ARBITRATION UNDER THE RULES OF ARBITRATION OF THE UNITED NATIONS COMMISSION ON INTERNATIONAL TRADE LAW

PCA CASE NO. 2011-17

GUARACACHI AMERICA, INC.

&

RURELEC PLC

Claimants

v.

PLURINATIONAL STATE OF BOLIVIA

Respondent

CLAIMANTS' POST-HEARING BRIEF 31 MAY 2013

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1. Guaracachi America, Inc. (*GAI*) and Rurelec PLC (*Rurelec*) (collectively, the *Claimants*) submit this Post-Hearing Brief in this arbitration against the Plurinational State of Bolivia (*Bolivia*) in accordance with Procedural Order No. 19. This Brief, together with the slides in support of the Claimants' Oral Closing Presentation (attached hereto as an annex), summarizes the evidence heard at the final hearing held in Paris from April 2 – 9, 2013 (the *Hearing*). This evidence unequivocally confirms that Bolivia unlawfully confiscated the Claimants' investments in Empresa Eléctrica Guaracachi S.A. (*Guaracachi*), first through the abrogation of the regulatory framework created to attract those investments, and later through the outright seizure of the Claimants' stake in Guaracachi; all without the payment of any compensation.

I. INTRODUCTION

- 2. The testimony adduced at the Hearing and the evidence of record confirms the key facts establishing the Claimants' case and disproves Bolivia's defenses. The following facts are clear and indisputable.
- 3. At dawn on 1 May 2010, without warning, the Bolivian military forcibly took control over the power plants and administrative offices of Guaracachi, the country's largest electricity generator. This was a mature power generation company with over 500 MW of installed capacity representing a market share in Bolivia of over 30%, and a long history of profitable operation. Yet it was seized with no compensation offered to the equity holders. As confirmed at the Hearing, that seizure took place only after Bolivia had already taken measures to materially reduce Guaracachi's only sources of revenue, capacity prices and spot prices.

This pleading is submitted in accordance with the Tribunal's instructions of 9 April 2013, as confirmed in the Tribunal's Procedural Order No. 19 (12 April 2013), and in the correspondence dated 19 April 2013 (Claimants letter to the Tribunal) and 24 April 2013 (letter from the PCA to the Parties). Capitalized terms not specifically defined in this Post-Hearing Brief have the same meaning as set forth in the Claimants' Statement of Claim (1 March 2012), Counter-Memorial on Jurisdiction (26 October 2012), Rejoinder on Jurisdiction (20 December 2012) and Reply Memorial (21 January 2013).

- 4. Bolivia's main defense, that the fair market value of the Claimants' controlling shareholding in Guaracachi was zero, was shown to be unsustainable. This defense is based on an alleged "independent" valuation carried out shortly after the nationalization by a consultant, PROFIN, to which Claimants had no access until just four weeks prior to the Hearing.
- 5. The evidence elicited at the Hearing, however, confirmed that the exercise performed by PROFIN was not objective. The Claimants were not allowed to participate in the selection of the expert, nor to review or comment on any draft report or conclusions. On its own terms, the resulting report produced by PROFIN was a confidential "strategic element" for Bolivia to use in settlement negotiations with Claimants a description that could not be further from an objective, impartial study. As the document itself states:

Consideramos que este es un documento confidencial del Gobierno Boliviano. Por ningún motivo sus partes o el documento completo deben revelarse salvo requerimiento judicial. Este documento es un elemento estratégico en las negociaciones con Guaracachi America, la antigua propietaria [...]. (Emphasis added)

- 6. In other words, this document was a secret report commissioned by Bolivia to assist it in its negotiations with Claimants. It is noteworthy that Bolivia has so little faith in the exercise undertaken by PROFIN that it does not even seek to defend its conclusions before this Tribunal. The PROFIN report is the only contemporaneous support for Bolivia's "zero value" defense and Bolivia has now abandoned it.
- 7. As a result, the exercise of valuation must necessarily begin anew. There is no dispute between the parties on the need for compensation equivalent to the fair market value of Guaracachi immediately prior to the expropriation, i.e. the price a

² Transcript (Spanish), Day 1, p 227:4-11.

Exhibit R-154, Informe PROFIN, p 20.

willing buyer would be prepared to pay in an arms' length transaction.⁴ That is, therefore, the principal scope of the exercise entrusted to the Tribunal.

- 8. Finally, the litany of side-issues concerning Guaracachi's operations raised by Bolivia with the aim of distracting attention away from the core issue of compensation, were shown to be both misleading and irrelevant. The key facts cannot be contested. The amounts invested in new power generation capacity were not challenged; the addition and disposals of power generation units were set out in Guaracachi's audited accounts and formed part of the valuation exercise; the company's highly efficient Combined Cycle Gas Turbine is now in operation; the short-term liquidity issues the company faced in the months prior to nationalization were jointly accepted to be irrelevant for valuation purposes⁵; and Rurelec's acquisition of a controlling stake in Guaracachi is well established and documented through incontrovertible evidence in the record.
- 9. Consistent with the record in this arbitration, the overwhelming evidence established that Bolivia's main defense, that the company was worth less than nothing, is unsustainable. Likewise, Bolivia's other defenses were undermined by the testimony adduced at the Hearing and found to be similarly meritless.
- 10. What remains is relatively straightforward: Bolivia has taken the benefit of the Claimants' investments a company with a book value of equity of US\$133.7 million,⁶ that recorded profits of US\$12.6 million in 2011⁷ without paying one cent in compensation.

Respondent's Opening Statement, Transcript (Spanish), Day 1, p 240:12-14: "los puntos sobre los que realmente no hay disputa entre las partes, incluido el método de cálculo, el estándar de willing buyer".

Bolivia's Rejoinder on the Merits, ¶¶ 176-177.

Exhibit C-36, Guaracachi 2009 FFSS as at 31 December 2009, published on 22 March 2010, p 36; Compass Lexecon Rebuttal Report, ¶ 27.

Exhibit C-224, 2010-2011 Audited Financial Statements of Empresa Eléctrica Guaracachi S.A., showing a profit of BS 87,467, 423. Using the exchange rate of BS 6.96 per US dollar (as set out in note 3.3.1 of the financial statements), this amounts to a profit of USD 12.6 million, at a time when the Combined Cycle Gas Turbine Project had yet to come online.

11. The remainder of this Brief is organized as follows: Section II discusses the testimony of Bolivia's witnesses adduced at the Hearing, which was unreliable and failed to support Bolivia's defenses; Section III summarizes the key facts proven in this arbitration; Sections IV and V set out how these facts confirm the Tribunal's jurisdiction and establish Bolivia's violations of the Treaties; Section VI addresses issues of quantum and sets out the legal and methodological bases of the compensation due to the Claimants; and Section VII sets out the Claimants' request for relief.

