferred to local Argentine ownership during the first half of 2005.
997. The Pre-Emergency Measures affecting the Concession contravened explicit and important rights granted by Respondent to Claimants as an inducement to invest. The Renegotiation Process was conducted in such a way that Claimants were left little alternative but to mitigate their losses by selling their investment to a local buyer. Only after the 2005 sale was the originally-promised economic equilibrium restored, even though during the intervening period the Provincial Emergency Law explicitly obligated EDEMSA to continue complying fully with the Concession Agreement, thus further exacerbating its financial plight and creating a markedly unfair asymmetrical relationship.

a) Interpretation of Article 3 and the Legal Standard

998. Article 3 of the Argentine-France BIT provides that “Each of the Contracting Parties undertakes within its territory and its maritime zone to grant Fair and Equitable Treatment according to the principles of International Law to the investments made by the investors of the other Party, and to do so in such a way that the exercise of the right thus granted is not impaired *de facto* or *de jure*.”
999. The Fair and Equitable Treatment clause under Article 3 obligated Respondent to respect international law in principle and in practice. The Tribunal need not decide whether Article 3 establishes an autonomous and independent standard of fairness or simply coincides with customary international minimum standard. In either event, failure to abide by express commitments without re-establishing economic balance in a reasonable period of time constitutes inequitable conduct.

1000. The Tribunal has carefully considered the various authorities cited by Respondent with respect to the minimum standard,⁷⁹ including the well-known 1927 case of *Neer v. Mexico*.⁸⁰ These arguments fail to address the difficulty in Respondent's behavior.
1001. Article 3 nowhere mentions "minimum standard" as such, but rather speaks simply of principles of international law. The treaty thus invites consideration of a wider range of principles related to fairness and equity. Such principles include the duty to aim for respect of specific commitments, such calculation of tariffs in dollars.
1002. Even if such specific commitments might be temporarily suspended during a state of emergency, fairness requires the host state to repair the economic balance within a reasonable time after the state of emergency has ended.
1003. Respondent's reliance on NAFTA jurisprudence is equally unavailing. The very title NAFTA Article 1105(1) is "Minimum Standard of Treatment." The Argentina-France BIT contains no such language. In this regard, the Tribunal's finding is further supported by the NAFTA Free Trade Commission's binding Note of Interpretation of 31 July 2001, which essentially instructed arbitral tribunals to take such a restrictive approach. Nothing of that nature has been introduced in connection with the Argentina-France BIT.
1004. Delineation of the contours of the Fair and Equitable Treatment standard of the Argentina-France BIT depends on the factual context of the host state's actions, including the evolution of the prevalent economic and social conditions.
1005. The Tribunal is mindful that the economic crisis is relevant to the interpretation of the Fair and Equitable Treatment standard. The investor's expectations must be balanced against the host state's need to take action in the public interest at a time of crisis. By the same token, an integral part of fairness and equity must be constituted by respect for

⁷⁹ Respondent cites to *Alex Genin et al. v. Republic of Estonia*, ICSID Case ARB/99/2, Award of 25 June 2001, at paragraph 367; *Saluka Investments v. Czech Republic* (Partial Award, 17 March 2006), at paragraph 292; and *M.C.I. Power Group L.C. and New Turbine, Inc. v. Ecuador*, ICSID Case No. ARB/03/6, Award of 31 July 2007, at paragraph 369.

⁸⁰ See *Neer v. Mexico*, published at 21 AM. J. INT'L L. 555 (1927). Respondent argues that this "Neer standard" does not impose obligations to keep the investment unharmed, and sets a high benchmark for unfair treatment as evidenced by the ICSID annulment decision in *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. the Argentine Republic*, Case No. ARB/03/97, Decision on Annulment, 3 July 2002, at paragraph 113.

fundamental representations of a concession after a state of emergency has passed and economic equilibrium can be restored.

1006. The Tribunal finds no support for Respondent's position in the *Glamis Gold decision*,⁸¹ an UNCITRAL proceeding involving NAFTA. As underscored above, this Tribunal must apply the Argentina-France BIT.
1007. The Tribunal emphasizes that Article 3 of the Argentine-France BIT protects against impairment of rights either "*de facto* or *de jure*" which leads to the following discussion of the renegotiation process by which Respondent rejected re-establishment of the economic equilibrium.

b) Emergency Measures and Renegotiation Process

1008. The Province of Mendoza had clearly embarked on a campaign to attract foreign investors in purchasing 51% of EDEMSA Class "A" shares. Respondent's road shows and Info Memo promoted *inter alia* a foreign investor-friendly legal regime that provided investors with reasonable returns as well as a series of protections tailored to make the investment more appealing to foreign capital markets. Respondent gave specific guarantees and commitments that created strong expectations of a long-term investment subject to only *de minimis* political or regulatory risk. Key features of the sales pitch included (i) the creation of a regulatory agency with independent oversight to insulate investors from politically motivated measures and actions; (ii) the Currency Clause; (iii) the Cost Adjustment Clause; (iv) the Extraordinary Tariff Adjustment Clause; (v) an initial tariff schedule with a fixed-term of five years; and (vi) a concession with a duration of thirty years.
1009. The due diligence obligations of a concession bidder provide no basis for the Tribunal to ignore Argentina's duties under its investment treaty with France. The failure of the Province to raise tariffs in a timely manner, so as to restore balance when rates were set in U.S. dollars, constituted unfair and inequitable treatment in and of itself.

⁸¹ *Glamis Gold, Ltd. v. United States of America*, UNCITRAL (NAFTA), Award of 8 June 2009.

1010. Had the provisions in the Currency Clause not existed, pesification and failure to restore the economic balance might not have figured as unfair and inequitable treatment. The effects of abrogation of that Currency Clause were to leave the investor with 33.3% of its bargain with the host state, with no repair of the damage in a reasonable time.
1011. Despite economic indicators showing a stable recovery trend during the third quarter 2002 (Arriazu Supplementary Expert Report, paragraphs 100-109) the Renegotiation Process was inordinately delayed. The process was expected to be concluded originally within 6 months. Nevertheless, Argentina repeatedly delayed raising tariffs.
1012. Had tariffs been raised in a timely fashion, any breach of the Currency Clause might have been rendered largely theoretical. Instead, the local authorities continued to extend deadlines while maintaining the tariff freeze.
1013. In this connection, the details of the EDFI Renegotiation Process merit restatement. On 15 January 2002, the Province of Mendoza, pursuant to Articles 8, 9 and 10 of Federal Law No. 25,561, enacted Provincial Law No. 6,976.
1014. Article 9 authorized the Government to renegotiate all public utility contracts. Through the Provincial Decree No. 487/2002 of 26 April 2002, the Government of Mendoza created the Renegotiation Commission, which, acting under the aegis of EPRE and the ME&PW, was commissioned to handle the renegotiation of the EDEMSA Concession Agreement.
1015. Pursuant to Article 5 of Provincial Decree No. 487/2002, which marked the beginning of the Renegotiation Process, the Renegotiation Commission was initially required by law to complete the new concession terms within a time frame of 180-days that ran from July 2002 until December 2002. The renegotiation, however, was unsuccessful.
1016. On 17 January 2003, the Government of Mendoza extended the deadline for an additional 180 days up to July 2003 through Provincial Decree No. 89/2003. Prior to the passage of Provincial Decree No. 89/2003, however, on 13 December 2002, EPRE held a public hearing in which twenty-six entities, including EDEMSA, non-profit organizations, unions, service companies, and users participated.

1017. On 13 March 2003, the governor of Mendoza issued Provincial Decree No. 323/2003, which sought to institute a 3.4% increase to the DAV reflected in EDEMSA's tariff schedule to apply until the completion of the Renegotiation Process. Without acknowledging any specific right of EDEMSA, EPRE explicitly approved the governor's proposal by issuing Resolution No. 467/2002.
1018. The increase in DAV, however, was ultimately rejected by the Mendoza Senate and thus, never entered into force. Despite the extension, the renegotiation process proved unsuccessful once again, which prompted the Mendoza Executive's issuance of Provincial Decree No. 1539/2003 which made effective a second extension to expire on 10 December 2003.
1019. Upon failure to reach an agreement on renegotiation terms by December 2003, Provincial Law No. 7,187 was passed on 24 February 2004 to extend the deadline to lapse in December 2004.
1020. Finally, upon another failure to agree on renegotiation terms by the end of the third extension, the Government of Mendoza enacted Provincial Law No. 7,324 which extended the deadline to 30 June 2005. This was the fourth and last extension to the renegotiation deadline before Claimants notified EPRE in July 2004 of their intention to divest from EDEMSA.
1021. Only after sale of EDEMSA to Argentine purchasers, in March of 2005, did the renegotiation process bear any fruit in the form of the letter of Understanding.
1022. For good order, the Tribunal notes that in other cases some tribunals have found the Fair and Equitable Treatment standard to protect investors against instability and predictability of the legal framework,⁸² or to protect investors against unreasonable or arbitrary measures.⁸³ Although mindful of these decisions, the Tribunal has made its determination in the present case on an independent finding of Respondent's breach of

⁸² See e.g., *Sempra v. Argentina*; *Enron v. Argentina*; *CMS Gas v. Argentina*.

⁸³ See e.g., *Saluka Investments*, (Partial Award, 17 March 2006), at paragraph 309.

the specific commitments embodied in the Currency Clause followed by its failure to restore EDEMSA's financial equilibrium in a timely fashion.

3. Pre-Emergency Measures Affecting the Concession

1023. Claimants assert that prior to the Emergency Measures Respondent unilaterally altered the Regulatory Framework and Concession Agreement in a way which had a negative impact on EDEMSA's operations, and changed the financial equilibrium of the contract to the detriment of EDEMSA. Claimants also contend that the changes adversely affected technical performance, making it increasingly difficult to meet quality standards.
1024. In Respondent's view, most of the Pre-Emergency Measures affecting the Concession, adopted under the regulatory authority of EPRE or the Government of Mendoza, give rise to strictly contractual claims which have already been addressed before local courts. For one of these claims, related to so-called "quasi-currency" obligations, Respondent seems to base its argument not on any local legal action, but rather contends the claim is groundless because the bonds could be used as payment of Provincial obligations and would mature in 2003.
1025. Respondent views these claims as *res judicata* and outside the Tribunal's jurisdiction. Respondent further argues that EDEMSA and the Government of Mendoza executed a contractual renegotiation agreement, in which the parties agreed to honor the outstanding payments due to EDEMSA as at 31 February 2005. Respondent's Rejoinder at paragraph 777-78. According to Respondent, such agreement was memorialized in the Letter of Understanding dated 7 April 2005.
1026. The discussion immediately hereinafter considers the particular merits of each specific claim based on Pre-Emergency Measures affecting the Concession. For reasons elaborated below, the Tribunal finds Respondent liable only on claims related to Modification of the Tariff Regime. In addition, the Tribunal notes Respondent's admission that some compensation is due with respect to the Polvaredas area. Later in this award, the Tribunal discusses the Respondent's more general arguments that the Letter of Understanding results in "double recovery" and bars Claimants' claims concerning Pre-Emergency Measures affecting the Concession.

a) Enumerated Claims

(1) Modification of the Tariff Regime under the Concession Agreement

(a) Network-Use Fee

1027. Claimants argue that EPRE unilaterally altered the tariff regime under the Concession Agreement by modifying its fee structure applicable to large users.

1028. Concession Agreement, Anexo II, Subanexo 1, “Tarifa Nro. 2 (Grandes Demandas)” of Chapter 2, Subsection 3, in pertinent part, provides as follows:

Before the commencement of the electrical supply, DISTRIBUTOR shall agree the maximum supply capacity with the user in writing The agreed upon value shall be valid and applicable, for invoicing purposes, in accordance with Subsection 5(b) for a term of 12 consecutive month as from the date the service is made available and, at the expiration thereof, for 12-month periods.

1029. The Concession Agreement’s schedule with respect to T-2 large users can be summarized as follows. The Tariff Schedule permitted EDEMESA to recover the additional costs incurred as a result of having to supply greater levels of power for large electricity users. This scheme established a Network-Use Fee as part of the tariffs applicable to large users. The Network-Use Fee was to be calculated based on the power capacity that had been installed and made available to each large user. Every twelve months, each large user would notify EDEMESA of the power capacity required in the next year. The power capacity requested by and made available to each user determined the amount of the fee paid for using the network during the relevant twelve-month period.

1030. Resolution No. 8/98 set forth a fee structure different from that quoted above in that the new fee calculation would be based on the last non-null power recorded by each user immediately prior to the beginning of the concession on 1 August 1998.

1031. Consequently, the Tribunal finds that EPRE did unilaterally modify the terms of the Concession Agreement by Resolution No. 8/98, which effectively allowed large users to only pay for the yearly minimum of their electricity use rather than the maximum as originally contemplated. The last non-null power usage immediately prior to the

beginning of the concession would have been made in July, during the winter season in the southern hemisphere. As electricity consumption generally declines during the winter, EPRE regulations in effect permitted large users to contract for their minimum use regardless of the power capacity actually installed and made available to such users.

1032. According to Respondent, this modification was consistent with the requirements of the Concession Agreement in order to ensure that the tariffs were just, proportional, and equitable. Respondent's witness, Mr. Sergio Rodríguez, opines that such modifications were sought in response to consumer complaints and applied in general to all power distributors in the province and not just to EDEMSA. See Witness Statement of Sergio Rodríguez, at paragraphs 33-42.
1033. Moreover, Respondent argues that the original tariff schedule was only applicable to new large users, as opposed to those pre-existing at the date of the Concession Agreement's execution. Mr. Rodríguez further opines that, given the existence of over 4,000 large users, the parties could not have expected the agreements with users to be completed by the time of service take over.⁸⁴ Rather, EPRE Resolution No. 8/98 served to clarify the different scheme applicable to pre-existing large users.
1034. The Tribunal cannot agree with Respondent's view, however. EDEMSA could have executed the individual contracts with each large user, including those pre-existing at the time of the Concession Agreement's execution. EDEMSA's predecessor company, EMSE, had at its disposition the exact figures of maximum energy consumption of each large user from the twelve months prior to the beginning of the concession period.⁸⁵ It would have been reasonable to project each consumer's energy consumption for the following year. Even agreements with pre-existing large users could have been accomplished prior to commencement of services.

⁸⁴ Rebuttal Witness Statement of Sergio Rodríguez, at paragraph 11.

⁸⁵ In support of this view, Claimants cite to the Supplementary Witness Statement of Héctor Gonella, at paragraph 12.

1035. The Concession Agreement did not permit EPRE to implement such unilateral modifications. Doing so resulted in substantial harm to EDEMSA, in breach of the applicable umbrella clause.
1036. The Tribunal finds this particular harm serious enough to rise to the level of a treaty breach, pursuant to the standards set forth above.

(b) Reduction of Contracting Period with Users

1037. Claimants also allege that EPRE improperly reduced the twelve-month period for contracting with large users. See Concession Agreement, Anexo II, Subanexo 1, “Tarifa Nro. 2 (Grandes Demandas)” of Chapter 2, Subsection 3.
1038. The Tribunal has found no evidence that the Parties ever agreed to a period of less than twelve months for calculating the Network-Use Fee. However, the evidence demonstrates that EPRE did in fact modify the duration of the contracts for large users.
1039. In practice, Resolution 73/99 permits large users with seasonable production cycles to pay EDEMSA for power capacity only during the months of maximum power, while paying lesser amounts during lower levels of activity, when separate contracts are concluded for a smaller power capacity.
1040. The change in contracting period from the original twelve months was unilaterally imposed by EPRE in breach of its obligations under the applicable umbrella clause. As with the network-use fee, the Tribunal finds this particular harm serious enough to rise to the level of a treaty breach pursuant to the standards set forth above.