II. BOLIVIA'S WITNESSES EITHER CONTRADICTED OR FAILED TO SUPPORT THE PURPORTED DEFENSES SET OUT IN BOLIVIA'S PLEADINGS

- 12. The purpose of the Hearing was for the Tribunal to have the benefit of interacting with the witnesses who lived the facts relevant to the dispute, and to test their credibility. To that end, the Claimants supplied five witnesses of fact with detailed and direct personal knowledge of each of the issues in question in the case: Mr Earl, the CEO of Rurelec; Mr Aliaga, the General Manager of Guaracachi; Mr Blanco, the Financial Director; Mr Andrade, the Business Manager; and Mr Lanza, the Project Manager. Each of these witnesses explained in detail the facts as they lived them covering all relevant times and details.
- 13. In contrast, there were just two witnesses of fact put forward by Bolivia Ms Bejarano, the internal auditor of Guaracachi, and Mr Paz, a former analyst of Guaracachi who is now its General Manager both of whom were fortunate enough to remain at Guaracachi following the nationalization. As explained below, of these two fact witnesses, only Ms Bejarano could confidently attest to having lived the facts about which she testified.
- 14. The third so-called "witness" put forward by Bolivia, Mr Quispe, was neither a fact witness nor an expert; he was an advocate for Bolivia disguised as a witness. His evidence was no more independent than if the Attorney-General himself had

submitted a statement to this Tribunal and expected it to be given more weight than mere party assertion.

15. Cross-examination of these three witnesses at the Hearing revealed that significant portions of their testimony were either irrelevant or unreliable.

A. MS BEJARANO'S TESTIMONY CANNOT BE RELIED UPON

- 16. Ms Bejarano was the only witness presented by Bolivia who appeared to have direct personal knowledge of the issues she was discussing. Yet it appeared she had agreed to give evidence without even being informed that she would be asked questions by opposing counsel.⁸
- 17. As explained below, much of Ms Bejarano's testimony at the Hearing was inconsistent with her witness statements and with the positions advanced by Bolivia in this arbitration. In particular, Ms Bejarano admitted:
 - the vast majority of Guaracachi's bonds issued in March 2009 (US\$24 million in total) were purchased by its two minority shareholders, Bolivian pension funds Futuro de Bolivia and Previsión, both with intimate knowledge of Guaracachi's financial situation through their participation on the company's audit committee;⁹
 - all of the equipment for the Combined Cycle Gas Turbine had been purchased by December 2009, ¹⁰ and the expenditures for that project were within the final budget approved by Guaracachi's shareholders; ¹¹ and

Transcript (Spanish), Day 4, p 1019:12-17. In her third witness statement (¶¶ 5, 10), Ms Bejarano suggests that Guaracachi's minority shareholders were troubled by Guaracachi's financial situation prior to nationalization.

⁸ Transcript (Spanish), Day 4, p 1026:17-19.

Transcript (Spanish), Day 4, pp 1055:21-1056:4. In her third witness statement (¶ 13), Ms Bejarano suggested that in January 2010 the start-up of the Combined Cycle Gas Turbine Project was going to be impacted due to Guaracachi's state of liquidity at the time.

Transcript (Spanish), Day 4, pp 1057:22-1058:4. In her second witness statement (¶ 12), Ms Bejarano misleadingly compares the initial budget (without financial costs and taxes) (US\$40 million) for the Combined Cycle Gas Turbine Project with the final budget (factoring in the cost of a larger turbine, financial costs and taxes) (US\$91 million), but fails to mention that the project came in on budget.

- Guaracachi's operations were never at risk due to its relationship with its gas supplier, YPFB: Guaracachi regularly made payments to YPFB, including in 2009 and 2010 and there was never any suggestion of an interruption in gas supply.¹²
- 18. In doing so, Ms Bejarano openly conceded facts which altogether undermined Bolivia's claims in relation to the company's liquidity, the progress of the Combined Cycle Gas Turbine Project, and the company's relations with its main supplier, YPFB.

B. TESTIMONY BY MR PAZ WAS TOO BROAD TO BE RELIABLE

19. Mr Paz was the "cover all" witness presented by Bolivia who claimed to have personal and direct knowledge of every issue raised in this arbitration. Yet Mr Paz was neither a director of Guaracachi nor did he occupy any management role during the 15-year period prior to the nationalization. As an analyst at Guaracachi from 1995 to 2010, his role was to carry out tasks requested by his superiors:

No, no soy responsable. Yo como analista hacía trabajos a requerimientos de mis superiores jerárquicos en todos los casos.¹³

- 20. He therefore had no direct and personal knowledge of any relevant prenationalization fact. His knowledge came from a review of the record of historic documents in this arbitration undertaken since his meteoric (but apparently unwanted) series of promotions to become the fourth General Manager of Guaracachi since the nationalization. This was confirmed on cross-examination at the Hearing, when he conceded that:
- (a) he had no personal and direct knowledge of any investment decision or disposal decision made by Guaracachi prior to nationalization that was the responsibility of others;¹⁴

Transcript (Spanish), Day 4, p 1047:12-13. In her first witness statement (¶ 33), Ms Bejarano claimed that Guaracachi ceased paying its bills in 2009 and 2010, such that "[t]his non-payment placed the whole operation at risk since gas is indispensable to making the EGSA generation units function"

¹³ Transcript (Spanish), Day 4, p 1134:17-19.

- (b) he had no personal and direct knowledge of the progress of the Combined Cycle

 Gas Turbine project until after nationalization this was the responsibility of Mr

 Lanza; 15 and
- (c) he had no personal and direct knowledge of the financial status of the company shortly before nationalization that was the responsibility of Ms Bejarano. ¹⁶
- 21. With little or no personal and direct knowledge of relevant facts, Mr Paz changes hats and is then used by Bolivia as an expert to respond to the report of Dr Abdala, notwithstanding that he is not independent of the party advancing this "expert" evidence. On the contrary, it is undisputed that he was appointed to his present post by the Bolivian Government through the vote of ENDE, whose directors are nominated by various Ministries.¹⁷
- 22. In light of his dependency on the Respondent, Mr Paz's "expert" evidence has no more value than if it was simply alleged or pleaded by Bolivia's counsel. Although Bolivia seeks to dress it up in a statement to give it the appearance of independent "expert" evidence, it is party advocacy, nothing more.

C. TESTIMONY BY MR QUISPE IS NEITHER INDEPENDENT NOR IMPARTIAL

23. Bolivia submitted "expert" statements from another individual under its control: Mr Quispe, a government lawyer in eight of his ten years of experience. Mr Quispe, however, had no personal and direct knowledge of the facts of this case. Mr Quispe readily acknowledged as much at the Hearing. As he stated: "[N]o tomé conocimiento de los hechos que relato en las declaraciones."

¹⁴ Transcript (Spanish), Day 4, p 1134:20-24.

¹⁵ Transcript (Spanish), Day 4, pp 1141:22-1142:11.

¹⁶ Transcript (Spanish), Day 4, p 1135:12-20.

¹⁷ Transcript (Spanish), Day 4, pp 1190:8-1191:17.

¹⁸ Transcript (Spanish), Day 3, pp 921:19:20; 922:21-23.

¹⁹ Transcript (Spanish), Day 3, p 919:6-8.

- 24. Mr Quispe also openly conceded at the Hearing that he was not independent of the Government:
 - P. Usted se considera independiente del Gobierno de Bolivia?
 - R. No, no independiente.²⁰

This is not surprising, since as a government lawyer, his role and duty is to defend the position of the Government in cases involving the Electricity and Hydrocarbon authorities before the Supreme Court.²¹

- 25. With that in mind, Mr Quispe's role as a party advocate was blatantly revealed in the course of his cross examination.²² He openly admitted that he had been instructed to investigate the issue of alternative remedies under Bolivian law and had provided three relevant legal authorities to Bolivia's counsel, one of which he considered favorable and the other two which were clearly adverse to his thesis.²³ He only included the favorable decision in his third report and made no reference to the other cases.²⁴ Mr Quispe did not consider this to be problematic, stating that he had only been instructed to determine if a request to suspend an administrative measure was possible rather than realistic²⁵ so had only referred to the positive decision.²⁶
- 26. In the end, as neither a fact witness nor an independent expert, Mr Quispe's testimony is not evidence at all but simply party submission.

Transcript (Spanish), Day 3, p 921:12.

Transcript (Spanish), Day 3, p 926:4-9.

²² See, e.g., Transcript (Spanish), Day 3, p 933:18-19.

²³ Transcript (Spanish), Day 3, pp 948:12-19; 951:19-24; 954:6-8; 963:22-964:8.

²⁴ Transcript (Spanish), Day 3, p 948:2-19. See also, e.g., p 954:6-14; 963:22-964:8.

²⁵ Transcript (Spanish), Day 3, pp 946:2-19 and 948:2-9.

²⁶ Transcript (Spanish), Day 3, p 948:10-19.

III. FACTS ESTABLISHED IN THIS ARBITRATION

- A. THE KEY FACTS OF THE CASE, NECESSARY TO DECIDE IN THE CLAIMANTS' FAVOR, ARE NOT IN DISPUTE
 - 1. Bolivia attracted foreign investment through capitalization and the promulgation of a new electricity law
- 27. At the Hearing, as in its pleadings, Bolivia focused on the condition of ENDE's existing plants and equipment prior to the capitalization of Guaracachi in 1995. This is, however, irrelevant to the issues to be decided by the Tribunal. What is relevant is that the capitalization process took place because the Government and ENDE did not have access to the funds to expand the power generation system on their own as required. The capitalization process was aimed at attracting new investment. And that is what it achieved.
- 28. New investment was attracted by aggressively marketing the new legal framework, and in particular the new Electricity Law, internationally. This Law was designed to ensure that the system would be self financing. Bolivia drew its central tenet from the successful privatization programs in Chile and Argentina: namely that of a wholesale electricity market based on each supplier receiving an equal payment depending on the "marginal cost of electricity", i.e. the cost of the last unit dispatched. Another important element of the Electricity Law was the remuneration for capacity payments which were based on the cost of adding new power to the system, as explained by Mr Andrade at the Hearing.²⁷
- 29. Based on this framework, Energy Initiatives, a US company and subsidiary of US investor, GPU Power Inc, successfully bid for control of Guaracachi. In order to operate Guaracachi it established a special entity to hold the investment, GAI. This was an express requirement of the bidding rules.²⁸ Indeed, Mr Earl, who was

²⁷ Transcript (Spanish), Day 2, pp 616:13-617:8.

See Bidding Rules, **Exhibit C-7**. Articles 1.2 and 8.3 provide that the company that will subscribe the shares in the capitalized company will be the "sociedad suscriptora". Article 2.1 lists four types of companies that could bid for Guaracachi: (1) an electricity company; (2) a consortium of related companies, one of which being an electricity company; (3) a company constituted solely

involved in that process at the time, described the establishment of a holding company as a "requirement of the capitalization process."²⁹ The Government understood that such entities would be controlled by the parent corporations that had been successful in the bid and which would have the necessary expertise and access to the necessary capital.

2. The Claimants directed Guaracachi's significant investments in new power generation capacity under Bolivia's new legal framework

30. In the years that followed, and based on Bolivia's legal framework designed to attract investment, Guaracachi began its significant investment program, unequalled by the other capitalized electricity companies. At the Hearing, Mr Earl explained:

We were not simply going to sit passively and take dividends from existing capacity. My agreement was to have a significant increase on the capacity in Bolivia, and that was what Rurelec invested in when it acquired Guaracachi.³⁰

31. The results of this investment program are not in dispute. It is unquestioned that with the inclusion of the Combined Cycle Gas Turbine Project, Guaracachi added over 320 MW of high efficiency installed capacity to the national grid. It is also unquestioned that during that same period it decommissioned approximately 50 MW of inefficient installed capacity. The net gain, therefore, is approximately 270 MW of high efficiency installed capacity to the national grid.³¹

for the purpose of participating in the bid; or (4) other types of consortia, one member of which must be engaged in electricity activities. The rules expressly note that only companies constituted solely for the purpose of participating in the bid could qualify as a "sociedad suscriptora". Article 2.3 provides that the winning bidder must constitute a "socieded suscriptora" if necessary, i.e., if the bidder is not a company constituted solely for the purpose of participating in the bid. Given that Energy Initiatives (the winning bidder) was an electricity company, it was required to constitute a "sociedad sucriptora", which it did when it created GAI.

²⁹ Transcript (English), Day 2, p 300:13-22.

³⁰ Transcript (English), Day 2, p 296:20-24.

Claimants' Closing Presentation, slides 17, 21.

3. Bolivia expropriated the Claimants' investment

- 32. On 1 May 2010, despite having increased installed capacity by 270 MW, Bolivia confiscated the Claimants' investments in Guaracachi in a military take-over, with a banner bearing the colors of the national flag being hung over the façade of the company reading "nacionalizado". The media was alerted ahead of time by the Government to ensure that they would capture the dramatic taking.
- 33. In the months that followed, not one cent of compensation was paid to the Claimants.

B. THE SIDE-ISSUES RAISED BY BOLIVIA, UPON CRITICAL EXAMINATION, ARE IRRELEVANT AND FALL AWAY

34. At the Hearing, Bolivia continued to focus on irrelevant side-issues in its questioning of the Claimants' witnesses, issues which have no bearing on Bolivia's liability under the Treaties or the calculation of damages. Nevertheless, the facts adduced at the Hearing established conclusively that this line of defense was without merit.

1. Under the Claimants' leadership, there was a net gain of approximately 270 MW of installed capacity

- 35. As it had done in its written pleadings, at the Hearing, Bolivia ignored the impressive record of investments in 320 MW of new efficient power generation capacity and instead focused on Guaracachi's decommissioning of 50 MW of inefficient units, insinuating that this was an improper "disinvestment". This could not be further from the truth.
- 36. Guaracachi had a license to operate certain units and it could not add new capacity or decommission old units without seeking and obtaining approval of the regulator. The record shows that Guaracachi did not decommission any units without the approval of the regulator. Slide 21 of the Claimants' Closing Presentation shows the power generation units added and withdrawn, together

with the relevant approval of the regulator and reference to the relevant exhibit number.

- 37. On certain occasions, the regulator denied Guaracachi's requests to decommission inefficient units and those units remained in place. For instance, in 2006, Guaracachi requested permission to withdraw the two inefficient Worthington motors (ARJ-5 and 6) and replace them with three efficient Jenbacher 616 engines. The regulator approved the request in 2007, and the Jenbachers were installed. The regulator however asked Guaracachi to keep the Worthington motors in service for line stability until 30 April 2010, the day before the nationalization.³²
- 38. In sum, it is undisputed that under the Claimants' leadership there was a net gain of 270 MW of installed capacity by Guaracachi between 1999 and 2010.³³ The inefficient units decommissioned by Guaracachi during this period were removed with the approval of the regulator, in accordance with the regulatory framework.