(c) Optional T-2 Tariff Category

1041. The third allegedly improper modification of the tariff regime concerns the Tariff Schedule under the Concession Agreement and relates to the temporary tariff, applicable to all users who, at the beginning of EDEMSA’s concession, either (i) did not have the power measuring equipment appropriate for their classification level within the Tariff Schedule established by the Concession Agreement, or (ii) had yet to be classified under one of the categories provided in the Tariff Schedule.

1042. In these instances, the transitory tariff was to apply until classification under a tariff category. The Concession Agreement required EDEMSA to complete the meter installation and user classification by specific deadlines, which, depending on the user's level of service demand, was either 6 or 12 months.
1043. The Tribunal understands the Concession Agreement to require that a user be automatically classified under the Optional T-2 large user category if the first reading with the new digital readers exceeded 10kW.
1044. Subsequent to the Concession, EPRE issued Resolution No. 125/99, which was later supplemented by Resolution No. 131/99. In the Tribunal's view, these resolutions effectively prevented EDEMSA from properly classifying temporary tariff users.
1045. The resolutions wrongfully permitted alteration of the tariff regime by allowing consumers to opt for the T-1 tariff category (applicable to small consumers) if successive readings from the first measurement showed power uses of less than 10kW.
1046. Respondent admits that Resolution No. 125/99 permitted users whose consumption fell between 10 and 50 kW to continue with the original T-1 tariff category. See Respondent's Rejoinder, at paragraph 799.
1047. In effect, some large users could avoid the T-2 tariff classification so long as later monthly readings fell below the threshold level. Such modification is clearly a violation of the Tariff Schedule which, under Anexo II, Subanexo 1, "Tarifa Nro. 2 (Grandes Demandas)" of Chapter 2, Subsection 1 expressly established that those users whose maximum power demand exceeding 10kW were to be categorized under the T-2 category.
1048. Moreover, the evidence shows that Resolution No. 131/99 suspended payment obligations of those users which had already been reclassified or were about to be reclassified as T-2 large users, and mandated refund of any and all monies that may have been billed in excess due to their reclassification. Such refund was required from the date on which the reclassified tariffs were implemented. Such conduct by EPRE improperly modified the Concession Agreement.

1049. Respondent seeks to justify its actions by arguing that Resolutions No. 125/99 and 131/99 were issued in the interest of the electricity consumers. The first resolution was allegedly enacted because the application of the measurement normalization plan under Chapter 5, subsection 2 of the Tariff Schedule was inadequate, resulting in only a series of measures aiming at safeguarding the information rights of users. The latter resolution was allegedly established as a precautionary measure.
1050. The Tribunal remains unconvinced by the suggested justification based on equity and the need to protect certain consumers. EPRE's imposition of the Optional T-2 tariff category, implemented through Executive Order No. 1632/00 unilaterally incorporated the transitory tariff into the Concession Agreement as a new tariff category as from 1 August 2000 to 31 July 2003. Although Respondent contends that the Optional T-2 tariff compensated for all costs related to the provision of the service (Rebuttal Witness Statement of Sergio Rodríguez, at paragraphs 60-61), the Tribunal finds that any imposition of new tariff categories was not contemplated in the Concession Agreement's terms.
1051. The original tariff system did not provide users with the option to choose between categories at their discretion. EPRE unilaterally modified the contract's terms by incorporating the Optional T-2 tariff category, thereby violating the Respondent's commitments under the Concession Agreement, protected by the applicable umbrella clause. As with the network-use fee and the reduction of contracting period, the Tribunal finds this particular harm serious enough to rise to the level of a treaty breach, pursuant to the standards set forth above.

(2) Expansion of the Scope of Concession Area

1052. Claimants assert that EPRE unilaterally expanded the scope of the Concession Agreement by incorporating therein the town of Polvaredas as well as the Scattered Market without adequate remuneration in exchange. In defense, Respondent argues that such isolated areas are deemed public service and thus serve as an integral part of EDEMSA's distribution services.

1053. The evidence shows that these categories include users located in remote regions not linked to the interconnected distribution network. Claimants' Memorial, at paragraphs 160, 162. Respondent's Counter-Memorial, at paragraphs 752-53, 757. Moreover, the area of Polvaredas was not transferred to EDEMSA upon commencement of the concession as this region was self-serviced.
1054. After an incident resulting in damages to the generation equipment and thus halt of power services to the Polvaredas inhabitants, Resolution EPRE No.183/99 was issued, expressly incorporating the town of Polvaredas into EDEMSA's area of concession. On 3 December, 1999, the Government of Mendoza issued Provincial Decree No. 2379/99, expressly incorporating into EDEMSA's area of concession the Scattered Market.
1055. The Tribunal notes that Article 2 of the Concession Agreement states in pertinent part that the concessionaire "shall also be responsible for handling any increase in demand in the AREA, be it through requests for new service or an increase in existing supply capacity."
1056. The quoted text clearly contemplates the possibility of expanding EDEMSA's responsibility to service areas within the agreed boundaries of concession.
1057. As admitted by Claimants, Polvaredas was geographically located within the area covered by EDEMSA's Concession Agreement. See Claimants' Memorial, at paragraph 159. The Scattered Market also fell within EDEMSA's area of concession.
1058. The Tribunal finds no intention to depart from Article 2 of the Concession Agreement simply from the fact that documents presented in the "data room" during the due diligence process makes reference only to the distribution system.
1059. Consequently, the Tribunal finds such isolated areas to fall under EDEMSA's "area" of concession. In this connection, the Tribunal notes that Provincial Decree No. 2379/99 further required EDEMSA to apply to users within the Scattered Market the same quality of service that applied to those within the interconnected distribution network. The Tribunal finds that Respondent was within its authority to obligate EDEMSA to maintain quality standards as Article 2 of the Concession Agreement required the concessionaire to

“ensure it can supply services under the quality conditions specified in Sub-Annex 5”, titled “Normas de Calidad Del Servicio Público y Sanciones.”

1060. The Tribunal remains mindful that Respondent seems to acknowledge that some compensation might be due EDEMSA for the Polvaredas area, noting that the Province of Mendoza undertook to provide Polvaredas the fixed material needed for power supply without EDEMSA having to invest money for such purpose. See Respondent’s Rejoinder, at paragraph 791-92. Respondent apparently concedes that EDEMSA was to be compensated through the PTC Fund, in order to balance the difference in distribution costs. With respect to the Scattered Market, Respondent stated that the increase in costs in relation to its servicing was expressly regulated in Schedule 1.2 of the Decree No. 2379/99, establishing a regime of subsidies and compensation payable to the concessionaire.
1061. Claimants themselves do not provide any figures in their final iteration of damages for amounts due with respect to the Polvaredas area or the Scattered Market. See e.g., Claimants Post-Hearing Brief on Quantum, at paragraph 53 as well as the LECG 2005 Report, at paragraphs 168-84. Earlier, in their initial 2005 Memorial, Claimants had requested \$729,673 in compensation (paragraph 480) but seem to have abandoned this quantification in the revised LECG Report.
1062. Claimants assert Respondent is liable, but provide no final accounting for amounts they believe should be paid. Under these circumstances, the Tribunal finds that the Claimants’ position is insufficiently substantiated. For this reason, this claim must be dismissed.

(3) Modification of the Agricultural Subsidies Regime

1063. The Transformation Law set forth a mechanism for subsidizing the electricity consumption of certain agricultural users engaged in irrigational activities. Claimants’ Reply, at paragraph 214; see Respondent’s Rejoinder, at 822. The Transformation Law mandated the application of a special tariff schedule to all agricultural irrigation users existing at the time the Regulatory Framework was passed. Under this system, EDEMSA was to be compensated for the difference between the subsidized tariff, referred as the Reference Tariff, and a benchmark tariff, known as the Tariff Payable to Distributor.

Under Article 36 of the Transformation Law, all amounts due to EDEMSA were to be paid out from the PTC Fund.

1064. This subsidy mechanism implemented by the Transformation Law was incorporated into EDEMSA's Concession Agreement. Accordingly, Anexo II, Subanexo 1, Chapter 2 of the Tariff Schedule in the Concession Agreement set forth the government's obligation to compensate EDEMSA for the difference that may exist between the amounts billed to the beneficiaries of the subsidy and those that would result from the application of the Tariff Payable to Distributor.
1065. The Parties disagree as to whether under this subsidy framework EDEMSA was required to deposit back into the PTC Fund any excess amount in instances where the Reference Tariff resulted in a higher amount than that from the Tariff Payable to Distributor. See Claimants' Reply, at paragraph 216; see Respondent's Rejoinder, at paragraph 828.
1066. According to Claimants, the original subsidy regime was altered by way of EPRE preventing EDEMSA from collecting the excess amounts in instances where the Reference Tariff resulted in a higher amount than that from the Tariff Payable to Distributor. Claimants argue that nowhere in the Concession Agreement was there a requirement that EDEMSA reimburse the PTC Fund under the concerned scenario.
1067. Moreover, Claimants assert that the contracting parties intended to limit the benefits of said subsidy framework to those agricultural users whose consumption was during hours of lowest demand. As such, Claimants assert that they were justified in charging the T-2 tariff category for those users failing to meet the aforementioned criterion for agricultural subsidy benefits. They argue that EDEMSA in fact did not charge a Reference Tariff higher than the Tariff Payable to Distributor, but rather simply applied the T-2 tariff category in those situations.
1068. By contrast, Respondent asserts that EDEMSA was not entitled to charge agricultural users a fee higher than the one under the Concession Agreement. Rather EDEMSA had agreed to collect the Tariff Payable to Distributor in relation to agricultural irrigation

users, and thus that any excess resulting from the difference with the Reference Tariff should have been deposited back into the PTC Fund.

1069. The subsidy scheme set forth under Article 36 of the Transformation Law was explicitly incorporated in Annex II, Sub-Annex 1, Chapter 2 of the Concession Agreement. Upon close reading of Article 36 of the Transformation Law, the Tribunal finds that this subsidy was not restricted to those agricultural users that consume during low-demand hours. Article 36, in pertinent part, states as follows.

In order to preserve the current tariff level and compensate the tariff difference from the application of the tariff system implemented by the [Regulatory Framework] for electrical power users for agricultural irrigation, resources from the Tariff compensator fund shall be annually assigned. The collection of this compensation shall only be applied to electrical power users for agricultural irrigation to the date of enactment of this law, in accordance with the regulations, and such compensation shall be gradually allocated in relation to the higher efficiency in the use of surface and ground water for agricultural irrigation

1070. The Tribunal reads Article 36 to encourage consumption during low-demand hours by providing different prices for low- and high-demand hours. See Rebuttal Witness Statement of Raul Faura, at paragraph 48. The quoted text expressly limits the application of this subsidy to “electrical power users for agricultural irrigation,” but does not further restrict it to those agricultural users consuming at low-demand hours. Absent express agreement otherwise, the Tribunal is convinced that those users consuming during high-demand hours would also be able to seek the benefit of the agricultural subsidy, assuming their electricity use is for the purpose of agricultural irrigation.
1071. The Concession Agreement does not expressly contemplate what is to be done when the Reference Tariff results in a higher amount than the Tariff Payable to Distributor. In light of the purpose behind this subsidized tariff scheme, to benefit agricultural users engaged in irrigational activities, the Tribunal does not find it credible that the contracting parties would have agreed to a subsidy framework to compensate EDEMESA in the concerned scenario. Permitting EDEMESA to collect in excess of that charged to non-subsidized users would run afoul with such general objective. For these reasons, this claim must be dismissed.

(4) Failure to Pay Compensation

1072. Claimants contend that the Tariff Schedule in the Concession Agreement provides for payment of the difference arising from application of specialized tariffs for specific groups (such as the elderly and users engaged in agricultural irrigation) as well as the provision of public lighting services. In addition, Claimants aver that EDEMSA was owed payment for extra costs incurred in purchasing power from the Nihuil IV power plant, which were to be reimbursed to EDEMSA through the PTC Fund.
1073. Claimants argue that EDEMSA had submitted the necessary monthly statements itemizing the amounts due pursuant to the application of the subsidized tariffs, but that the provincial government failed to make the payments owed. Despite filing with both the administrative agency and judicial authorities, they were denied legal recourse to have their claims heard.
1074. The evidence shows that Article 37 of the Transformation Law mandated the assignment of EMSE's rights and obligations arising out of a contract entered into with a power generation company, Hidronihuil S.A. See Claimants' Memorial, at paragraph 172; see Respondent's Counter-Memorial, at paragraphs 777-83.
1075. The Nihuil IV Contract was for the construction, operation and maintenance of a hydroelectric power project known as "NIHUIL IV Plant" and provided *inter alia* for a commitment by EMSE to purchase all of the Nihuil IV power plant's output at a price higher than that available in the Electricity Wholesale Market. Article 37 of the Transformation Law established that "[t]he difference between the price that EDEMSA must pay pursuant to this contract and the purchase value of energy in the electricity wholesale market, shall be compensated to EDEMSA by the Province with funds allocated pursuant to Article 47." In conformity with Article 37 of the Transformation law, Article 22.36 of the Concession Agreement memorialized the compensation scheme.
1076. In defense, Respondent states that Claimants failed to exhaust administrative procedures, that the Letter of Understanding removes any debt obligation of the Province of Mendoza in regards to this claim, and that Claimants failed to prove the lack of payment.

1077. Absent special circumstances, failure to pay money due under an agreement implicates claims of a contractual nature. As such, these claims were to be submitted to the courts of the Province of Mendoza. Claimants did so and the courts rejected the requests of payment on procedural grounds.
1078. After their requests for payment were rejected by the courts, Claimants did nothing to obtain compensation from the Province or tackle the procedural objections stated by the courts. See Claim, paras. 179, 182, 190.
1079. Consequently, no claim for denial of justice can be sustained.
1080. Accordingly this claim must be dismissed. No persuasive argument has been presented which would raise the simple contract disagreement to the level of a treaty breach, whether by virtue of denial of justice, pursuant to an “umbrella clause” or otherwise.

(5) Quasi-Currency

1081. Claimants contend that EDEMSA was forced to accept notes issued by the Province’s treasury as opposed to monetary currency, which were not legal tender and could not be used to pay their monetary obligations elsewhere; in addition if they refused to accept payment in this form under Section 2 of Provincial Law No. 6955 they faced a penalty equal to five times the amount of the particular transaction. Such was contrary to the tariff principles in the electricity regulatory framework.
1082. Respondent argues that the magnitude of the economic crisis forced it to issue bonds in order to deal with their obligations, and that this tactic has been adopted previously by other governments, such as that of California. Respondent also asserts that Claimants were not treated unfairly because all distributors, Mendoza inhabitants, and economic sectors had to accept payment in this form, and the bonds could be used to pay taxes and other obligations owed to the Provincial government. Finally, Respondent asserts that Claimants are at fault for their loss, for if they had kept the bonds instead of selling them at an 80% depreciated value they would have matured to more than 110% their nominal value.

1083. The Tribunal notes that nothing in Claimants' calculation of quantum suggests that the amount of damages would be different if a theory of quasi-currency payments were included. No separate item for quasi-currency losses has been suggested.
1084. Claimants' Post-Hearing Brief on Quantum, 11 March 2011, at paragraph 53, states that the historical damages claims (i.e., pre-emergency claims) have been quantified in the LECG Report of 28 April 2005 at paragraphs 168-84. However, that section of the report contains a Table XII for damages from measures taken prior to enactment of Law 25,561. No itemization of quasi-currency damages has been listed. Moreover, nothing on this line appears in the Updated Historical Damages Table included in Claimants' Closing Statement at the Quantum Hearings on 14 February 2011.
1085. Consequently, after due consideration, the Tribunal finds that the claim with respect to quasi-currency payments is insufficiently substantiated and must therefore be dismissed.