2. The Combined Cycle Gas Turbine Project (CCGT) is now online, doubling Guaracachi's EBITDA

39. In its written submissions and at the Hearing, Bolivia sought to raise questions about the state of Guaracachi's most important investment – the Combined Cycle Gas Turbine Project – at the date of seizure. The facts that were confirmed at the Hearing speak for themselves.

a. Mr Lanza was Guaracachi's expert on the Combined Cycle Gas Turbine Project

40. On cross-examination at the Hearing, Mr Paz made it clear that Mr Lanza was Guaracachi's expert in installing electrical power generation projects, such as the

Exhibit C-136, Resolution SSDE No. 107/2007; Exhibit C-141, Resolution SSDE No. 341/2007; Exhibit C-176, Resolution SSDE No. 185/2009. See also Transcript (English), Day 2, p 382:13-17 (Earl): "And a very good example is that we were trying to take out the -- two of the Worthington machines [i.e. ARJ-5 and ARJ-6] really pretty much from 2008 onwards when we installed the extra three Jenbachers, and we weren't allowed to take them off the License because CNDC was using them for line stabilization."

Claimants' Closing Presentation, slide 21.

CCGT. Indeed, Mr Paz described Mr Lanza as the individual at Guaracachi with the most detailed knowledge of the CCGT.³⁴ For that reason, Mr Lanza was not dismissed on nationalization because he was needed for the project, and was later promoted by the State shareholder ENDE to General Manager of Guaracachi given the importance of his role on the project.

41. For these reasons, Mr Lanza's evidence on the question of the completion of the project is highly credible.

b. The progress of the Combined Cycle Gas Turbine Project

- 42. Mr Lanza regularly reported to the board on the progress of the project.³⁵ His progress reports were verified and repeated by the company's auditors and ratings agency.³⁶ For example, in 2010, he reported that the physical completion of the project was at 92.1% in January 2010, 94.4% in March 2010, and 95.1% in May 2010 (the month nationalization occurred).³⁷ These reports were important given the significant impact the CCGT would have for Guaracachi once online: it was unquestioned that Guaracachi's cash flow would increase substantially. At the Hearing, Mr Earl and Mr Blanco confirmed that the CCGT was set to double Guaracachi's EBITDA.³⁸
- 43. Bolivia's witnesses do not, and cannot, dispute the progress rates reported by Mr Lanza or the impact of the CCGT on the company's financial performance. The board raised no concerns about this progress information. Neither did internal auditor Ms Bejarano. Ms Bejarano noted that she had to review every contract entered into with suppliers and found nothing untoward. Mr Paz likewise

Transcript (Spanish), Day 4, pp 1160:23-1161:12.

Claimants' Closing Presentation, slide 23.

Exhibit C-349, Pacific Credit Ratings Reports for Empresa Eléctrica Guaracachi S.A., Various Dates (PCR report for 30 June 2010 showed the Combined Cycle 96% completed); Exhibit C-36, 2009 Annual Report of Empresa Eléctrica Guaracachi S.A., p 65 (showing that the Combined Cycle was 90% complete as of 31 December 2009).

Claimants' Closing Presentation, slide 23.

³⁸ Transcript (English), Day 2, pp 385:23-386:2; Transcript (Spanish), Day 3, pp 761:17-762:1.

³⁹ Transcript (Spanish), Day 4, p 1053:19-23.

confirmed that he had no reason to suggest that Mr Lanza would supply incorrect information whether before or after nationalization.⁴⁰

c. The budget for the Combined Cycle Gas Turbine Project

- 44. At the Hearing, Ms Bejarano acknowledged that as of 31 December 2009, 90% of the total CCGT project budget of US\$68 million had been spent, and that all of the equipment had been purchased.⁴¹ This is consistent with what Mr Lanza confirmed at the Hearing.⁴²
- 45. Despite this, Mr Paz is relied upon by Bolivia to suggest that only 50.7% of the total CCGT project budget had been spent at the time of nationalization based on a document of the Electricity Authority.⁴³ The circumstances of that document have no relation to any concept of true advancement.
- 46. Bolivia is no different from most countries that require a performance bond to be posted in connection with public works. In the case of the CCGT project, it was 5% of a project originally budgeted for US\$40 million, i.e. US\$2 million. The bond had been duly posted by Guaracachi.
- 47. In 2008, the budget for the CCGT project was increased to US\$68 million. This is reflected in AE Resolution 123/2010, which shows that Guaracachi informed the authority of the revised budget in 2008, but that the regulator rejected the revised budget (claiming that it had not been provided with sufficient information) 18 months later in April 2010.⁴⁴ However, the authority failed to adjust the formal budget and retained the US\$2 million bond that would normally have remained in place until the project was complete.

⁴⁰ Transcript (Spanish), Day 4, pp 1161:22-1162:1.

⁴¹ Transcript (Spanish), Day 4, pp 1055:10-1056:23.

⁴² Transcript (Spanish), Day 3, p 770:13-19.

⁴³ **Paz Annex 24**, AE Resolution 123/2010, 13 April 2010, p 5.

⁴⁴ **Paz Annex 24**, AE Resolution 123/2010, 13 April 2010, pp 2, 4, 6.

48. As explained by Mr Lanza at the Hearing, in light of the near completion of the project and the cash constraints of the company at that moment, Guaracachi opened a discussion with the regulator to seek to have part of the bond discharged. A "gentleman's agreement" was reached whereby the regulator agreed to release one half of the bond – i.e. US\$1 million – to Guaracachi. In order to justify the release, a decision was issued referring to 50.7% completion based on a budget that the regulator knew was no longer applicable. This enabled the regulator formally to retain US\$1 million as a means of ensuring full completion. 45

d. The final phase of the Combined Cycle Gas Turbine Project

- 49. At the Hearing, as in its written pleadings, Bolivia suggested that Claimants' actions delayed the CCGT's entry into service. Consistent with the explanations set forth in the Claimants' pleadings, the evidence adduced at the Hearing confirmed that such suggestions are unfounded.
- 50. As of the date of nationalization, the plant was due to be completed by 1 November 2010. This final phase of the project consisted of pre-commissioning, commissioning, training and start up. A combined cycle had never been commissioned in Bolivia before. It was for that very reason that IPOL had been contracted to supply engineers experienced in combined cycle projects on the ground at this delicate phase. At the Hearing, Mr Paz conceded that the real experts in this new technology for Bolivia were IPOL (and in particular Mr Gerry Blake):
 - R: [. . .] De acuerdo a la información que yo he revisado, teníamos a Santos CMI, que era el contratista; IPOL, que eran los expertos, en particular el señor Gerry Blake. 46
- 51. Yet, following nationalization, IPOL received the clear message that foreign participation was no longer welcome in the project.⁴⁷ As a result, it was

⁴⁵ Transcript (Spanish), Day 3, pp 899:24-900:8.

⁴⁶ Transcript (Spanish), Day 4, p 1153:5-8.

- "practically impossible" for the people from IPOL to go to Guaracachi to provide the necessary assistance for the project.
- 52. The reason for this was simple: the then General Manager, Mr Mercado, believed Guaracachi could commission the Combined Cycle alone.⁴⁸ That belief was misplaced. In 2010, several technical problems arose, including a problem in the inclination of the generator's rotor, an issue with the seals for the generator, and bearing failures. It became clear that the only entity capable of resolving the issues was IPOL.
- As a result, Mr Lanza entered into contact with IPOL and convinced them to assist. Mr Gerry Blake travelled to Bolivia on behalf of IPOL in January 2011 and prepared a detailed report. Following IPOL's visit, however, a number of engineering issues combined with intense weather conditions caused a short circuit in the unit on 30 January 2011. This put the project back more than a year as the generator rotor had to be repaired. As Mr Lanza noted as the father of the project, it was one of "the saddest days of [his] life." 50
- 54. Mr Lanza explained, at the Hearing, that had the engineering issues been identified earlier, the extreme weather conditions would likely not have caused the short circuit. In his view, had IPOL been involved continuously, the technical problems in 2010, and the short circuit suffered on 30 January 2011, could have been avoided or at least mitigated.⁵¹

3. Guaracachi's liquidity never threatened its operations

55. Another issue raised by Bolivia in its written pleadings and at the Hearing is Guaracachi's liquidity, particularly in the months immediately prior to nationalization. This is surprising because even before the Hearing started,

Transcript (Spanish), Day 3, p 795:4-12.

⁴⁸ Transcript (Spanish), Day 3, pp 795:20-796:5.

⁴⁹ **Paz Annex 59,** Informe Tecnico tras la visita de IPOL a EGSA del 17 al 27 de enero de 2011.

⁵⁰ Transcript (Spanish), Day 3, p 818:14-18.

⁵¹ Transcript (Spanish), Day 3, p 816:3-11.

Bolivia had conceded that the question of liquidity has no bearing on the valuation exercise.⁵² The only thing that mattered was debt⁵³ and the two experts agreed on the magnitude of the company's debt.

- Nevertheless, Bolivia has suggested in its written pleadings that Guaracachi's liquidity issues principally affected its largest supplier, the State-owned gas company YPFB. At the Hearing, however, Ms Bejarano could not recall that YPFB had threatened to turn off the gas (or even whether YPFB had charged Guaracachi interest on pending invoices prior to the nationalization it had not)⁵⁴ and agreed that Guaracachi was in close contact with YPFB to manage the payment situation throughout this period.⁵⁵ She acknowledged that monthly payments were being made against the outstanding balance.⁵⁶
- 57. Contrary to Bolivia's pleadings, Ms Bejarano also confirmed that payments to the suppliers of the Combined Cycle project had not been significantly delayed, as the latest pre-May 2010 budget showed over 97% of it was expended.⁵⁷

P: ¿YPFB alguna vez amenazó con cortar el gas antes de la nacionalización?

R: No lo sé."

⁵⁵ Transcript (Spanish), Day 4, p 1048:9-16:

- P: (Interpretado del inglés): ¿Sabía usted que Jaime Aliaga estaba en contacto frecuente con YPFB y con su gerencia respecto de la cuenta de Guaracachi?
- R: Sí, en realidad eso era lo que se trataba de mantener con todos los proveedores, buenas relaciones porque muchas veces hemos ido postergando los pagos. ¿No?.
- ⁵⁶ Transcript (Spanish), Day 4, p 1047:7-10:
 - P: Pero Guaracachi estaba hacienda pagos, por lo menos en forma mensual a YPFB.
 - R: Sí, y de hecho me he corregido inclusive hasta en la cifra en la primera introducción.
- ⁵⁷ Claimants' Closing Presentation, slide 35; Transcript (Spanish), Day 4, p 1040:11-15;1045:9-13.

Bolivia's Rejoinder, ¶¶ 176-177.

At the Hearing, Mr Earl explained that "[t]ypically, in the power generation business, you see debt-equity ratios of more than 2:1," and in the case of Guaracachi in 2010, at the time of nationalization, Guaracachi's debt was US\$92 million, and its equity was US\$140 million; meaning that the company was "undergeared, not overgeared." Transcript (English), Day 2, p 298:2-299:3.

⁵⁴ Transcript (Spanish), Day 4, p 1047:12-14:

58. As these examples show, issues of liquidity were a temporary concern that did not pose any difficulties for Guaracachi's operations in the months prior to nationalization.

4. Rurelec's acquisition of a controlling stake in GAI for US\$35 million is well established and documented

59. Finally, at the Hearing, Bolivia continued to question whether a purchase price of US\$35 million was actually paid by Rurelec. There is ample evidence – both adduced at the Hearing and on the record – that demonstrates that Rurelec acquired an indirect ownership interest in Guaracachi in January 2006 for precisely that amount. For instance, in response to a question from the Chairman, Mr Earl confirmed that US\$35 million was paid:

PRESIDENT JUDICE: You're sure payment had been made?

THE WITNESS: Absolutely, most definitely. But it was in two payments of 30 million and 5 million.⁵⁸

60. Further, this payment was demonstrated through at least two pieces of incontrovertible evidence on the record, namely the 2006 and 2007 financial statements of Rurelec plc, a publicly traded company subject to the rules of the London Stock Exchange. These statements were audited by Grant Thornton, one of the most reputable auditing firms in the UK. Bolivia has not, nor could it, dispute the authenticity of these accounts.⁵⁹

Transcript (English), Day 2, p 397:21-23. *See also* Transcript (English), Day 2, pp 295:25-296:20; 396:4-397:20; 399:14-400:13.

Likewise, Bolivia has not and cannot dispute the other incontrovertible evidence on the record: (1) the contemporaneous announcement of the acquisition for US\$35 million (Announcement of Rurelec PLC regarding the acquisition of Bolivia Integrated Energy Limited, 13 December 2005, Exhibit C-213; Rurelec Press Release, "EGM Approval of the Acquisition of a controlling stake in Empresa Eléctrica Guaracachi S.A.", 5 January 2006, Exhibit C-215); (2) the share transfer executed on 5 January 2006 as a result of which BIE's shares were transferred to Birdsong in consideration of the sum of US\$35 million (Share Transfer executed between Birdsong Overseas Limited and Southern Integrated Energy Limited, 5 January 2006, Exhibit C-214); (3) a contemporaneous share certificate shows that Rurelec owned all of the shares in Birdsong at the time of the 2005–2006 acquisition (Share Certificate Evidencing Rurelec's 100% Stake in Birdsong Overseas Limited, 8 December 2005, Exhibit C-30); (4) Birdsong's share register (disclosed to Bolivia in response to its document request) confirms that Rurelec owns all of that

- 61. The Share Purchase Agreement provides for the acquisition of Bolivia Integrated Energy Limited (*BIE*).⁶⁰ BIE held a 50.001% indirect interest in Guaracachi through GAI. The acquisition would be made by Rurelec's wholly owned subsidiary, Birdsong Overseas Limited (Birdsong) for the total consideration of US\$35 million. Clause 3 of the Share Purchase Agreement provides that the payment of the US\$35 million would be made in installments.⁶¹
- 62. Consistent with Mr Earl's testimony, Rurelec's 2006 audited financial statements confirms that US\$33 million of the US\$35 million purchase price was paid to the seller. This is set out in Note 26 to those financial statements, which states that the "purchase consideration for the shares was \$35m, of which \$30m was paid in cash on completion and \$3m was paid in cash in April 2006. The final installment of \$2m is due to be paid by 31 December 2007. Rurelec's 2007 Annual Report confirms that the final US\$2 million installment of the US\$35 million purchase price was paid. Million installment of the US\$35 million purchase
- 63. In the end, the evidence in record and adduced at the Hearing leads ineluctably to the conclusion that Rurelec acquired a controlling stake in Guaracachi in 2006 for US\$35 million.

company's shares (Share Register of Birdsong Overseas Limited, 10 September 2012, **Exhibit C-236**); (5) BIE's share register and an accompanying letter from Rurelec's current corporate administrator demonstrate that BIE's shares were held in trust for Birdsong between 2006 and 2009, and then in Birdsong's name from 2009 onwards (Counter-Memorial on Jurisdiction, footnote 35; Share Register of Bolivia Integrated Energy Limited, 10 September 2012, **Exhibit C-225**, and letter from Nerine Trust Company, 26 October 2012, **Exhibit C-226**); (6) GAI's share register demonstrates that BIE held 100% of GAI's shares at all relevant times (Share Certificate and Share Register evidencing Bolivia Integrated Energy Limited's 100% stake in GAI, **Exhibit C-27**); (7) Fitch Ratings profile in 2007 on Guaracachi's shareholdings (Fitch Rating for Empresa Eléctrica Guaracachi S.A., December 2007, **Exhibit C-233**); and (8) 2008 Agreement between CAF, Rurelec and GAI (Agreement for Accessory Obligations between Corporación Andina de Fomento, Rurelec and GAI, 8 August 2008, **Exhibit C-234**).