(6) Imposition of Service Quality Conditions

1086. Claimants state that Provincial Law No. 6856 set forth new obligations and procedures on EDEMSA that are more onerous than those originally laid out in the Regulatory Framework. In particular, Claimants seek support in Sections 2 through 6, which set forth new more stringent procedures for those wishing to file claims against EDEMSA for damages caused by failures in the electricity distribution system.
1087. Respondent contends that, first, Provincial Law No. 6856 is applicable to every concessionaire and all types of public services' providers, and was therefore not aimed in a discriminatory manner at the Claimants. Second, Respondent claims that the Provincial Supreme Court has found Law No. 6856 to be constitutional and non-arbitrary.
1088. The Tribunal notes that nothing in Claimants' calculation of quantum suggests that the amount of damages would be different if a theory of imposition of more stringent quality service conditions were included. No separate item for imposition of more onerous quality service conditions losses has been suggested.

1089. Claimants' Post-Hearing Brief on Quantum, 11 March 2011, at paragraph 53, states that the historical damages claims (i.e., pre-emergency claims) have been quantified in the LECG Report of 28 April 2005 at paragraphs 168-84. However, that section of the report contains a Table XII for damages from measures taken prior to enactment of Law 25,561. No itemization of the imposition of more stringent quality service conditions damages has been listed. Moreover, nothing on this line appears in the Updated Historical Damages Table included in Claimants' Closing Statement at the Quantum Hearings on 14 February 2011.
1090. After due consideration, the Tribunal finds that the claim relating to the imposition of more stringent conditions regarding quality of service is insufficiently substantiated and must therefore be dismissed.

b) *In Limine* Objections: Late Pleading of Denial of Justice

1091. Without admitting wrongdoing, Respondent asserts that any claim based on denial of justice should be dismissed *in limine* insofar as it is based on the Pre-Emergency Measures affecting the Concession because it was not pled in Claimants' Memorial, and thus, must be deemed untimely. See Respondent's Rejoinder at paragraph 768.
1092. The Tribunal must reject Respondent's inadmissibility defense. Respondent was on notice since the early stages of this proceeding that Claimants were bringing a general claim based on the Fair and Equitable Treatment provision. Respondent has had the opportunity to fully comment on this matter at the Hearings as well as in its post-hearing submissions.
1093. As discussed above, to the extent that Pre-Emergency Measures affecting the Concession disregarded material financial and contractual commitments, EPRE ignored those obligations in a way that went beyond mere contractual breaches. The Province of Mendoza unilaterally modified the Concession Agreement on these matters, thus violating the specific commitments undertaken by the Respondent with respect to the Claimants' investment. Such conduct, inconsistent with the material terms of the Concession Agreement, breached the "umbrella clauses" incorporated through the Argentina-France BIT.

1094. The Tribunal notes that Claimants' witness Mr. Gonella, testified that EDEMSA was required to submit any administrative claim in the first instance to EPRE, which in fact was the same independent government entity that had issued the administrative resolutions detrimental to EDEMSA. See Supplementary Witness Statement of Hector Gonella, at paragraph 79.
1095. The Tribunal is mindful of EPRE's role as both judge and party and finds that such dual responsibility is inherently suspect in providing justice before the administrative tribunal. In this connection, the Tribunal agrees with Mr. Gonella's description of the general way in which EDEMSA's claims were addressed, involving lengthy proceedings with long periods of time spent waiting for decisions to be adopted and notified. The administrative appeal process failed to provide meaningful recourse as each and every claim submitted before the ME&PW was rejected. As to the final stage of appeal, the Supreme Court of Mendoza rejected all claims made by EDEMSA.
1096. In this connection, the Tribunal notes that Claimants did not make a separate "stand-alone" claim with respect to denial of justice. Instead, their arguments contending that justice was denied were presented in the context of claims based on "fair and equitable treatment" and "full protection and security." See Claimants' Reply of 30 April 2009 at pages 167-69, 176-77; Claimants' Post-Hearing Brief of 14 December 2009 at paragraph 102. Moreover, Claimants asserted in their Post-Hearing Reply of 8 January 2010 that showing denial of justice was not a necessary element of their indirect expropriation claim. See Claimants' Post-Hearing Reply of 8 January 2010 at paragraph 26.
1097. Accordingly, the Tribunal need make no determination in connection with "denial of justice" theories as an independent basis for recovery, apart from considerations related to the other claims noted above.

c) Double Recovery

1098. As discussed more fully below, in connection with Affirmative Defenses, the Tribunal cannot agree that Claimants receive a double recovery of damages caused by the Pre-Emergency Measures. In short, the Letter of Understanding of 7 April 2005 was concluded at a time when IADESA controlled EDEMSA.

1099. Claimants received no redress for any Pre-Emergency breaches through the Letter of Understanding or local court proceedings. Claimants' treaty rights (expressly retained by EDFI and León at the time of sale of EDEMSA shares) remain independent of any benefits given to the IADESA-controlled EDEMSA under the 2005 arrangements.
1100. For the sake of good order, the circumstances in which the sale took place will be discussed below, in connection with quantum.

4. Other Claims

a) Discrimination and Arbitrariness

1101. The Tribunal rejects Claimants' assertions with respect to discrimination, arbitrariness, and unreasonable or unjustified treatment, to the extent that such contentions can be considered as stand-alone claims.
1102. Nothing in Claimants' calculation of quantum suggests that the amount of damages sought would be different if a theory of discrimination and arbitrariness were to form the basis of the Tribunal's calculations.
1103. As discussed elsewhere in this Award, the Tribunal has awarded damages on the basis of Respondent's breach of both the applicable umbrella clause and its duty of Fair and Equitable Treatment under Argentina-France BIT. Responsibility for such breaches implicates appropriate payment by Respondent.
1104. In coming to this conclusion, the Tribunal has carefully considered Claimants contention that Respondent did not accord Claimants treatment equal to Argentine and third party nationals (Article 4 of the Argentine-France BIT) and that such unequal treatment was demonstrated by the fact that tariffs increased soon after Claimants sold their interest to a local company. The Tribunal also notes Claimants' assertion that Respondent's actions were arbitrary and unreasonable in the sense of there being no legitimate justification for the Emergency Measures that targeted the public utilities, with the discriminatory intent evidenced by statements by legislators and executive officials.

1105. According to Claimants, notions of “arbitrariness” become relevant, *inter alia*, by virtue of the MFN clause which bring into consideration Article 3(1) of the Argentina-Mexico BIT stating that each Contracting Party will not impair investors’ enjoyment or disposal through “arbitrary or discriminatory measures,” which becomes relevant according to Claimants by virtue of Article 3 of the Argentina-Luxembourg BIT. We also note Claimants’ argument that a prohibition of “unreasonable” measures becomes relevant through Article 2(2) of the Argentina-Israel BIT as incorporated by the MFN clause.
1106. The Tribunal has also considered fully Respondent’s argument that it did not engage in discriminatory, arbitrary or unjustified behavior because the Emergency Measures were effective for all sectors of the Argentine economy, and that Claimants knew there would be a raise in tariffs when they sold their shares. We have also noted Respondent’s argument that the Emergency Measures were an effective response to the economic crisis, and that statements by individual legislators and officials are not dispositive evidence of a comprehensive plan to discriminate against Claimants.
1107. Nothing in either side’s arguments changes the liability for damages, pursuant to a theory of discrimination and arbitrariness, as contrasted with the Tribunal’s findings of breach of applicable “umbrella clauses” and its duty of Fair and Equitable Treatment under Argentina-France BIT, which carries liability and damages as discussed elsewhere herein.

b) Full Protection and Security

1108. The Tribunal declines to find liability based on Claimants’ assertions with respect to full security and protection or denial of justice.
1109. Respondent has been found to have breached treaty provisions on Fair and Equitable Treatment as well as failure to respect the Concession Agreement. Nothing in the Argentina-France BIT incorporates a duty to maintain a stable legal and commercial environment, apart from the impact that such an environment may have in connection with fulfillment of other treaty obligations.
1110. In reaching this conclusion, the Tribunal has taken note of Claimants’ argument that Respondent violated Article 5(1) of the Argentina-France BIT by failing to afford full

security and protection to Claimants' investment, or in the alternative that the MFN clause permits incorporation of such guarantees from the Argentina-Germany BIT. In a related argument, we note that Claimants assert they suffered a denial of justice as they were deprived of fair access to a legal system.

1111. The Tribunal has also taken due note of Respondent's contention that the claim should be inadmissible because it did not appear in Claimants' opening Memorial, that EDEMSA was never deprived of physical protection and security, and that Claimants' arguments fall outside the scope of the relevant treaties, and that Respondent did not engage in a denial of justice. For the sake of good order, the Tribunal notes that Respondent has had the opportunity to comment on the arguments both at the hearing and in post-hearing submissions.
1112. Responsibility for such breaches implicates payment of damages as discussed elsewhere in this award. Nothing in Claimants' calculation of damages, or the Tribunal's analysis of quantum, suggests that the amount of damages would be different if based on a theory of denial of justice or absence of full protection and security.

c) Indirect Expropriation

1113. The Tribunal rejects Claimants' assertions with respect to indirect expropriation. No evidence has been presented to persuade us that Claimants were "substantially" deprived of their investment by operation of the Emergency Measures. To the contrary, they continued to own and operate EDEMSA and later sold the company, albeit at an unfavorable price.
1114. The Tribunal has taken full cognizance of the Parties' disagreement on the proper legal standard for indirect expropriation claims.
1115. Claimants contend that indirect expropriation is more expansive than direct expropriation, and that the Argentina-France BIT does not require an investment's obliteration as a precondition to indirect expropriation.

1116. By contrast, Respondent contends that it did not expropriate Claimants' investment, and that the threshold for indirect expropriation should not be lower than that for direct expropriation. Respondent suggests that the standard should be a material deprivation of value, and asserts that its actions do not qualify as such since Claimants maintained title to their investment and were able to sell it for a positive value, resulting in no violation of Article 5(2) of the Argentina-France BIT.
1117. Under either theory, the Tribunal must decline to find indirect expropriation.
1118. In passing the Tribunal notes that the rejection of an "indirect expropriation" claim as such does not change its findings that Respondent breached the umbrella clause by breaching the Concession Agreement as well as the Fair and Equitable Treatment provisions of the Argentina-France BIT. Responsibility for such breaches implicates payment of damages in an amount discussed later in this Award.

D. AFFIRMATIVE DEFENSES

1119. Respondent asserts several affirmative defenses, which the Tribunal considers into the following six categories: (i) *res judicata* and *litis pendens*, (ii) double recovery, (iii) Claimants' consent to the Emergency Measures, (iv) Article 3(2) of the Argentina-Luxembourg BIT, (v) Article 5(3) of the Argentina-France BIT, and (vi) State of Necessity. After due consideration of the Parties' arguments, the Tribunal finds that none of these defenses bars Claimants from recovery in this proceeding.

1. Res Judicata and Litis Pendens

1120. With respect to Claimants' claims based on Pre-Emergency Measures affecting the concession, Respondent contends that Claimants are attempting to present contractual issues that are foreign to this Tribunal and, in some instances, are *res judicata*. See Respondent's Counter-Memorial at paragraphs 205-08. The Tribunal notes Respondent's classification of Claimants' claims based on Pre-Emergency Measures affecting the concession, which has been organized in ten categories as detailed above and in Respondent's Counter-Memorial at paragraph 210.

1121. Respondent argues that local courts rendered judgment on the merits of five of Claimants' ten claims relating to the Pre-Emergency Measures affecting the concession. Respondent's Counter-Memorial at paragraph 210. According to Respondent, these claims relate to the incorporation of the town of Polvaderas to EDEMESA's concession area, the creation of the Scattered Market, the creation of the operative tariff T-2, the modification of the subsidies regime, and the imposition of stricter standards of service quality. Respondent's Counter-Memorial at n. 229.
1122. Additionally, Respondent asserts that the three claims filed in local courts relating to Respondent's alleged failure to reimburse Claimants for energy purchased from the Nihuil IV hydroelectric plant were dismissed because they had not been exhausted at the administrative level, the claim relating to subsidies on Public Lighting was deemed extinct due to lack of prosecution because of EDEMESA's own negligence, and that the last claim relating to Respondent's use of "quasi-currency" lost currentness. Respondent's Counter-Memorial at paragraphs 210-11, n. 229-31.
1123. Respondent thus contends that these ten claims are barred from adjudication by this Tribunal because the claims are contractual in nature and have either been ruled on by Argentine courts or have not been exhausted by Claimants in local proceedings. See Respondent's Counter-Memorial at paragraphs 205-10, 727-810.
1124. In response, Claimants argue that they are not required to exhaust their claims at the local level before seeking adjudication before this Tribunal and that decisions rendered by Argentine courts have no *res judicata* effect on this Tribunal. Claimants' Reply at paragraph 254. To this effect, Claimants contend that Respondent's assertions would result in a "fundamental 'Catch-22,' in which Claimants' treaty rights would be unenforceable at the international level whether Claimants first pursued local remedies or elected instead to forgo them." Claimants' Reply at paragraph 254.
1125. After due consideration of the Parties' arguments, the Tribunal finds that Claimants' claims based on the Pre-Emergency Measures affecting the concession are not foreign to this Tribunal and that any decisions made on these issues by Argentine courts do not render these claims *res judicata*.

1126. Claimants are not required to exhaust local remedies before this Tribunal may hear their claims. In fact, the language of the ICSID Convention suggests that an agreement to arbitration precludes the parties from seeking local remedies. ICSID Convention, Article 26, provides, “Consent of the parties to arbitration under this Convention *shall*, unless otherwise stated, be deemed consent to such arbitration *to the exclusion of any other remedy.*” (Emphasis added).
1127. Having elected not to incorporate a provision mandating the exhaustion of remedies prior to arbitration into the France BIT, Respondent cannot now argue that one implicitly exists. To hold otherwise would conflict with the plain reading of Article 26, as well as invite States to mandate the exhaustion of local remedies without giving fair warning of such a stipulation to investors who enter a treaty expecting a clear path to arbitration.
1128. As a corollary, Claimants decision to first pursue local remedies does not lead to a determination that such remedies are to the exclusion of arbitration, particularly when, as discussed in more detail below, local courts generally do not render claims *res judicata* with respect to international tribunals.
1129. In support of its contention that Claimants are required to exhaust local remedies before seeking adjudication by this Tribunal, Respondent relies on the fact that the Argentine Supreme Court required EDEMSA to exhaust administrative procedures before the court could declare the formal admissibility of certain claims. See Respondent’s Counter-Memorial at paragraph 779-80. This fact is irrelevant, however, to the issue of jurisdiction in this proceeding. Local rules of procedure, as varied and complicated as they may be, are not binding on this Tribunal. Furthermore, Article 26 of the ICSID Convention presumes arbitration regardless of whether parties have pursued local remedies unless the contracting states agree to an exhaustion provision.
1130. Moreover, the decisions of national courts are not binding on this Tribunal. Respondent contends, however, that the claims relating to the Pre-Emergency Measures affecting the concession are purely contractual claims that arise not under the BIT, but under Argentine national law, and are therefore foreign to this Tribunal’s jurisdiction. The Tribunal need not take a position on whether decisions on purely contractual matters

preclude subsequent adjudication by international tribunals. Indeed, this is not the issue facing this Tribunal as these claims arise under the BIT.