Exhibit R-61, Share Purchase Agreement, 12 December 2005.

⁶¹ Ibid.

Exhibit C-113, 2006 Rurelec Annual Report.

⁶³ *Ibid.* note 26.

Exhibit C-127, 2007 Annual Report of Rurelec, p 62, note 23c.

IV. BOLIVIA'S JURISDICTIONAL OBJECTIONS ARE WITHOUT FACTUAL OR LEGAL FOUNDATION

A. THE INTERACTION BETWEEN GAI AND RURELEC IN THE CONTEXT OF THE CLAIM

- 64. At the Hearing, Professor Vinuesa sought clarification from the Parties as to how the two Claimants interact in the context of the claim, as one (Rurelec) is the ultimate shareholder of the other (GAI).⁶⁵
- 65. It is irrelevant where the Tribunal starts its analysis of the claim. It may do so from the perspective of GAI or from the perspective of Rurelec. The reason is simple the damage is one and the same:
- (a) If the Tribunal follows the first option, i.e., to analyze the claim from the perspective of GAI, and uphold jurisdiction, then GAI's direct loss is the market value of the participation in Guaracachi at the date of valuation and the related losses arising out of the spot price and effective means claims. That amount will then constitute the damages award and there is no need to consider any question concerning Rurelec, since Rurelec's loss would be entirely satisfied by payment of a full damages award to GAI.
- (b) If the Tribunal follows the second option, i.e., to analyze the claim from the perspective of Rurelec, and uphold jurisdiction, Rurelec's loss is the market value of its participation in Guaracachi at the date of valuation and the related losses arising out of the spot price and effective means claims. (Because the "effective means" standard is not part of the UK Treaty, it is imported from the US Treaty through the UK Treaty's MFN provision.) The amount thus calculated by the Tribunal will be the damages award, and the Tribunal need not consider any question concerning GAI, since GAI's loss would be entirely satisfied by payment of a full damages award to Rurelec.

⁶⁵ Transcript (Spanish), Day 2, p 358:17-360:3.

- 66. One thing is clear: no double recovery is sought by the Claimants in this arbitration.
- 67. With this introduction, it will be apparent to the Tribunal that it may not be necessary to address all of the jurisdictional issues that Bolivia has raised depending on the entity with which the Tribunal begins its analysis. Bolivia's jurisdictional objections will be addressed in turn in the following sections.

B. RURELEC AND GAI ARE NOT BARRED FROM BRINGING THEIR CLAIM IN A SINGLE ARBITRATION PROCEEDING

- 68. In its written and oral pleadings, Bolivia insisted on its extraordinary proposition that two investors at different levels of the corporate structure cannot bring a single arbitration, even where the claims are based on identical measures and the Treaty provisions in question are wholly compatible. Bolivia has found no authority either in case law or scholarly writing that supports its proposition, either in its written pleadings or at the Hearing.
- 69. Bolivia tries to cast the question as an issue of consent.
- 70. In a desperate attempt to build a case, Bolivia relies on *ICS v Argentina* and *Daimler v Argentina* cases⁶⁷ in which the claimant had failed to comply with an express 18-month obligation to litigate before the Argentine courts in the UK-Argentina BIT. None of these authorities are apposite to the present case.
- 71. First, contrary to the situation in *ICS* and *Daimler*, the Claimants here are not ignoring any express procedural or jurisdictional step.
- 72. Second, Bolivia's position does not concern any lack of consent to arbitrate disputes arising from its breach of the Treaties. Consent by Bolivia to arbitrate

⁶⁶ Transcript (Spanish), Day 1, 194:6-204:24.

Daimler Financial Services AG v. The Republic of Argentina (ICSID Case No ARB/05/1), Award of August 22, 2012, **Exhibit RL-118**; ICS Inspection and Control Services Limited (United Kingdom) v. The Republic of Argentina (UNCITRAL) Decision on jurisdiction of February 10, 2012, **Exhibit RL-29**.

disputes arising from the UK and US Treaties before an UNCITRAL tribunal was given in the relevant dispute resolution provisions in those Treaties.⁶⁸ GAI and Rurelec gave consent in turn to arbitrate their dispute with Bolivia through a single Notice of Arbitration.

- 73. So the question before this Tribunal is not one of lack of "consent" to arbitrate the disputes brought by the Claimants under the UK and US Treaties. Indeed, Bolivia cannot point to any condition for consent under either of the Treaties that has not been fulfilled.
- 74. Bolivia in fact complains about the commencement of a single proceeding on the basis of two treaties. But nothing limits the Claimants' right to do just that. Indeed, counsel for Bolivia accepted in their opening statement that an investor can advance a contractual claim and a Treaty claim in a single arbitration proceeding based on two separate instruments of consent (contract and treaty), as happened in the *Perenco v Ecuador* case.⁶⁹ Counsel for Bolivia failed to identify any conceptual difference between the situation in Pereno v Ecuador and the present case. In Perenco there were two different sources of rights (a contract and a treaty) that included compatible dispute resolution provisions – ICSID arbitration. Consent was given by Perenco in the two instruments at different times – in the contract for the contractual claim and in the Request for Arbitration for the ICSID claim. If anything, the situation in this case is much simpler: the Tribunal faces two treaties with compatible dispute resolution provisions and expressions of consent by both Claimants in a single Notice of Arbitration. Both Claimants advance claims based on the same investment, on the same measures, and on legal rights which are practically identical.

US-Bolivia Treaty, **Exhibit C-17**, Article IX.3(a)(iii); UK-Bolivia Treaty, **Exhibit C-1**, Article VIII(2)(c).

Transcript (Spanish), Day 1, p 204:19-24. *Perenco Ecuador Ltd v. Republic of Ecuador and Empresa Estatal Petróleos del Ecuador (Petroecuador)* (ICSID Case No. ARB/08/6), Decision on Jurisdiction, 30 June 2011, **Exhibit CL-137**.

- 75. Additional consent is only required where there is incompatibility between dispute resolution mechanisms. That was the situation in the cases brought by Suez, Vivendi, Aguas de Barcelona and Anglian Water against Argentina. There, four investors advanced claims under three different BITs in a single arbitration proceeding. The substantive provisions under the three different treaties were the same, but the dispute resolution clauses in the applicable treaties were incompatible. While the France-Argentina and Spain-Argentina BITs provided for disputes to be governed by the ICSID Rules, the UK-Argentina BIT provided that UNCITRAL Rules should apply. Argentina's consent to arbitrate the dispute in the same arbitration proceeding was thus necessary in relation to the claim of the UK investor. This was achieved as a matter of procedure.
- 76. As long as the conditions of the offer to arbitrate under the treaties are mutually compatible, the claims can be heard in a single procedure. In the instant case, the conditions for consent under the relevant treaties are consistent with each other, so there is no need for additional consent from Bolivia.
- 77. In any event, Bolivia's argument defies logic. With GAI and Rurelec bringing their claims jointly, Bolivia has avoided expense and the risk of contradictory decisions. Bolivia should be content that the two companies' claims will be decided by the same tribunal, and in the same arbitration. Bolivia's objection can only be explained by a strategy of delaying the resolution of its dispute with GAI and Rurelec and payment of the compensation due as a result of the unlawful expropriation of their assets in Bolivia.