1131. Multiple sources of law may apply to a single set of facts, as is the case with the facts of the Pre-Emergency Measures affecting the concession. While Argentina's national courts may have made decisions pursuant to national laws, the France BIT still furnishes Claimants the opportunity to seek redress before an international tribunal for violations of rights established under international law.
1132. Furthermore, it is generally accepted that an identity requirement must be satisfied in order for a tribunal to take into account the decisions of national courts. As Claimants explain, there is a notable absence of the requisite parity relating to the parties, cause of action, and applicable legal standards between the claims brought in local courts by Claimants and those currently before this Tribunal. This lack of parity precludes satisfaction of the identity requirement in *res judicata* or *lis pendens*, rendering Respondent's defense in this respect moot.
1133. The Parties in this proceeding are EDFI, SAURI, and Leon Participaciones, while the parties in the local proceedings cited by Respondent included EDEMSA, EPRE and the Province of Mendoza. Parity is thus not satisfied with respect to the disputing parties.
1134. In the local proceedings, EDEMSA brought suit under the Concession Contract, whereas Claimants in the present proceeding seek redress under the BIT. Parity is thus not satisfied with respect to the causes of action.
1135. Finally, the applicable legal standards employed by local courts and this Tribunal differ, as well. In the local proceedings, local courts analyzed contractual breaches according to the Concession Contract. This Tribunal, however, assesses the Parties' obligations and alleged breaches under the BIT and international law.
1136. Therefore, Claimants' pursuit of or failure to pursue claims based on the Pre-Emergency Measures affecting the concession in Argentine courts is irrelevant to whether this Tribunal may hear and adjudicate related claims.

2. Double Recovery

1137. Respondent expresses concern that Claimants might receive a double recovery if the Tribunal grants relief for claims based on Pre-Emergency Measures affecting the Concession. According to Respondent, several of such claims (particularly those concerning outstanding payments for purchase of energy from the Nihuil IV power plant and the agriculture irrigation subsidies) have been settled through the Letter of Understanding of 7 April 2005 and subsequent annexes. Respondent's Counter-Memorial at paragraphs 211, 785, 788, and 799.
1138. In support of this argument, Respondent cites to this Tribunal's Decision on Jurisdiction in which the Tribunal noted that "[t]o the extent that the judicial process in Mendoza (pursuant to the forum selection clause) results in Claimants receiving compensation for their loss, recovery under the French and Luxembourg investment treaties would likely be barred." Decision on Jurisdiction at paragraphs 220.
1139. Annex II of the Letter of Understanding, Article 2 ("Cancelación Deudas" or "debt cancellation") sets forth a list of the debts scheduled for "cancellation" by way of Mendoza making eight (8) equal and consecutive monthly installments from the legislative ratification of the Letter. This list establishes three categories of debt: (i) interest on Nihuil IV compensation of AR \$3,548,492; (ii) interests on the agricultural irrigation subsidies of AR \$4,919,839; and (iii) tax on interest of AR \$1,778,850.
1140. In this connection, the Tribunal notes that claims related to outstanding payments from the Nihuil power plant and the agriculture irrigation subsidies have been dismissed, rendering moot Respondent's concern about any double recovery in that connection.
1141. Nevertheless, we remain mindful that the Letter of Understanding recognized the need to increase the DAV portion of the electricity tariffs and established a 38.05% tariff increase. Consequently, a portion of Claimants' recovery might to some extent be perceived as overlap with the increased payments to the IADESA-controlled EDEMSA.
1142. Such possible overlaps, however, in no way constitute double recovery. While Claimants are granted damages for the treaty breach pursuant to the Argentina-France BIT, any

benefits from the Letter of Understanding went to an IADESA-controlled entity, following Claimants' sale of EDEMSA. The facts of the 2005 sale do not permit any inference that Claimants received indirectly the value of the prospective rise in tariffs.

1143. To the extent that debt cancelled by the Letter of Understanding implicated the 2005 sale price, the adjustment had been taken into account by LECG's calculations of damages as discussed below. See LECG April 2009 Report, footnote 112.

3. Consent to Emergency Tariff Measures

1144. Citing Memorandum No. 1 of the Renegotiation Commission of the Public Contracts and EDEMSA, dated 20 March 2003, Respondent contends that Claimants consented to the Emergency Tariff Measures. Such consent was said to comprise the declaration of public emergency, the provisions that invalidated the mechanisms of adjustment or indexation of prices in foreign currency, and the Executive Power authorization to renegotiate the public service contracts. See Respondent's Counter-Memorial at paragraphs 426-34; Respondent's Rejoinder at paragraphs 160-68; Respondent's Post Hearing Brief on Merits, at paragraphs 154-59.
1145. Claimants argue that Memorandum No. 1 was the result of Claimants' wishing to enter negotiations with Respondent as a means of voicing their objections to the Emergency Tariff Measures. See Claimants' Post Hearing Reply on the Merits at paragraph 64-66.
1146. The Tribunal finds no evidence that Claimants consented to the Emergency Tariff Measures. Any acknowledgement that Claimants may have made with respect to the severity of the economic conditions in Argentina before, during, or after the enactment of the Emergency Laws does not amount to termination of the Concession Agreement or a waiver of Claimants' contractual or treaty rights.
1147. Selective citation of Memorandum No. 1, which states that "the Parties acknowledge that the dynamic of the reigning crisis calls for the effective execution of the renegotiation process," merely evidences a desire to tailor performance according to economic conditions so as to meet objectives of the Concession Agreement. This intent is further

demonstrated by the passage which states that “the companies represented hereby maintain that the original conditions of the concession contract should be respected.”

1148. The Tribunal finds no merit in Respondent’s suggestion that consent was evidenced by Mr. Nitrosso’s recognition that economic conditions necessitated readjustment of the electricity framework. See Respondent’s Post-Hearing Brief on the Merits at paragraph 154. Readjustment in no way equates with abrogation of a fundamental underpinning of the Concession Agreement such as the Currency Clause.

4. Article 3(2) of the Argentina-Luxembourg BIT

1149. Against Claimant León, Respondent asserts the defense of necessity based on Article 3(2) of the Argentina-Luxembourg BIT. See Claimants’ Post Hearing Brief on the Merits of 14 December 2009 at paragraphs 58-66; Respondent’s Post Hearing Brief on the Merits at paragraphs 142-45.
1150. Respondent contends that Article 3(2) of the Argentina-Luxembourg BIT supports a defense of necessity by providing that investments are to enjoy safety and protection without prejudice to “measures necessary for the maintenance of public order,” and Respondent argues that the conduct at issue in this proceeding does not infringe on the guarantee provided in Article 3(2) because the conduct was necessary for the maintenance of public order in Argentina during the economic crisis. See Claimants’ Post Hearing Brief on the Merits of 14 December 2009 at paragraphs 58-66; Respondent’s Post Hearing Brief on the Merits at paragraphs 142-45.
1151. As previously explained, the relevant interests were owned at the outset by French investors. Although for a time such interests were held by a Luxembourg company, León Participaciones Argentinas S.A., they have since been transferred to EDFI. See Exhibit C80, Letter sent by EDFI to the EPRE notifying the acquisition of León Participaciones Argentinas, S.A., 15 March 2004; Exhibit C131 Section 9.1.7. See generally LECG Supp. Rept. ¶¶ 191-99.

1152. Accordingly, the Tribunal grants relief in this case on the Argentina-France BIT, not on the Argentina-Luxembourg BIT, and therefore the “public order” defense provision of Article 3(2) of the Argentina-Luxembourg BIT is of no consequence in these proceedings.

5. Article 5(3) of the Argentina-France BIT

1153. Respondent contends that Article 5(3) of the Argentina-France BIT precludes a host country’s liability towards investors who “have suffered losses owing to war or any other armed conflict, revolution, state of national emergency, or rebellion” as long as the host country provides “treatment no less favorable than that granted to its own investors or to those of the most favored Nation.”

1154. According to Argentina, Article 5(3) comprises a general exception for acts which occurred during extraordinary circumstances that would otherwise be contrary to the State’s obligations under the BIT. Under such circumstances, the BIT would, according to Respondent, oblige the State *only* to provide national treatment and most favorable treatment to foreign investors.

1155. Respondent also argues that Article 5(3) is analogous to Article XI of the U.S.-Argentina BIT, which the *LG&E* and *Continental Casualty* tribunals interpreted as relieving Argentina of liability for particular measures enacted during the economic turmoil. See Respondent’s Counter-Memorial at paragraphs 131-37.

1156. In response, Claimants seek support from *Enron*, *Sempra*, and *CMS Gas*, cited already, which according to Claimants rejected such argument proposed by Respondent. See Claimants’ Post Hearing Brief on Merits, at paragraph 136. Moreover, Claimants assert that Article 5(3) “bears no resemblance whatsoever to Article XI, either textually or functionally.” Claimants’ Post Hearing Brief on Merits, at paragraph 137.

1157. The plain language of Article 5(3) makes clear that it serves as a non-discrimination provision, not a shield against host state liability for treaty violation. Investors who suffered losses due to a national emergency receive treatment “no less favorable” than that granted to host state nationals or to nationals of a most favored nation. Respondent

argues that such interpretation would make Article 5(3) redundant as investors already enjoy national and most favorable treatment under Article 4 of the BIT.

1158. Article 5(3) may best be understood against the background of the rules of customary international law on State Responsibility toward foreign investors during periods of war, insurrection and other extraordinary circumstances, which determines host State responsibility toward aliens.
1159. Article 5(3) leaves those customary rules untouched and indeed supplements their content by requiring equality of treatment in response to such extraordinary circumstances.
1160. If the host State grants redress or reparation for the losses suffered, it must give investors of the other Contracting Party treatment “no less favorable” than that granted to nationals of the host state or of a most-favored nation.
1161. Furthermore, the substance of Article 5(3) bears no resemblance to Article XI of the Argentina-U.S. BIT. The latter provides that the treaty “shall not preclude the application by either party of measures necessary for the maintenance of public order, the fulfillment of its obligations with respect to the maintenance of or restoration of international peace or security, or the protection of its own essential security interests.” By contrast, the former says nothing that would justify host state conduct to the detriment of the treaty partner’s nationals.
1162. Accordingly, after due consideration of the arguments, the Tribunal finds that Article 5(3) of the Argentina-France BIT does not serve as an exemption clause to relieve Respondent of liability for injury suffered as a result of treaty violations.

6. State of Necessity Defense

1163. Lastly, Respondent invokes the State of Necessity defense under customary international law. According to Respondent, to the extent the Emergency Measures breached Argentina’s treaty obligations, such breach was justified as a means of preserving essential national interests threatened by a grave and imminent peril. See Respondent’s Counter-Memorial at paragraphs 620-22. Consequently, Respondent argues that this

Tribunal should dismiss Claimants' claims because the "State of Necessity" defense has been satisfied. See Respondent's Counter-Memorial at paragraph 637.

1164. In response, Claimants assert that Respondent has not met the elements of the State of Necessity defense. Even if these elements were satisfied, say Claimants, the State of Necessity defense does not excuse Respondent's obligation to compensate Claimants for any injury sustained prior to or after the emergency period. See Claimants' Reply at paragraph 611.
1165. For the purpose of these proceedings, the Tribunal notes that both sides rely on ILC Article 25 rather than some different standard of international law. Claimants Post-hearing Reply on the Merits at paragraph 54 appears to admit that ILC Article 25 "reflects the customary international law for invoking necessity to excuse international treaty violations." Rather than challenging applicability of Article 25 as such, Claimants argue that Respondent simply has not met the stringent requirements of that provision. See Claimants' Post-hearing Brief on the Merits at paragraphs 147-149; Claimants' Post-Hearing Reply on the Merits at paragraphs 54-61.
1166. Claimants also rely on ILC Article 27 to support their argument that Respondent must in any event compensate Claimants for injury sustained as a result of the Emergency Measures. See Claimants' Post-hearing Brief on the Merits, paragraph 173.
1167. The Tribunal need take no position on the theoretical question of how far the various aspects of ILC Article 25 codify customary defenses related to necessity. Although addressed by the International Court of Justice,⁸⁶ the matter has continued to be subject to scholarly and judicial debate.
1168. As discussed in more detail below, it is sufficient for the Tribunal to note that both sides in this arbitration stipulate that the Tribunal's analysis should take as applicable legal norms the State of Necessity defense presented by the contours articulated in ILC Article

⁸⁶ See e.g., *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, I.C.J. Reports 2004, p. 136, at 140.

25. Neither side has argued for application of a standard more favorable to host states than the norms of Article 25.
1169. In short, the Tribunal finds that the standards urged by both sides, as providing applicable norms, have not been met so as to excuse treaty breach by reason of the Emergency Measures.
1170. Moreover, the Tribunal notes that the Argentina-France BIT lacks the type of special provisions contained in Article XI of the Argentina-U.S. BIT, discussed in the *Continental Casualty* and the *LG&E* cases. However, the Tribunal need take no position on these doctrinal matters.
1171. Necessity must be construed strictly and objectively, not as an easy escape hatch for host states wishing to avoid treaty obligations which prove difficult. In this connection, Respondent has failed to meet its burden to demonstrate three key elements of ILC Articles 25 and 27: (i) that the wrongful act was the only way to safeguard Argentina's essential interest under Article 25 (1)(a); (ii) that Respondent did not contribute to the situation of necessity; and (iii) that Respondent did not return to the pre-necessity *status quo* when possible, or compensate Claimants for damage suffered as a result of the relevant measures.
1172. The Tribunal does not call into question Respondent's good faith in asserting that the tariff freeze was enacted to safeguard the country's vital interests, such as protecting of Argentina's indigent population (Respondent's Post Hearing Reply on the Merits at paragraph 148). However, regardless of whether the Emergency Measures related to the concession did much to affect the macro-economic conditions in Argentina, the Tribunal is not convinced that those measures, as presented and explained in these proceedings, were the only means by which Respondent could have protected its public interests.
1173. Equally as important, the Tribunal has difficulty finding that Respondent did not contribute to the situation which produced the 2001 crisis. Quite significantly, in May 2002 the then President of the Argentine Republic, Mr. Eduardo Duhalde, affirmed in *The Washington Post* that, "[O]ur crisis is homegrown -- made in Argentina, by

Argentines.” See Claimants’ Post Hearing Brief on Merits, at paragraph 167 and Exhibit CL-35. Although external factors may have aggravated the economic turmoil, Argentina’s contribution to its economic situation is clear or was far from negligible.

1174. In addition, Respondent concedes that it was responsible at least in part, for creation of a poor economic climate, through the government’s continued failure to achieve primary surpluses sufficient to stop an unsustainable debt ratio. See Professor Roubini’s Expert Report at paragraphs 21-22.
1175. Respondent added to the problem by continuing a fixed exchange regime which left the country susceptible to severe economic downturns for which it did not adequately prepare. Compounding this economic vulnerability were policies which decreased employer contributions to the social security system and which increased public spending so as dramatically to increase the country’s debt and impair economic stability.
1176. Although it is not for this Tribunal to opine acceptable or unacceptable economic risks as a general matter, the duty to consider the State of Necessity Defense raised by the Respondent requires the Tribunal to take note of the role played by Respondent in bringing about its own economic adversity.
1177. Finally, even if Respondent’s conduct might be excused under the State of Necessity Defense, Respondent remains obligated to return to the pre-necessity *status quo* when possible. Moreover, the successful invocation of the necessity defense does not per se preclude payment of compensation to the injured investor for any damage suffered as a result of the necessity measures enacted by the State.
1178. The Tribunal considers that, at some reasonable point in time, Respondent should have compensated Claimants for injury suffered as a result of measures enacted during any arguable period of necessity in late December 2001. As mentioned earlier, ILC Draft Article 27 provides that “[t]he invocation of a circumstance precluding wrongfulness [is without prejudice to] compliance with the obligation in question, if and to the extent that the circumstance precluding wrongfulness no longer exists.”

1179. Such re-establishment of EDEMSA's economic equilibrium clearly did not happen. As discussed earlier in this Award, the Province of Mendoza failed to raise tariffs in a timely fashion such as to restore the concession's economic equilibrium. Although the Government of Mendoza eventually agreed to a series of DAV increases, the adjustments took effect only after Claimants had decided to withdraw their investments by executing a sales contract with IADESA on 30 June 2004.
1180. The breach by Respondent might well have been only temporary if Argentina had made timely efforts to raise tariffs to a reasonable level. However, Claimants waited more than three years following the Emergency Measures before selling their investment in an attempt to mitigate damages. The Renegotiation Process, which initially was expected to be concluded within six months, was delayed by local authorities which kept extending the deadline while maintaining the tariff freeze during 38 months.
1181. In this connection, to test the conclusion enunciated above, the Tribunal notes that eight other tribunals have rejected Argentina's necessity defense under ILC Article 25. The two tribunals that upheld a necessity defense by Argentina invoked Article XI of the Argentina-U.S. BIT. See *LG&E Energy Corp. et al. v. Argentine Republic* (Decision on Liability; *Continental Casualty* (Award, 5 September 2008)). See also Professor Dolzer's Supplemental Expert Report at paragraphs 93-95.

E. QUANTUM OF DAMAGES

1. Overview

1182. Given the number of moving parts in determining quantum, the Tribunal sets forth the following road map of its computation, with details and justification included later in this section of the Award.

Claimants' Total Damages as of December 2001

Damages caused by Emergency Measures	US\$ 133,635,633
Damages by Pre-Emergency Measures	US\$ 2,502,797
Total Damages as of 31 December 2001	US\$ 136,138,430

1183. In calculating the quantum of damages, the Tribunal has generally adopted the LECG model as follows, taking 31 December 2001 as the valuation date.

- (i) Damages caused by the Emergency Measures will be calculated as the difference between two values: the value of Claimants' stake in EDEMSA under a scenario free of the Emergency Measures ("*but for*" scenario) and the value of the same stake under a scenario with the Emergency Measures ("*actual*" scenario), taking 31 December 2001 as the valuation date.
- (ii) The "*but-for*" value (EDEMSA in the absence of the Emergency Measures) determined by DCF method discounted as of 31 December 2001;
- (iii) From that amount, the Tribunal subtracts the amount which should reasonably have been received by Claimants in the 2005 sale of its EDEMSA shares discounted to 31 December 2001;
- (iv) To that amount, the Tribunal adds damages attributable to Pre-Emergency Measures, again valued as of 31 December 2001;

1184. Following this three-step approach yields figures as follows:

Step 1: DCF calculation of Claimants' investments in the absence of the Emergency Measures as of 31 December 2001

Firm Value (Discount rate, WACC 11.34%)	US \$ 448,855,587
Financial Debt (Dec 2001 book value)	US\$ (119,644,020)
Equity Value	US\$ 329,211,567
Value of Claimants' Investment in EDEMSA (44.88% share)	US\$ 147,750,151

Step 2: Subtracting price which might reasonably have been received in the 2005 sale, valued as of 31 December 2001

Value of Claimants' Investment in EDEMSA	US\$ 147,750,151
2005 Sale discounted to 31 December 2001.	US\$ 14,114,518
Total damages caused by Emergency Measures	US\$ 133,635,633

Step 3: Inclusion of Pre-Emergency Damages

Total:	US\$ 2,502,797.00
	US\$ 136,138,430

1185. A final step will be to include calculation of interest, which for reasons discussed below should be added at the rate of 10-year U.S. Treasury bond from 31 December 2001 until payment.

2. Emergency Measures and Renegotiation Process

a) Net Equity Analysis and SSB Model

1186. Although differing in the methodology used for the net equity analysis, the Parties agree that the net equity analysis is less suitable for the present circumstances. See Claimants' Post-Hearing Brief on Quantum, paragraph 31; MBG Report on the Valuations performed by LECG of 10 November 2010, at paragraph 51.
1187. Similarly, although advancing valuations based on the SSB model, the Parties seem to agree that the SSB model does not provide the appropriate basis for determining Claimants' damages. See Claimants' Post-Hearing Brief on Quantum, at paragraph 32; see MBG Report on the Valuations performed by LECG of 10 November 2010, at paragraph 51.
1188. Having examined the Parties' arguments and expert submissions on all methods for calculating quantum of damages, the Tribunal is convinced that the DCF method is most suitable for the present case. The enterprise under assessment is a regulated utilities company with a predictable revenue stream. The DCF method is widely used in the context of tariff reviews for regulated utilities.

b) Inadequacy of MBG Model

1189. The Tribunal finds itself unable to accept Respondent's proposed valuation approach, which varies from the more normal DCF method. That valuation was performed according to the adjusted present value method, which determines the value of EDEMSA's equity as the difference between the value of the business and its financial debt. See Report on Issues Raised by the Tribunal of 23 September 2010, at paragraph 28. Respondent used this method to perform five evaluations, for 30 November 2001, 31 December 2001, 31 January 2002, 31 January 2005, and 31 January 2010. Overall, Respondent's valuations purports to demonstrate that the emergency measures helped Claimants' business and that without the Emergency Measures EDEMSA's value would have been much lower, even in 2010. See Report on Issues Raised by the Tribunal of 23 September 2010, at paragraph 11.

1190. As further discussed below, the Tribunal finds MBG's models contain unreasonable assumptions. First, the Tribunal is not persuaded that EDEMSA benefitted from the Emergency Measures. Under the Regulatory Framework, almost all of EDEMSA's revenue came from tariffs, which, by operation of the Emergency Measures, decreased the revenue in dollar terms by 66%.
1191. In this connection, the Tribunal finds unreasonable Respondent's assertion that the tariff levels assumed in LECG's model would have triggered a radical drop in demand for electricity and significantly increased theft and uncollectables. To the contrary, the Tribunal was convinced by Dr. Manuel A. Abdala's testimony that even a large increase in tariffs in absolute terms would have had less of an actual impact on consumers because wholesale costs increased 118% as a result of inflation during the relevant time period. See Hearing Transcript of 14 February 2011, at 192:8 – 193:17 (English) (Abdala)⁸⁷. Moreover, as explained by Professor Pablo T. Spiller of LECG, the tariff increase would have affected only the DAV portion of the tariff, making the overall increase in tariffs a much lower percentage than that asserted by Respondent. See Hearing Transcript of 14 February 2011, at 337:11 – 338:4 (English) (Spiller). The Tribunal agrees that the effect of tariff increase would have been further muted by the fact that electricity is a necessity good and thus has low demand elasticity. See Hearing Transcript of 14 February 2011, at 338:16 – 339:2 (English) (Spiller).
1192. Second, the Tribunal is unconvinced by MBG's calculation of zero value for EDEMSA in November and December 2001. As evidenced by the reports of credit rating agencies, EDEMSA's equity was not worthless as of December 2001. Claimants' Post-Hearing Brief on Quantum, at paragraph 6.
1193. The evidence shows that in late December 2001, Standard & Poor as well as Fitch gave EDEMSA BBB+ and A- ratings, respectively. From this, the Tribunal finds clear that at the time of rating these agencies viewed EDEMSA to have a strong capacity to repay its debts. The Standard & Poor rating as of December 2001 was only one rank lower than

⁸⁷ The Tribunal notes that the transcript incorrectly states that wholesale inflation was 180% rather than the correct figure, 118%.

Fitch's, which the Tribunal understands to mean that EDEMISA had an "adequate financial risk profile." See Claimants' Post-Hearing Brief on Quantum, at paragraph 13 (citing to S&P rates Corp Banca bonds BBB+). The Tribunal finds that ratings of either A- or BBB+ are incompatible with Respondent's assertions that EDEMISA's equity was zero at the end of December 2001.

1194. As indicated by the Fitch report, one of the key components of EDEMISA's high ratings was the guaranteed cash flows it received as part of the Concession Agreement. Fitch's April 2002 report, however, no longer listed "flujo de fondos estables" (translated in English as "stable cash flow") as one of EDEMISA's strengths. Accordingly, EDEMISA's ratings were dropped to a CCC. Claimants' Post-Hearing Brief on Quantum, at paragraph 8.
1195. In the Tribunal's view, the significance of EDEMISA's high rating does not lose force simply because Fitch had provided similar ratings for other companies which also defaulted on their obligations. In fact, not all of the companies listed by Respondent received a high rating from Fitch, whose valuations in fact ranged from AAA to D. Like EDEMISA, the regulated companies received high scores while some unregulated companies received low ratings in the period just before the Emergency Measures. If such companies, like EDEMISA, had assumed debt in U.S. dollars while receiving guarantee of payment also in dollars, the pesification and freeze of the tariffs would have created a severe imbalance in the concessionaire's economic equilibrium, thereby making it arduous to cover obligations. Absent concrete evidence otherwise, the fact that these regulated companies later defaulted on their debt does not support Respondent's assertion that the ratings are unreliable.
1196. In this connection, the Tribunal cannot accept Respondent's argument that the Fitch reports were merely domestic ratings so as to exclude consideration of macroeconomic changes. To the contrary, the very language of the 27 December 2001 Fitch report explicitly recognizes that "the uncertainty of the macroeconomic context" contributing to EDEMISA's decrease in rating from A to A-. See Fitch Ratings Report (27 December 2001), Exhibit C263, at page 1.

1197. What is more, Argentina's quantum expert admitted in his later testimony that Fitch had taken macroeconomic conditions into account when rating EDEMSEA. Claimants' Post-Hearing Brief on Quantum, at paragraph 11 (citing to Hearing Transcript of 14 February 2011, at 248:4 – 7 (English) (Molina)). In any event, Respondent has failed to advance evidence of any international rating of EDEMSEA that would undercut Fitch's analysis of EDEMSEA's capacity to provide payment of principal and interest on its obligations.
1198. Third, the difficulties with the MBG models are further highlighted by the fact that said experts of Respondent abandoned their earlier model submitted during the merits phase of this proceeding.
1199. The quantum phase model submitted by the same experts is inconsistent with the prior model in that key figures have been modified, including a 77% decrease in firm value; increase in the country risk premium by 3% (from 7% to 10%); and the addition of an EBITDA/sales cap.
1200. Contrary to Respondent's argument, these changes are inconsistent with the Tribunal's instructions set forth in its letter of 9 July 2010. Nothing in the Tribunal's instructions required a change in the assumptions taken for the valuation of EDEMSEA as of 31 December 2001. Rather, the Tribunal simply requested that Argentina's experts explain what they had done in their previous model. Moreover, Argentina's experts have failed to advance any principled reason for their willingness to abandon the assumptions and results calculated in the merits phase.
1201. With respect to the 25 per cent EBITDA/sales cap, Respondent's experts fail to advance any justification or evidence as to warrant its inclusion as a limitation on EDEMSEA's revenue. Under this 25% EBITDA/sales cap, if at a given tariff level the EBITDA exceeds 25% of revenues, a tariff reduction in real terms is implemented that year so that the resulting EBITDA would not exceed 25% of the adjusted revenues.
1202. The Tribunal finds that there is no basis for the EBITDA/sales cap. The cap is inconsistent with EDEMSEA's right to obtain a reasonable rate of return on its investment,

which had been established in Article 43 of the Provincial Electricity Law and incorporated by reference under Article 28 of the Concession Agreement.

1203. As explained by Professor Spiller, an EBITDA/sales ratio has nothing to do with determining whether an investor has received a fair rate of return. The EBITDA is basically sales less operating costs, so the higher the latter value, the lower the EBITDA. Accordingly, companies with high operating costs would have a low EBITDA/sales ratio and vice versa.
1204. Under Respondent's approach, changes in the cost of wholesale electricity, which was designed in the regulatory system to be entirely a pass-through to the consumer, could affect the EBITDA and therefore the EBITDA/sales ratio.
1205. Respondent has failed to advance evidence of any instances in which the Argentine electricity regulator has used an EBITDA/sales cap. Moreover, Respondent's experts fail to explain how it has reached the 25 per cent figure.
1206. Contrary to Respondent's assertions, the Tribunal does not find that the 25 per cent EBITDA/sales cap was a fundamental feature of the SSB model. The Tribunal's view is supported by the fact that Argentina's model of 29 January 1998, which purported to be the basis of the SSB model, did not contain an EBITDA/sales cap. Moreover, line 398 of the tab "Model" of that January 1998 model contains a line called "EBITDA/ingresos," which represents the EBITDA/sales ratio for each year of EDEMSA's operation. As highlighted by Claimants, 18 out of the 30 years of the concession assume a ratio of over 25 per cent. The Tribunal thus finds that such cap on EDEMSA's revenue was not contemplated.
1207. Last, the Tribunal notes the inconsistency in Respondent's position with respect to its valuation for November and December 2001. Although MBG testified in the merits hearing that EDEMSA had experienced a significant drop in equity value between the end of November and the end of December 2001, their most recent calculations reflect no such decrease. See Hearing Transcript of 6 November 2009, 260:1-2 (English) (Bello); compare with MBG Report of September 2010, at paragraph 7.

1208. For the abovementioned reasons, the Tribunal dismisses MBG's version of the DCF method.

c) The Reliability of LECG's DCF Method

1209. The Tribunal has been convinced that LECG's DCF model presents the more reliable set of calculations for a fair assessment of Claimants' damages. Respondent has been found responsible for denying Fair and Equitable Treatment in the context of re-establishing the parties' economic equilibrium under the Concession Agreement.

1210. The fairest measure of damages for that breach would be the genuine value of the investment. Such a standard has been recognized in Article 5 of the Argentina-France BIT as the appropriate measure of compensation in cases of dispossession. Article 4 of the Argentina-France BIT does not present any alternative formulation for determining the value of a business diminished by unfair or inequitable treatment. Consequently, the Tribunal finds it appropriate to examine the value of EDEMESA had it not been reduced by the Emergency Measures.

1211. The Tribunal is mindful of Respondent's argument that Claimants' DCF model is faulty since it argues that the value of the company is simply equal to the accounting value of its assets at the beginning of the first period of operations. See MBG Report of November 2010, at paragraph 2. Respondent asserts that LECG uses the DCF method to calculate the tariff adjustment needed in 2002 to recover the price paid by the shareholders during privatization, rather than to assess the value of EDEMESA. See MBG Report of November 2010, at paragraph 56. In Respondent's calculations, Claimants' share of the official valuation amount had been US\$ 107 million, which was approximately US\$ 100 million lower than the amount of Claimants' actual investment (US\$ 209 million).

1212. With respect to Respondent's defenses against LECG's method, Claimants assert that nothing in the bidding process or the regulatory framework purported to limit the investor's return on the EDEMESA investment to the official valuation amount. Rather, Claimants had a reasonable expectation that they would receive a return on their full investment. Moreover, there is no basis whatsoever to assume that Claimants overbid, whether due to expected synergies or for any other reason. In Claimants' view, the fact

that other sophisticated investors bid similar amounts, which were also significantly in excess of the official valuation amount, confirms that the amount of Claimants' bid was reasonable.

1213. Consistent with the Provincial Electricity Law, LECG has accounted for the investor's reasonable rate of return on their investment. See LECG Report of 28 April 2005, at paragraph 112; see also LECG Report of 30 April 2009, at paragraphs 6(f) and 58-89.
1214. In light of such assurance, which had been incorporated by reference in the Concession Agreement, the Tribunal agrees with Claimants in that the proper asset base for determining Claimants' return on its investment should be the actual price paid for the EDEMSA shares.
1215. The Tribunal is unconvinced by Respondent's assertion that Claimants' return should be limited to the official valuation amount. This finding is supported by the fact that several sophisticated multinational companies also bid far in excess of the valuation amount. Moreover, Respondent has failed to offer any sound explanation as to why investors would have been willing to do that if the return on their investment would be limited to the official valuation amount. In the Tribunal's view, no rational investor would have been willing to agree with such restriction, which would have rendered it impossible for the investor to earn a return on its overall investment.
1216. The official valuation amount was simply referenced as a floor price, and thus the actual purchase price of the EDEMSA shares should be the basis for which Claimants reasonably sought a return on. During the merits hearing, it was found that even Argentina's expert, Dario Quiroga, had in a previous case taken the position that the purchase price, not the official valuation, should be included in the asset base. See Hearing Transcript of 6 November 2009, at page 2609, lines 4-18 (English) (Quiroga); see also MBG Cross-Examination Slide 22.
1217. Moreover, Argentina's expert, Mr. Bello, recognized at the merits hearing that nowhere in the SSB report was there a statement as to the investor's return being limited to the amount of the official valuation. See Hearing Transcript of 6 November 2009, at page

2558, lines 17-21 (English) (Bello). Rather, Mr. Bello admitted that the official valuation report repeatedly stated that the official valuation was merely designed to be a floor price. See Hearing Transcript of 6 November 2009, at page 2609, lines 9-16 (English) (Bello).