C. GAI AND RURELEC GAVE SUFFICIENT NOTICE TO BOLIVIA OF THE CLAIMS BROUGHT IN THIS ARBITRATION

78. There is no dispute that, on 1 May 2010, the Claimants sent notices of dispute relating to the nationalization of Guaracachi. Bolivia asserts, however, that insufficient notice was given of the spot price and capacity claims.

Suez, Sociedad General de Aguas de Barcelona S.A., and Vivendi Universal S.A. v Republic of Argentina (ICSID Case No. ARB/03/19), and AWG Group v Republic of Argentina (UNCITRAL).

- 79. Bolivia is not the first respondent State to advance an argument based on alleged insufficient notice given by claimant in an investment arbitration proceeding. The vast majority of decisions on the question are to the effect that such notices are a procedural obligation and not a jurisdictional requirement. The Claimants referred to those cases in their opening and closing statements.⁷¹
- 80. Bolivia simply ignores this body of legal authority. It invokes two cases in support of its proposition that these requirements are nevertheless jurisdictional: *Burlington v Ecuador* and *Murphy Oil v Ecuador*.⁷² However, these cases are inapposite. In *Murphy*, the Claimant had sent no notice of any dispute at all, relying instead on the notice of a third party.⁷³ In *Burlington*, the claimant had sent a notice of dispute relating to an excess profits tax. It was then prevented from adding a wholly unrelated claim regarding indigenous peoples, which the tribunal found to be unconnected to the dispute that had been subject to notice.⁷⁴
- 81. In the instant case, the spot price mechanism and capacity payment measures took place in the very period during which Bolivia was implementing an undeclared nationalization policy of the electricity sector. Bolivia states that they "see no connection" among them. But the Attorney General of Bolivia told the Tribunal directly and emphatically that the government's plan, *beginning in 2006*, was the reclaiming of power generation companies by the State. In the words of Bolivia's Attorney General:

[E]l programa de Gobierno [...] propuesto por el entonces candidato y actual presidente constitucional Evo Morales en las elecciones democráticas del período 2006 al 2009, contemplaba como uno de sus

Claimants' Closing Presentation, slide 46.

⁷² Transcript (Spanish), Day 1, pp 316:14-317:1.

Murphy Exploration and Production Company International v. Republic of Ecuador (ICSID Case No. ARB/08/4), Award on Jurisdiction, 15 December 2010, **Exhibit RL-60**, ¶¶ 111 and 116.

Burlington Resources Inc. v. Republic of Ecuador (ICSID Case No. ARB/08/5), Decision on Jurisdiction, 2 June 2010, Exhibit RL-17, ¶¶ 280 and 314-318.

Transcript (Spanish), Day 1, p 319:4-6.

ejes principales la recuperación por parte del Estado de las generadoras de energía eléctrica que fueron privatizadas en los años 90 [. . .].⁷⁶

82. Bolivia thus implemented a six-year plan that culminated in the expropriation of the Claimants' investment. Prior to the nationalization, Bolivia took a variety of measures that diminished the Claimants' investment as part of its program to recover power generation companies to the State. The spot price and capacity measures were designed to reclaim value from the companies for the State, and to depress their income prior to final seizure. These State acts cannot be divorced from the overall political program described by Bolivia's Attorney General.

D. BOLIVIA CANNOT DENY BENEFITS TO GAI, LET ALONE DO SO RETROACTIVELY

- 83. Bolivia further alleges that this tribunal has no jurisdiction over GAI because it purported to deny benefits under the US Treaty, despite the fact that all substantive breaches had already occurred when those benefits were undisputedly still in place. Bolivia's argument is misconceived in at least two respects.
- 84. First, Bolivia could have denied benefits under the US Treaty only if certain conditions were met. In particular, benefits could only be denied if GAI had no substantial business activity in the US.⁷⁷ In fact, GAI is the special purpose vehicle that Bolivia itself, through the bidding rules, required investors to create in order to manage Guaracachi's shares.⁷⁸ It has held shares in Guaracachi since 1995; it has a designated agent in the State of Delaware; it held annual shareholder meetings in the US; it held board of directors meetings; and it submitted annual tax returns among other activities.⁷⁹ Indeed, PROFIN considered that GAI was the proper interlocutor with the Government for purposes of settlement negotiations.⁸⁰ In this context, the extent of business activities must account for the nature of the company that Bolivia required to own

Transcript (Spanish), Day 1, p 181:25 – 182:7; see Claimants' Closing Presentation, slide 47.

US-Bolivia Treaty, **Exhibit C-17**, Article XII(b).

Bidding Rules, **Exhibit C-7**, Clauses 2.1.3 and 2.3.

Rejoinder on Jurisdiction, ¶¶ 43-46.

Exhibit R-154, Informe PROFIN, p 20.

the Guaracachi shares – a single-purpose holding company. GAI conducted all of the substantive activities one would expect of such a business, and it conducted them in the US.

- 85. Even if GAI's activities in the US are deemed not to have been "substantial", Bolivia would still be unable to deny benefits of the US Treaty as it has purported to do.
- 86. In the US Treaty, Bolivia "reserves the right to deny benefits". It does not deny benefits. It could have done just that: many treaties simply require substantive business activities in the home country as a condition to qualify an investor for protection as such. The US Treaty does not do this.
- 87. As explained by the *Yukos* Tribunal,

Article 17(1) [here Article XII of the US Treaty] [...] does not deny <u>simpliciter</u> the advantages of Part III of the ECT .[..] It rather 'reserves the right' of each Contracting Party to deny the advantages of that Party to such an entity. This imports that, <u>to effect denial</u>, the Contracting Party must exercise the right. ⁸¹ (Emphasis added.)

88. The *Plama* Tribunal adopted the same position. It held that:

[T]he existence of a 'right' is distinct from the exercise of that right. For example, a party may have a contractual right to refer a claim to arbitration; but there can be no arbitration unless and until that right is exercised. In the same way, a Contracting Party has a right under Article 17(1) ECT to deny a covered investor the advantages under Part III; but it is not required to exercise that right; and it may never do so. (Emphasis added.)

89. The relevant question is therefore at what moment a State must exercise its right to deny benefits for that election to be effective. This question in turn depends on the nature of Treaty benefits that the State intends to deny. In the case at hand, these fall into two categories.

Claimants' Closing Presentation, slide 48; *Yukos Universal Limited v Russian Federation*, Interim Award on Jurisdiction and Admissibility, 30 November 2009, **Exhibit CL-127**, ¶ 456.

Claimants' Closing Presentation, slide 48; *Plama Consortium Limited v Republic of Bulgaria*, Decision on Jurisdiction, 8 February 2005, **Exhibit CL-110**, ¶ 155.