1218. This finding is further supported by the very language of the official valuation decree.⁸⁸ Moreover, both before and after issuance of such, the Government of Mendoza promulgated decrees specifically finding that the value of EDEMSA's concession should be based on the amount paid, while failing to make any mention of the official valuation. See Decree No. 197 (11 February 1998), Claimants' Exhibit 19; Decree No. 1176 (27 July 1998), Claimants' Exhibit 57; see also Claimants' Quantum Opening, Slides 7-8.
1219. The Tribunal thus finds that the proper asset base for purposes of DCF calculations should be the actual price paid for the EDEMSA shares, not the official valuation amount.
1220. Respondent further argues that Claimants' LECG report engaged in inappropriate and circular valuations. According to Respondent, LECG only uses the DCF method to calculate the equilibrium tariff on the basis of a predetermined value, the tariff base necessary for cash flows to equate to the amount paid for EDEMSA's shares. See MBG Report of November 2010, at paragraphs 51-54.
1221. Upon close examination, the Tribunal does not find that LECG's DCF model engages in circular analysis. As highlighted by the Claimants, LECG's DCF model in fact yields a 29.4 per cent drop in EDEMSA's equity between 1998 and 2001. Such decrease would not have been made if, as asserted by Respondent, the LECG model sought to maintain a value that was equal to the price paid. The Tribunal agrees with Claimants that this percentage figure is comparable to the average decrease in value of analogous regulated companies on Argentina's stock market. See LECG Report of April 2009, at paragraph 134, Graph IX.

⁸⁸ See Articles 2 and 3 of Decree No. 901 of 16 June 1998, Claimants' Exhibit C-13 ("The official valuation for . . . 51% of [EDEMSA's] capital stock . . . is established to be AR\$122,197,000. Accordingly . . . no price offer shall be admitted that is lower than 70% of the official valuation, that is to say, AR\$85,587,900"); see also Claimants' Quantum Opening, Slide 6.

1222. Contrary to Respondent's position, the Tribunal finds that EDEMSA did maintain a positive value as of December 2001. Such finding is consistent with EDEMSA's financials, which were showing an increase in profitability. What is more, the reports submitted by Fitch as well as S&P further evidence that EDEMSA's equity value was not zero as of December 2001.

d) Purchase Price Starting Point for Analysis

1223. The Tribunal is not convinced by Respondent's argument that Claimants significantly overpaid for the EDEMSA shares. Indeed, no evidence presented in this case detracts from the plausibility of the amount paid as a reasonable starting point for calculating quantum.

1224. For the first five years, the regulatory regime contemplated established immutable tariffs. Moreover, the investment would depreciate over the course of the fixed term, and thus the amount depreciated would not be accounted for during the five-year tariff review.

1225. In the Tribunal's view, no reasonable investor would have overbid knowing it would be subject to the five-year time lag before a tariff increase, at which point the asset would have depreciated. In this connection, the Tribunal finds unreasonable that rational investors would not have calculated the amount of their bid based on a possibility of future tariff increases to cover the amount of the bid.

1226. The Tribunal sees no evidence that Claimants' overbid in anticipation of synergies. As underscored by Claimants' witness, Mr. Blandin, nothing in the record suggests the existence of synergies. See Hearing Transcript of 2 November 2009, at 1027:7-12 (English) (Blandin); see also Hearing Transcript of 2 November 2009, at 1025:14-1026:2 (English) (Blandin). Such finding is consistent with the fact that more than 99% of EDEMSA's activities were regulated, thereby inherently limiting the scope of any potential synergies to almost nothing.

1227. Although the Tribunal finds no reason to depart from the price actually paid for EDEMSA (adjusted pro rata to correspond to Claimants' interest) as the starting point for analysis, we have nevertheless tested the rigor of our views by looking to the second

highest bid, paid by Compañía de Electricidad Mendoza, which was \$207.7 million, or more than 87% of the \$237.8 million actually paid.

1228. This alternative was considered by LECG as an alternative proposal. Were that path followed, the asset base would include \$207.7 million as opposed to SODEMSA's \$237.8 million bid. See Claimants' Observations on Supplementary Quantum Report by Argentina's Damage Experts, 15 November 2010 at paragraph 13; LECG Supplemental Report of 30 April 2009 at Graph VI, page 41.
1229. As discussed below, exploration of this alternative has confirmed the soundness for use of the highest bid, which also comports with practice in an industry where a variety of companies have included purchase price in the initial book value of their assets, which in turn factors into the expected return on investment.⁸⁹
1230. After careful consideration, the Tribunal finds no reason to deviate from Claimants' actual investment in setting the initial asset base.
1231. The Argentina-France BIT provides only one valuation standard. Article 5(2) speaks of "*la valeur réelle*" in the French and "*el valor real*" in the Spanish, both translated as "genuine value" in the English. This value must be established under "normal" conditions prior to any threat by the host state.
1232. To determine genuine value one usually asks what a willing buyer would have paid for a business as of a particular date, which in our case would be the end of December 2001. For an electricity company, such a buyer would look to revenue streams that might be generated, and thus examine the local tariff regulatory regime to see what cash might be expected. The buyer would note that Article 43 of the Mendoza Provincial Electricity Law says that investors receive a reasonable rate of return (*una tasa de rentabilidad razonable*) on the amount invested. Since we do not have an actual investment in December 2001, the next best starting point would be the amount actually paid for the investment, on which a reasonable return can be calculated. Bidders normally determine

⁸⁹ See IILECG Report, Damage Valuation and Assessment, 30 April 2009, at paragraphs 70-74, including a survey of seventeen (17) entities which registered purchase price originally paid as their book value of assets.

their price as a function of forecasts on the project's viability in light of variables which include projected revenues and costs.

1233. The willing buyer would also look at other aspects of the regulatory framework. Provincial Decree 197/98 allow share capital to be increased in an amount that reflects “the societies’ assets, the value of the concession granted by the Province of Mendoza, *determined by the proportional amount of the winning economic bid of the tender.*” Emphasis added.
1234. Of course, the amount invested is not the end of the story. Other elements have been taken into consideration. Indeed, the method adopted by the Tribunal has yielded a value of approximately \$147 million, down from the \$209 million pro rata investment attributable to Claimants’ shares in EDEMSA. For the sake of good order, the Tribunal again notes that Claimants’ stake was 44.88% of the capital, and that the \$237 million bid was made for 51% of EDEMSA Class “A” shares offered by the Province of Mendoza.
1235. In other words, the Tribunal has adopted a quantum of approximately two-thirds (2/3) of the actual price paid.
1236. In this connection, the Tribunal notes the Award in *Azurix Corp. v. Argentina* (ICSID Case No. ARB/01/12) as one example of a tribunal using the second-best offer as the initial asset base. In *Azurix* the tribunal took into account a lower “Canon Payment” than the one actually made by the claimant. In that case, however, the second highest bid was less than nine percent of the amount ultimately bid by the investor. The winning bid totaled \$438 million, while the second place bid was approximately \$38 million.
1237. The discrepancy between the highest and the second highest bid in *Azurix* is clearly distinguishable from this arbitration, where the second highest bid totaled 87% of the actual price paid: \$207.7 million as contrasted with \$237.8 million.
1238. Thus no evidence exists that Claimants’ bid was unreasonably high. Several other firms made competitive bids. In total, there were nine bids: three over US\$ 200 million, a

fourth bid close to US\$ 190 million, and the last five below this value. See LECG Supplemental Report of 30 April 2009 at paragraph 63.

1239. The closeness of the first and second bids provides strong evidence of the commercially realistic and reasonable nature of the purchase price.
1240. It is noteworthy that the Argentine Natural Gas Regulator (ENARGAS), in its 2001 methodological paper on how to proceed with a tariff review, provides a description of how to measure the asset base for the purpose of computing the tariff level in a tariff review, and such description explicitly includes a reference to the purchase price:

“The initial asset valuation for each five-year period under analysis will consist of The global price paid at the moment of the privatization for the totality of the assets acquired by the license. This value has the advantage of being known, objective, and furthermore, recognized by the Basic Rules of the Licenses as the base of the initial value of the Essential and Non-Essential assets.”

See LECG Supplemental Report of 30 April 2009 at paragraph 75; ENARGAS, March 2001, *op. cit.* (Claimant’s translation), Exhibit CE036.

1241. In determining the anticipated tariff rates, the LECG methodology, found reasonable by the Tribunal, takes into account the several criteria enumerated in Article 43, including subsection (d) of that provision, which attempts to ensure that consumers pay a minimum reasonable cost for electricity.

e) Valuation Assumptions

1242. As discussed below, the Tribunal finds the assumptions underlying LECG’s DCF valuation method to be realistic. The Tribunal has paid particular attention to the WACC calculations, which prove critical to the DCF method. In calculating future income, a higher rate yields greater future income. Conversely, in working backwards, discounting future income streams to a starting point, the higher rates yield lower starting values. The more secure the investment, the lower the discount rate and vice versa. A \$100 bank deposit in a trusted institution might earn 1% interest over the course of a decade, while the same amount invested over the same time in a speculative commercial venture would

command 5%. However, starting with an income stream rather than capital, the greater rate indicates a smaller initial value. Thus \$10 earned over a decade in a secure bank at 1% simple interest suggests an initial deposit of \$100. However, that same \$10 income stream over the same period for the more speculative venture at 5% would indicate an investment of only \$20.

1243. The key assumptions and figures in the LECG approach to WACC have been set forth below.

(1) Cost of Equity

1244. The Tribunal starts with the LECG assumption on the cost of equity as a measurement of the return a company pays to its equity investors to obtain their capital. The Tribunal finds that the CAP Model is widely used to calculate the cost of equity. Under this model, investors must be compensated for time value of money and risk.

1245. The Tribunal understands that the time value of money is represented by the risk-free rate. The risk component in that rate would normally be identified as “beta” in economic measures. The beta quantifies the volatility (systematic risk) of an investment in relation to market movements.

1246. The CAP Model provides that the opportunity cost of equity is equal to the return on risk-free securities, plus the company’s systematic risk (beta), multiplied by the market price of risk (market risk premium). The equation for the cost of equity (kE) is as follows:

$$kE = rf + [E(rm) - rf] * (beta)$$

where:

rf = the risk free rate of return.

E(rm) = the expected rate of return on the overall market portfolio.

E(rm) - rf = the market risk premium.

beta = the systematic risk of the equity.

1247. The Parties disagree on the applicable U.S. Treasury Bond rate. Claimants suggest the ten-year rate whereas Respondent the thirty-year rate. The Tribunal finds the 10-year

U.S. Treasury Bond rate more suitable. The risk free rate would be the return on a zero-beta portfolio, and the beta value from the 10-year rate is closer to zero than that of the thirty-year bonds (according to JP Morgan, thirty-year Treasury Bonds have a beta of 0.25). In this regard, the Tribunal finds reasonable LECG's calculation of 5.09% as the applicable risk-free rate.

1248. The Tribunal understands the market risk premium as the extra return that the market provides over the risk-free rate to compensate for market risk. This is quantified by the difference between the expected rate of return on the market portfolio and the risk free rate. LECG advances that the main differences in the various approaches for calculating the market risk premium are (i) the time period for analyzing historic returns should be used and (ii) whether an arithmetic or a geometric average should be calculated to arrive to the expected market risk premium. The Tribunal finds it appropriate to look to long periods of historical data available, as the market risk premium tends to follow a random walk. In this connection, the Tribunal finds reasonable LECG's use of historic data for the period 1928-2001.
1249. Given the long time horizon under consideration, the Tribunal considers the geometric average (rather than the arithmetic mean) as a better indicator when calculating the risk premium, given the long-term historic negative correlation among stocks from different economic entities and sectors. The Tribunal finds suitable LECG's calculation of 5.17% geometric average for the period from 1928 to 2001. See Appendix B of LECG 2005 Report, at 97, Table XIV.
1250. According to LECG, data of beta assessments from developing countries' stock exchanges are highly volatile and unreliable. See Appendix B of LECG 2005 Report, at 98, paragraph 9. In addition, betas of several companies are often needed, as this makes the sample much more stable. Respondent's experts also advance that it is difficult to find relevant local companies in the local stock exchange that are comparable with EDEMSA. Finding such views reasonable, the Tribunal is convinced that a more reliable beta value is yielded by estimating the beta for an equivalent company in a developed economy such as the U.S., and then adjusting to reflect the extra return required for

investing in a developing economy. See Appendix B of LECG 2005 Report, at 98, paragraph 10. In this connection, the Tribunal finds more suitable the raw beta measurements established by Ibbotson, rather than relying on assessment of the few U.S. companies selected by MBG.

1251. Ibbotson provides betas based on U.S.-based industries by Standard Industrial Classification (SIC) codes. The SIC code 4911 comprises 51 companies from the electricity generation, transmission and/or distribution industry, which the Tribunal finds appropriate and comparable to EDEMSA's business.
1252. The raw and levered beta obtained from Ibbotson Cost of Capital Yearbook 2001 is equal to 0.06. When adjusted for "reversion to one," the beta value of one (1) represents that the security's price will move with the market. A beta of less than 1 indicates that the price is less volatile than the market. Consistent with the Parties' views, the raw figure is then adjusted according to the following methodology: $\text{Adjusted Beta} = (0.67) * \text{Raw Beta} + (0.33) = 0.37$.
1253. This adjusted value, however, only reflects the risk of a company with the average capital structure of the Ibbotson sample used. Since typically the American and Argentine electricity sectors have different capital structures, the beta calculated above must be further adjusted to reflect the appropriate leverage.
1254. The first task is to un-lever the adjusted beta value calculated above. The Tribunal understands the un-levered beta to be the systematic risk without any debt. The Ibbotson Yearbook 2001 provides the U.S. industry, average debt/ equity (D/E) ratio to be 84%. Using these figures, the un-levered beta is calculated under the following formula: $\beta_U = \beta_L / (1 + ((1-t)D/E))$.
1255. The Tribunal agrees with the Parties that the un-levered beta must be adjusted for regulatory differences. The Tribunal agrees with LECG's observation that U.S. electric utilities are typically regulated under a rate of return regime, while Argentine utilities are regulated under price cap regimes.

1256. Rate of return regimes are less risky for investors as their rate of return on investments are assured. In contrast, business risk is higher on a price cap regime because, once tariffs are fixed, any future inefficiencies are precluded from passing through to tariffs. In the Tribunal's view, the higher risk is evident by the higher expected returns for investors regulated under price cap regimes.
1257. After accounting for these regulatory adjustments, the beta is re-levered to reflect the expected D/E ratio for the Argentine industry.
1258. LECG's D/E ratio reflects its expectations on the future optimal capital structure for a local company. See LECG Report of April 2005, at page 100, Table XV. LECG first calculates the debt / firm value (D/FV) for each year based on the D/FV ratios of several companies in the local industry. See LECG Report of April 2009, at page 91, paragraph 172. Next, LECG calculates the market capitalization weighted average across several years to isolate any specific event that might have changed the ratio in any particular year. LECG then converts this D/FV average ratio into a D/E ratio. LECG calculates the average D/E, weighted by capitalization, to be 33.3% for the period 1994-2001. In this connection, the weighted average D/E yields 25% for the weight of debt in the capital structure. In turn, the weight of equity equals 75%.
1259. The Tribunal recognizes that these percentages (25% for weight of debt and 75% for weight of equity) are not the only rates that might have been used. For example, a 21.9% weight of debt appears in the book values of the December 2001 financial statements. However, there is nothing inherently unreasonable about a 25/75 allocation as between debt and equity, which remains in line with the averages presented in Table XV of LECG's 2005 Report. See page 100.
1260. Following the above-mentioned steps, the Tribunal finds that the calculation of the levered beta (adjusted to one) equals 60%.
1261. LECG advances that adjustments to equity return must be made to reflect the risk of investing in Argentina. See Appendix B of LECG 2005 Report, at page 100, paragraph

18. In this connection, LECG recommends the Relative Volatility approach as opposed to the Country Debt Spread approach.
1262. When involving investment in emerging countries such as Argentina, the cost of equity must account for a country risk premium. The country risk premium represents the premium required by an investor to place money in a foreign investment.
1263. The Tribunal understands the Country Debt Spread methodology to calculate the country risk through the spread between the local Government bond and U.S. Treasury bonds, and then to add this factor to get to the return on equity.
1264. Although simple and widely used, the Country Debt Spread approach tends to be a volatile measure. In particular, it becomes unreliable in situations like the present case where high country risk figures are involved. When countries are approaching default-like situations, like Argentina did in year 2001, the measure reaches high values of risk, turning the proxy for country risk premium into an unrealistic measure for a cost of equity calculation. Moreover, when countries enter default, like Argentina did in 2002, the sovereign debt spread becomes almost irrelevant, as the country no longer has access to sources of finance.
1265. Instead, the Tribunal finds the Relative Volatility approach to be more suitable under the present circumstances. The Tribunal understands the Relative Volatility approach to measure the volatility of the market in question relative to a referenced market. This methodology adds to the equity return a factor based on the ratio of the volatilities of the local and the reference stock exchanges. In this connection, the Tribunal finds reasonable LECG's use of Bloomberg's volatility factors, identified by the sigma factor in the equation below.
1266. For good order, the Tribunal notes Respondent's method in calculating the country risk premium. After due consideration, the Tribunal is less persuaded by Respondent's approach, which appears to render an excessive value of country risk premium and then apply a 10% ceiling to their historical average without sufficient justification.

1267. In sum, the Tribunal finds that EDEMSA's cost of equity should be calculated using the following formula:

$$re = rf + \text{Beta} * \text{US Market Risk Premium} * (\sigma_{\text{arg}} / \sigma_{\text{us}})$$

1268. Applying the figures, EDEMSA's cost of equity as of 2001 yields as follows:

$$re = 5.09\% + 0.60 * 5.17\% * (5.45\%/2.15\%) = 12.97\%$$

(2) Cost of Debt

1269. Cost of debt is the overall rate that a company pays on its debt obligations.

1270. LECG calculates the cost of debt in a different way than by basing it on a developed world company or industry, and then adding the country risk. Their justifications for not adopting such approach are that (i) in the present situation the country risk has an extremely high level, and (ii) local utilities get financing at rates the same as or lower than the government. See Appendix B of LECG 2005 Report, at page 102, paragraphs 23-24. LECG instead recommends both analyzing the historic cost of debt and credit ratings at each time, and estimating the future cost of debt by estimating the company's future credit rating.

1271. The Tribunal agrees. Credit ratings provide proper basis for cost of debt analysis in that established agencies such as Standard & Poor take into consideration the cost of debt of the valued company, generally yielding a negative correlation between the rating and cost of debt.

1272. In this connection, the Tribunal finds reasonable to use the ratings of mid 2001, which values EDEMSA before the collapse of the Argentine economy, in order to estimate future credit ratings.

1273. As advanced by LECG, the Tribunal finds that during mid 2001 most utility companies had a credit rating similar to that of Standard & Poor's AA+ rating. The Tribunal has thus used this credit grading for calculating the 2001 WACC rate.

1274. For the historic period, the Tribunal agrees with LECG's use of the actual cost of debt for the AA+ ratings of sample local companies.
1275. In order to arrive at the 2001 figure, the difference between the AA+ rating of each year and the respective risk free rate is calculated. Then, a simple average of the differences is determined, and the 2001 risk free rate is added, with the final value yielding a cost of debt of 9.94%.
1276. Using these figures, the Tribunal calculates the WACC rate as follows:

$$\text{WACC} = 12.97\% * 75\% + 9.94\% * (1-35\%)* 25\% = 11.34\%$$

(3) Application of WACC Rate

1277. The Tribunal considers it appropriate to apply the same discount rate (WACC rate of 11.34%) for both the actual and but-for scenarios. See LECG Report of April 2009, at pages 88-89, paragraphs 162-65.
1278. The Tribunal agrees with LECG's approach to hold the WACC constant across the two scenarios. As advanced by LECG, the only difference considered between the two scenarios is the Emergency Measures affecting EDEMSA. This is because LECG has accounted for the effects of such measures on EDEMSA's revenues and costs under its cash flow assessment. In effect, adjusting the discount rate would result in double counting of the effects of the Emergency Measures. Moreover, the Emergency Measures pertain to neither the macroeconomic effects of such laws enacted nor the pesification of the whole economy, but rather EDEMSA's tariffs.
1279. The Tribunal agrees with Claimants that the valuation date of 31 December 2001 should be used to determine the value of Claimants' shares immediately before the Emergency Measures.
1280. To determine the value to all shareholders, LECG subtracts EDEMSA's financial debt as of 31 December 2001 from the firm value.
1281. With respect to EDEMSA's financial debt under the "but-for" scenario, LECG has used the book value of the financial debt as of 31 December 2001, which totals

US\$ 119,644,020. See LECG Report of September 2010, at paragraph 24, Table II. The Tribunal finds such assumption reasonable given that the book value prior to enactment of the Emergency Measures would have been a reliable indication as to the value of EDEMSA's debts.

1282. The Tribunal understands that LECG calculates the regulatory asset base as of 2001 by taking the purchase price of the EDEMSA shares and adding the net investments of the 1998-2001 period as well as the 2001 stock of working capital. In the Tribunal's view, LECG presents a reliable method in calculating the asset base and applicable market risks.
1283. In this connection, the Tribunal finds reasonable LECG's underlying assumptions including those concerning the macroeconomic conditions, operating and capital expenditures, energy-purchasing costs, as well as the electricity-demand factor.
1284. With respect to tariffs, the Tribunal finds that, in accordance with Article 28 of the Concession Agreement, an Ordinary Tariff Review would have taken place in 2002, which would have allowed the company to recover the value of its tariff base over the life of the concession, at its cost of capital.
1285. To determine the present value of the free cash flows, LECG has used a discount factor determined by the WACC, which represents a measure of the cost of raising funds from shareholders and lenders in a company operating in the industry at hand.

f) EDEMSA's Value Following 2005 Sale

1286. Claimants assert that the residual value of their investment is equal to the sales price as of 2005, which as established in Article 3.1 of the SPA of 30 June 2004, was US\$2 million.
1287. In the absence of any tariff revision, perhaps the Tribunal might find that figure a reasonable measure of the fair market value of EDEMSA in 2005.
1288. However, the sale of EDEMSA was made in the context of a tariff renegotiation process required by law. Mendoza set up a commission for the renegotiation and fixed an initial time period for the renegotiation of 180 days after 2 February 2003. The time period was

extended several times, through December 2003, December 2004, June 2005 and, finally, until December 2005.

1289. During that process, in March 2003 a freeze of the quality standards was granted, allowing EDEMSA to postpone investment obligations. Furthermore, in February 2005 the Province of Mendoza announced a projected 38.05 % tariff increase. A reference to this announcement was included in EDEMSA's Financial Statements. On 7 April 2005, a Letter of Understanding ("Carta de Entendimiento") was signed between EDEMSA and Mendoza, reaching an agreement on the renegotiation process and including that tariff increase and other measures. Later tariff increases were approved in 2008 (51%) and 2009 (56%).
1290. Respondent asserts that the extended period of renegotiation was reasonable because the period between the measures and the end of the renegotiation was one of complete disruption of all relevant economic indicators.
1291. Claimants allege that they had no obligation to maintain their shares until the renegotiation process ended. Moreover, according to Claimants, subsequent tariff increases should have little bearing on assessment of the market price at the time of the sale, given that such future increases were purely speculative, with no assurance of being realized in the foreseeable future.
1292. While the renegotiation process was open, on 30 June 2004, Claimants signed an SPA with IADESA, another of EDEMSA's indirect shareholders. The closing took place on 30 March 2005, only a week before the Letter of Understanding was executed between EDEMSA and the Province of Mendoza in February 2005. Two years later, in 2007, IADESA sold its 51% stake in EDEMSA for \$ 60 million.
1293. Respondent contends that by selling EDEMSA in the middle of the renegotiation process, Claimants "got off the horse in the middle of the river." The consequences, they say, are not imputable to Respondent. See Hearing on Quantum, Argentina's Opening Statement, at 51, lines 5 to 15; reiterated by Respondent in Post-Hearing Brief on Quantum at paragraphs 31, 35, 43 and Post-Hearing Brief on Merits at paragraphs 94, 101, 105.

1294. In other words, Respondent alleges that the damages claimed in this arbitration were not caused by the Emergency Measures, but by Claimants' own decision to divest of its investment while the renegotiation process was still open.
1295. Claimants allege that they were entitled, at any point following the Measures that caused the damage, to divest their interest in EDEMSA to mitigate the damage that they were suffering as a result of the measures adopted by Argentina (Claimants' Post Hearing Brief on the Merits at paragraph 108). Evidence shows that the Claimants withdrew from Argentina also as part of a larger EDF strategy to terminate certain damaged investments in anticipation of a public offer of EDF's Shares (Claimants' Reply at paragraphs 46). That is to say, the Claimants had entrepreneurial reasons for abandoning Argentina at that point in time.
1296. EDFI sold the investment to IADESA, without including any provision in the SPA for the case that the renegotiation ended up with a tariff increase and/or any other measure that might reestablish all or part of the enterprises' potential value. The SPA did not contain any specific stipulation concerning the results of a renegotiation process that could entail a significant change in the concession economy.⁹⁰
1297. The Tribunal notes that EDFI sold to IADESA for US\$ 2 million its 44.88% stake in EDEMSA. IADESA in turn, resold that interest, together with its own 6.12%, for US\$ 60 million.
1298. Both seller and buyer were EDEMSA's shareholders. Each side to the sale should have had a knowledge of the context for that transaction. IADESA, as buyer, already held a 6.12 % stake in EDEMSA. While negotiating the sale of EDEMSA, Claimants and IADESA knew that a tariff change was being discussed with the Province.
1299. In fact, the Document "Projet EMMA" (4 July 2004) shows that one of the "important risks" associated with the projected sale of EDEMSA that the Board of Directors of EDFI took into consideration was, precisely, the risk that crystallized in this case: a "fast resale

⁹⁰ The SPA only contained a standard price revision clause (Article 3.2 Potential Additional Price) should EDEMSA's gross margin be higher than US\$ 55 million. The additional payment would be equal to 15% of the surplus over that figure.

after a tariff raise with a significant capital gain, right under the threshold triggering the mechanism of complement pricing, exposing EDF to criticism for an inappropriate and bad managed exit.” That notwithstanding, no specific provision was included in the SPA.

1300. In 2007 EDEMSA’s shares were sold by IADESA to a third party for 60 million.
1301. It would be patently unfair to allow Claimants to recover damages for loss that could have been avoided by taking reasonable steps. In other words, the injured party must be held responsible for its own contribution to the loss.
1302. The duty to mitigate damages is a well-established principle in investment arbitration.⁹¹ This idea is reflected in *Middle East Cement v. Egypt*, where that tribunal clearly recognized it as a general principle of law:
1303. “The duty to mitigate damages is not expressly mentioned in the BIT. However, this duty can be considered to be part of the General Principles of Law which, in turn, are part of the rules of international law which are applicable in this dispute according to Art. 42 of the ICSID Convention.”⁹²
1304. The duty to mitigate damages was also considered by the International Court of Justice *obiter* in the *Case Concerning the Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*; the principle was enunciated by the Court as follows:
1305. “It would follow from such a principle that an injured State which has failed to take the necessary measures to limit the damage sustained would not be entitled to claim compensation for that damage which could have been avoided.”⁹³
1306. Whether the aggrieved party has taken reasonable steps to reduce the loss is a question of fact, not law. What is reasonable depends largely upon the facts of the individual case.

⁹¹ See also Commentary to Article 31 of the ILC Articles on State Responsibility for International Wrongful Acts.

⁹² *Middle East Cement Shipping and Handling Co. S.A. v. Egypt* (ICSID Case No. ARB/99/6), Award, 12 April 2002, at paragraph 167. The same idea can be seen at *AIG Capital Partners, Inc. and CJSC Tema Real Estate Company v. Kazakhstan* (ICSID Case No. ARB/01/6), Award, 7 October 2003, at paragraph 10.6.4.

⁹³ *Case Concerning the Gabčíkovo-Nagymaros Project* (Hungary/Slovakia), Judgment, 25 September 1997, at paragraph 80.

1307. In this case both seller and buyer were shareholders in EDEMSA, which was renegotiating the Concession terms and a tariff review. The Claimants would normally be expected to have incorporated a specific clause in the SPA to take this process into account as well as the concomitant changes in the economic framework.
1308. Nevertheless, the SPA did not contain any stipulation for the case in which the renegotiation process ended with success, or the tariffs were raised, or other means of reparation were accorded to EDEMSA.
1309. EDFI, the seller, only retained the international claim against the Republic of Argentina pending before this Tribunal (Article 9.1.7 of the SPA) and the rights pertaining to this claim, leaving any possible benefit derived from the renegotiation process to the buyer (except for the part of that benefit that the standard price revision clause could capture).
1310. By failing to take into account the renegotiation process in the SPA, Claimants failed to comply with their duty to minimize damages. Respondent is, thus, not liable for any loss attributable to Claimants' failure to take reasonable steps.
1311. In determining the extent to which the sales price should be deemed adjusted (and thus damages should be reduced) the Tribunal looks to the background of the renegotiation in course over the concession. A reasonable seller would try to retain some of the possible benefits and, therefore, in arm's-length transactions a seller and a buyer would accept to partake any substantial benefit. Absent any special circumstance, the Tribunal considers equitable to impute to each of the parties an equal share of 50% in those potential benefits. The buyer would have still enough incentives to buy and the seller would have taken a reasonable step to minimize its losses.
1312. Consequently, the Tribunal considers that an amount equivalent to the 50% of the value of their participation in EDEMSA, as evidenced by the 2007 sale, must be subtracted from the amount of damages to be awarded by the Tribunal.
1313. The Tribunal has taken into account that IADESA sold its stake in EDEMSA (51%) for an estimated US\$ 60 million (LECG Supplementary Expert Report 30 April 2009 at paragraph 100 and Exhibit CE042). The Tribunal also notes that (i) when the Claimants

sold their 44.88% in EDEMSA to IADESA in 2005 the latter already had a 6.12% stake in EDEMSA; and (ii) IADESA sold in 2007 its whole stake in EDEMSA (51%) to a third party. The price corresponding to the 44.88% stake is US\$ 52.8 million, or US\$60 million x 44.88 / 51 = \$52.8 million.⁹⁴

1314. The Tribunal will discount that price to 31 December 2001. For this purpose, the Tribunal will use the following formula where PV = present value, FV = future value, and $wacc$ = weighted average cost of capital.

$$PV = FV / (1+wacc)^t$$

1315. Applying above formula the result is as follows where time is 6 years (from 31 December 2007 to 31 December 2001).

$$PV = 52,800,000 / (1+0.11)^6 = 28,229,036$$

1316. Fifty per cent (50%) of the resulting amount yields \$14,114,518, which would reasonably be the price obtained for the 2005 sale.

1317. In summary, the starting point for adjustment to damages is to recognize the \$60 million obtained by IADESA for sale of its 51% share of EDEMSA in 2007. Claimant's 44.88% share would have been \$52.8 million (44.88 / 51 = 88%. 60 x .88 = 52.8). Discounting that amount, at the 11% WACC rate, going back to 2001 would yield US\$ 28,229,036 (US\$ 52.8 million / (1 + .11) ^ 6 = \$28,229,036). 50% of that amount would come to US\$ 14,114,518.

3. Pre-Emergency Measures Affecting the Concession

a) Overview

1318. Aside from the damages caused by the Emergency Measures, Claimants assert that additional injury resulted from other provincial actions implemented in relation to the

⁹⁴ According to the purchaser's 2007 financial statements, the acquisition of IADESA's 51% stake in EDEMSA was completed on 2 October 2007 (25.5%) and 21 February 2008 (25.5%). See Andes Energía plc 2007 Annual Report and Accounts (Exhibit CE043) at p. 2. For the sake of simplicity, the Tribunal will assume that the closing of the whole operation was completed on an intermediate date, *i.e.*, 31 December 2007.

Pre-Emergency Measures affecting the Concession. The total due, as explained later, is set forth in the following table:

Pre-Emergency Measures Claims	Amount (US\$ December 2001)
Modification of Large users Tariff Schedule	5,576,643
Total Damages to EDEMSA	5,576,643
Total Damages to Claimants (44.88%)	2,502,797

1319. As mentioned above, the Tribunal has encountered a number of difficulties in analysis and quantification of these claims, given that their categorization changed as between discussions by Claimants and Respondent, and also as between Claimants’ briefing and the analysis of their expert, LECG. On some items (such as the Quasi-Currency) Claimant did not break out any separate quantification. On Pre-Emergency Measures, Respondent did not present alternative calculations of quantum, although on one item (Polvaredas) Respondent seems to have admitted that some compensation might be due, but without any suggested figure. This matter has been addressed more fully below.

1320. For guidance, the Tribunal sets forth the following summary chart of the various iterations of claims for Pre-Emergency Measures, along with the Tribunal’s own grouping and conclusions.

Claimants	Respondent	LECG	Tribunal	Disposition
Modification “Use of Network Fee” and/or “Reduction of contracting period.”	Modification “Use of Network Fee”	Modification “Use of Network Fee”	Modification of Tariff Schedule	Respondent Liable US\$ 5,576 ,643 (Claimant’s pro rata share being US\$ 2,502,797)
Optional T-2 Tariff Category	Optional T-2 Tariff Category	Creation of New Subsidized Tariffs to Large Users		
Unilateral Expansion Scope of Concession	Incorporation of Polvaredas into Concession Area		Expansion of Scope of Concession	Claim not Substantiated
	Incorporation of Scattered Electricity			

	Market Users			
Failure to Make Payments and Denial of Access to Court	Failure to Make Payments in Regards to Nihuil IV (First Claim)	Failure of Compensation for Nihuil IV	Failure to Pay Amount Owed	Of a contractual nature. Not covered by the umbrella clause.
	Failure to Make Payments in Regards to Nihuil IV (Second Claim)	Late Reimbursement of Subsidy Obligations		
	Failure to Pay Subsidies and Provision of Public Lighting Services	Irrigation Subsidies LECG discussion failure to pay; but Parties address as separate claim.		
Modification of Agricultural Subsidies Regime	Modification of “Agricultural Irrigation” Subsidies Regime		Agricultural Irrigation Subsidies	Respondent not Liable
More Stringent Quality Service Conditions	Imposition of More Stringent Conditions Regarding Quality of Service		Service Quality Conditions	Claim not Substantiated
Quasi Currency	Imposition of Obligation to Pay Quasi Currency from Users		Quasi Currency	Claim not Substantiated

1321. Although Respondent did not address quantum with respect to Pre-Emergency Measures, Claimants’ Expert LECG provided several reports on the matter. These reports, however, took a number of twists and turns which the Tribunal will address below. Consequently, the Tribunal first recalls the LECG analysis, following which it presents its own conclusion

b) Tribunal Conclusions

1322. For reasons elaborated above, the Tribunal has found Respondent liable only on claims related to one of the Pre-Emergency Claims presented by the Claimants.

1323. The Tribunal remains convinced that EPRE unilaterally modified the tariff schedule under the Concession Agreement. This includes (i) alteration of the Network-Use Fee applicable to T-2 large users, (ii) reduction of the twelve-month contracting period with users and (iii) implementation of measures relating to the transitory tariff, as well as the Optional T-2 Tariff. In accordance with LECG's figures, the Tribunal finds that this amounted to US\$ 5,576,643 as of 31 December 2001. Claimants' damages are 44.88% of that amount, 2,502,797.

4. Interest

1324. Claimants request that the Tribunal add compound interest to their damages, as from 31 December 2001 through the date of the payment of the Award.

1325. As discussed below, the Tribunal sees the rate on U.S. Treasury Bonds as representing a reasonable expectation of return in situations such as the present one. Indeed, Respondent does not appear to challenge that this risk-free rate would be one appropriate benchmark for interest.

a) Period after 2005 Sale of EDEMSA

1326. According to Claimants, both side's experts agree that the applicable interest rate for the relevant period after the sale in 2005 should be the U.S. "risk-free" rate. Although this request was made prior to the down-grading of United States credit rating by Standard & Poor on 5 August 2011, the Tribunal sees no reason to depart from the Parties' perspective on the matter, which seems reasonable.

1327. Accordingly, the Tribunal will award compound interest for this period at the "risk-free" rate as discussed below.

1328. The 2009 LECG Report takes the U.S. "risk-free" rate as the rate for 10 year U.S. Treasury Bonds, which would have averaged 4.2% over the period from mid-2005 to March 2009.

b) Period before 2005 Sale of EDEMSA

1329. With respect to the 2001-2005 period Claimants contend that the applicable interest rate should be the WACC because this rate is equivalent to Claimants' opportunity cost for their invested amount during their operation of the concession.
1330. Claimants' calculations apply the same rate to the Pre-Emergency Measures through 31 March 2005. According to Claimants, from the moment of Respondent's breach of its obligations until the moment of divestiture of EDEMSA Claimants' capital was tied to their Argentine investment.
1331. Claimants further request that the Tribunal apply a compound interest rate. See Claimants' Post-Hearing Brief on Quantum, at paragraph 56. In support of their view, Claimants cite to several prior awards.⁹⁵ Claimants assert that both as a matter of law and economics, simple interest is not sufficient. Claimants' Reply of 30 April 2009, at paragraph 702. In this connection, Claimants cite to one commentator who posits that "in the last 10 years tribunals have predominantly awarded compound interest." Sergey Ripinsky with Kevin Williams, DAMAGES IN INTERNATIONAL INVESTMENT LAW 384 (citation omitted). Since 2000, numerous international tribunals have awarded compound interest in investor-state disputes.⁹⁶
1332. Claimants note that from an economic standpoint compound interest is necessary to compensate Claimants fully. Claimants' Reply of 30 April 2009, at paragraph 704. In this connection, Claimants advance LECG's expert opinion, positing that "[i]n the real world, all interest is compound interest." See LECG Report of April 2009, at paragraph 125. LECG opines that "compound interests reflect the economic reality that a dollar foregone could have otherwise been invested, and that the income on that investment could have been reinvested, so that funds grow at a compound rate." *Id.* According to Claimants, the same reasoning was applied in *Compañía del Desarrollo de Santa Elena*,

⁹⁵ Claimants cite to *inter alia* *Compañía del Aguas del Aconquija, S.A. and Vivendi Universal, S.A. v. Argentina* (Award, 20 August 2007); *Enron v. Argentina*, (Award, 22 May 2007).

⁹⁶ Claimants cite to *inter alia* *Sempra Energy v. Argentina*, (Award, 28 September 2007); *Vivendi v. Argentina*, (Award, 20 August 2007); *LG&E v. Argentina*, (Award, 25 July 2007); *Enron v. Argentina*, (Award, 22 May 2007); *PSEG v. Turkey*, (Award, 19 January 2007).

S.A. v. Republic of Costa Rica, ICSID Case No. ARB/96/1, (Award, 17 February 2000), at paragraph 104.

1333. Claimants underscore that LECG follows a relatively conservative approach in that it compounds interest annually, rather than on a semi-annual or quarterly basis as several past tribunals⁹⁷ have done. Claimants' Reply of 30 April 2009, at paragraph 705.
1334. By contrast, Respondent contends that the Tribunal should apply a simple interest rate. Respondent asserts that under the Argentina-France BIT an "appropriate" interest rate should be applied. According to Respondent, a reasonable rate would be the interest rate of the U.S. Treasury Bills or LIBOR. See Respondent's Rejoinder at paragraphs 875-76, 880-81. In this connection, Respondent contends that no reasonable grounds in arbitral practice exist for the kind of interest applied by LECG in their calculations. See Respondent's Counter-Memorial at paragraph 726.
1335. Respondent argues that the WACC rate is unreasonable and artificially increases the amount claimed. See Respondent's Rejoinder at paragraphs 876-9. However, if a WACC rate is to be used, Respondent proposes 18.6%, higher than the Claimants' rate, which according to Respondent would be justified by the high risk during 2002.
1336. The Tribunal does not find the WACC rate appropriate in this context. No evidence has been presented that Claimants could or would have earned the high-risk WACC rate. Consequently, with respect to the 2001-2005 period, the interest is to be calculated following the same methodology adopted by the Parties for the 2005-2011 period: the US "risk-free" rate.

c) Compound Interest

1337. The Tribunal agrees with Claimants with respect to compound interest. The Argentina-France BIT provides in Article 5 that interest shall accrue at an "appropriate" rate up to the date of payment. Although this provision appears in connection with expropriation, no reason exists to find that any standard other than "appropriate" should be used for

⁹⁷ Claimants cite to *inter alia* *PSEG v. Turkey*, (Award, 19 January 2007); *Enron v. Argentina*, (Award, 22 May 2007); and *Sempra Energy v. Argentina*, (Award, 28 September 2007).

damages pursuant to the Fair and Equitable obligations of Article 3 of that BIT. Simple interest would not be appropriate, given that it would fail to account accurately for the time value of money until the date of payment.

d) Post-Award Interest

1338. Claimants also note the long delay by Argentina in honoring the award issued against it in the *CMS Gas* case, and thus consider it appropriate that Respondent be ordered to pay post-award interest, compounded monthly until the date of payment. In Claimants' view, there is ample precedent in the jurisprudence for the application of compounding on a monthly basis, particularly in the post-award phase.⁹⁸ Claimants' Reply of 30 April 2009, at paragraph 706 and Claimants' Post-Hearing Brief on Quantum, at paragraph 57.
1339. The Tribunal notes that ICSID Tribunals commonly order post-award interest, notably in several Argentine cases.⁹⁹ This practice appears appropriate, as not awarding post-award interest would fail to account for the time value of money for the period from the award to the payment.
1340. In connection with the terms of compound interest, the change from annual to monthly compounding sought by Claimants and adopted by some tribunals can be explained by the desire of these tribunals to ensure prompt compliance with the award by adding what can be seen as a punitive element, a change that this Tribunal cannot endorse.
1341. Consequently, the Tribunal awards post-award interest on the same terms as pre-award interest, to accrue until payment.

⁹⁸ Claimants cite to *inter alia* *CMS Gas v. Argentina*, (Award, 12 May 2005), at paragraph 471; *Occidental Exploration and Production Co. v. The Republic of Ecuador*, LCIA Case No. UN3467, Award (1 July 2004), at paragraph 471.

⁹⁹ See, e.g., *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic* (awarding interest until the date of payment); *LG&E v. Republic of Argentina* (awarding post-award interest, starting 30 days after the award, on the same terms as pre-award interest); *Siemens A.G. v. Argentine Republic* (awarding post-award interest, from 30 days after the award until the date of full payment); *Azurix Corp. v. Argentine Republic* (awarding interest from the date of the award until the date of payment, with a 60-day break after the date of the award); *CMS Gas Transmission Company v. Argentine Republic* (awarding interest from the valuation date until the date of payment).

5. Attorneys' Fees, Costs of Arbitration and Administrative Expenses

1342. Claimants assert that they are entitled to all costs and expenses of these proceedings, including attorneys' fees, arbitrator fees, and expenses of the Centre. In support of their position, Claimants advance several ICSID decisions.¹⁰⁰ They suggest that an award of costs is particularly appropriate in the present case, where they experienced long delays throughout the arbitral proceeding as a result of the Respondent's vexatious litigation tactics. As an example, Claimants argue that Respondent caused long and evidently tactically-motivated delays in challenging former Tribunal member Mr. Fernando de Trazegnies, as well as Tribunal member Ms. Gabrielle Kaufmann-Kohler. See Claimants Reply, at paragraph 707.
1343. Respondent argues that Claimants should pay all expenses and costs for this proceeding, as they are at fault for any damage to their investment, and any objections raised were legitimately made according to Respondent's rights under Article 57 of the ICSID Convention, and therefore are not a reasonable means by which to hold Argentina liable for Claimants' expenses and costs. See Respondent's Rejoinder, at paragraphs 880-81.
1344. In addition, Respondent asks for Claimants to pay interest on the costs and expenses incurred by the Argentine Republic. See Respondent's Post Hearing Brief on the Merits, at paragraph 306.
1345. Having considered the Parties' arguments, the Tribunal finds that both sides have presented some meritorious arguments, each side winning on some issues while losing on others. The Tribunal thus finds appropriate to direct each side to bear its own legal expenses, including fees for attorneys and experts. The costs of arbitration, including the fees of the arbitrators and the administrative expenses of the Centre, shall be divided on an equal (50/50) basis.
1346. The total costs of the arbitration, including arbitrators' fees and expenses, as well as ICSID administrative expenses, is set at US\$ 1,631,297.95.

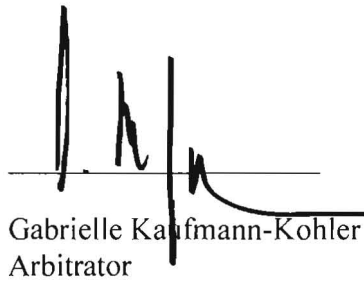
¹⁰⁰ Claimants cite to *inter alia* *AGIP S.p.A. v. People's Republic of the Congo* (ICSID Case No. ARB/77/1), (Award of 30 November 1979), at paragraph 115; *Southern Pacific Properties (Middle East) Ltd. v. Arab Republic of Egypt*, ICSID Case No. ARB/84/3, (Award, 20 May 1992), at paragraph 257.

Disposition of the Case

For the foregoing reasons, the Arbitral Tribunal decides as follows:


- I. Respondent has breached its obligations to (i) respect specific commitments undertaken in connection with Claimants' investment and (ii) afford Claimants Fair and Equitable Treatment with respect to their investment.
- II. Claimants are entitled to damages in a principal amount equal to US\$ 136,138,430 as of 31 December 2001.
- III. Interest compounded annually shall accrue at the rate for the ten year U.S. Treasury Bonds for the period from 31 December 2001 up to the date of payment.
- IV. Each side shall bear its own legal expenses, including fees for attorneys and experts. The costs of arbitration, including the fees of the arbitrators and the administrative expenses of the Centre, shall be divided on an equal (50/50) basis. The total costs of the arbitration, including arbitrators' fees and expenses, as well as ICSID administrative expenses, is set at US\$ 1,631,297.95.
- V. Any and all other claims heard before the Tribunal are hereby dismissed.

Done in English and Spanish, both versions being equally authoritative.



Gabrielle Kaufmann-Kohler
Arbitrator

11 May 2012



William W. Park
President of the Tribunal

8 May 2012



Jesús Remón
Arbitrator

May 14, 2012