- 90. First, GAI receives the benefit of the Treaty's substantive protections: for example, the right to compensation for expropriation, or the right fair and equitable treatment. When Bolivia adopted the measures at issue in this case, it had not yet purported to deny GAI those benefits. Those measures (including expropriation without compensation) breached the Treaty at the moment they were adopted and GAI's rights arising out of the US Treaty's substantive provisions crystallized at that moment. By the time Bolivia sought to withdraw the benefits of the US Treaty, GAI's rights under the substantive protections had already accrued. Bolivia's purported denial of benefits could have no effect on the rights that had already crystallized. Bolivia's attempt to retroactively deny benefits is therefore invalid under the US Treaty.⁸³
- 91. The second benefit that Bolivia seeks retroactively to withdraw is the right of access to international arbitration of investment disputes. This benefit, accorded in the form of Bolivia's unilateral consent to arbitration, was completed when GAI accepted the offer to arbitrate and launched the present proceeding with its Notice of Arbitration. When Bolivia purported to deny the benefit of its consent to arbitrate under the US Treaty, it was too late the arbitration agreement was already in place and could not be set aside by the unilateral act of one party.
- 92. The retroactive destruction of acquired rights that Bolivia asks this Tribunal to countenance would also undermine the object and purpose of the US Treaty to promote and protect investment. It is for this reason that denial of benefits clauses can only apply prospectively, and cannot be interpreted as a unilateral, after-the-fact nullification of all responsibility that the State may deploy at will.
- 93. The *Yukos* Tribunal clearly summarized the position:

[I]f the passage in Respondent's First Memorial [...] is construed as an exercise of the reserved right of denial, it can only be prospective in effect from the date of that Memorial. To treat denial as retrospective would, in the light of the ECT's 'Purpose,' as set out in Article 2 of the Treaty [...] be incompatible 'with the objectives and principles of the

Claimants' Closing Presentation, slide 49.

Charter.' Paramount among those objectives and principles is 'Promotion, Protection and Treatment of Investments' as specified by the terms of Article 10 of the Treaty. Retrospective application of a denial of rights would be inconsistent with such promotion and protection and constitute treatment at odds with those terms." (Emphasis added.)

94. Bolivia seeks to support the retroactive effect of its belated exercise of the denial-of-benefits clause by noting that the US Treaty entered into force after GAI invested in Guaracachi. 85 This entirely misses the point. Bolivia offered investors such as GAI certain rights under the Treaty, including the right to commence arbitration proceedings in the event of a breach of Treaty obligations by Bolivia. Bolivia granted these rights when the US Treaty entered into force in 2001. Once Bolivia granted these rights under the US Treaty, there were only two possible critical dates: the moment when the breach occurred (with respect to substantive benefits), and the moment when the Claimant accepted the State's offer to arbitrate under the US Treaty (with respect to procedural rights).

E. RURELEC MADE A QUALIFYING INVESTMENT UNDER THE UK TREATY

- 95. Bolivia persists in its allegation that there is no evidence on the record establishing Rurelec's acquisition of its investment.⁸⁶ This allegation is contradicted by ample contemporaneous documentation on the record and discussed at the Hearing, evidencing the transaction and payment.⁸⁷
- 96. In advancing this argument, Bolivia emphasizes the *Quiborax* case. 88 But Bolivia fails to note that in *Quiborax*, Bolivia similarly challenged the claimant's investment, and that its position was rejected by the arbitral tribunal. The arbitrators held that, unless the respondent can show fraud or overcome the

Claimants' Closing Presentation, slide 50; *Yukos Universal Limited v Russian Federation*, Interim Award on Jurisdiction and Admissibility, 30 November 2009, **Exhibit CL-127**, ¶ 458.

⁸⁵ Transcript (Spanish), Day 1, p 218:5-7.

⁸⁶ Transcript (Spanish), Day 1, p 207:17-21.

Claimants' Closing Presentation, slides 39, 40 and 41. See paragraphs 59-63, above.

Transcript (Spanish), Day 1, p 209:7-17. *Quiborax S.A., Non Metallic Minerals S.A. and Allan Fosk Kaplún v. Plurinational State of Bolivia* (ICSID Case No. ARB/06/2) Decision on Jurisdiction, 27 September 2012, **Exhibit CL-150.**

evidence showing acquisition,⁸⁹ then it must accept jurisdiction. Thus, following the holding in *Quiborax*, it is for Bolivia to offer evidence contradicting that submitted by the Claimants, or to show that the evidence submitted is fraudulent. Bolivia has done neither.

- 97. Bolivia further argues that the UK Treaty requires a "contribution" to the local economy for an asset to qualify as an investment, despite the absence of the term from the UK Treaty. Bolivia invokes the *Romak* case for the proposition that an objective concept of investment applies to all bilateral investment treaties.⁹⁰ This is simply not the holding of the *Romak* decision,⁹¹ and in any event there is no reason to depart from the UK Treaty's language. In any event, the contributions made by Rurelec to the electricity sector in Bolivia have been extensively described in the written pleadings and during the Hearing.⁹²
- 98. Bolivia further argues that "el Tratado inglés no protege participaciones indirectas". 93 Bolivia's argument is not supported by the text of the UK Treaty, and Bolivia has not advanced any justification for a restrictive reading of Article I of the UK Treaty. The UK Treaty incorporates a broad definition of "investment" that includes "every asset" and clearly encompasses Rurelec's indirect controlling shareholding in Guaracachi. This conclusion results from the plain meaning of Article I of the UK Treaty, its context and the object and purpose. International tribunals have been confronted with similar provisions on several occasions in the

Quiborax S.A., Non Metallic Minerals S.A. and Allan Fosk Kaplún v. Plurinational State of Bolivia (ICSID Case No. ARB/06/2) Decision on Jurisdiction, 27 September 2012, Exhibit RL-123, ¶ 192.

⁹⁰ Transcript (Spanish), Day 1, p 208:13-18.

Romak S.A.(Switzerland) v. Republic of Uzbekistan (UNCITRAL), Award, 26 November 2009, Exhibit RL-54, ¶¶ 182, 184-190. The Romak tribunal dealt with the claim that a one-off sale of wheat was a "claim to money" and thus a protected "investment." This would have led to an absurd result given the Contracting Parties to the BIT at issue in Romak had signed a separate treaty on sales agreements contemporaneously. It was because of this absurd result that the tribunal relied on objective criteria.

Statement of Claim, ¶¶ 52-88; Reply, ¶¶ 36-70; Claimants' Opening Presentation, slides 8, 12, 34-37 and 44-58.

⁹³ Transcript (Spanish), Day 1, p 207:23-24.

past, and have consistently held that indirect holdings constitute protected investments. 94

99. Having established that the Tribunal has full jurisdiction over the claims submitted by both entities, we now turn to the merits of GAI's and Rurelec's substantive claims.

V. BOLIVIA BREACHED ITS TREATY OBLIGATIONS

A. BOLIVIA'S EXPROPRIATION OF GUARACACHI WAS UNLAWFUL

- 100. Bolivia recognizes that it nationalized Guaracachi and paid no compensation to the Claimants. As explained in the Claimants' Opening Statement, 95 this expropriation was unlawful both because of the manner in which the expropriation was carried out (with armed soldiers breaking down the front door at dawn) and because of the failure to pay *any* compensation.
- 101. Bolivia's claim that the expropriation was "peaceful and orderly" cannot be countenanced in light of the testimony of the witnesses present on that day. 96 Moreover, Bolivia has not and cannot justify its failure to pay compensation.
- 102. Bolivia accepts that it has an obligation to pay compensation for expropriated property based on its fair market value immediately before the expropriatory act. Bolivia has argued that it fulfilled that obligation given that Claimants' majority stake in the largest power generator in Bolivia was worthless. Yet that argument did not survive scrutiny at the Hearing. Bolivia failed to undertake an objective valuation of Guaracachi at the time of the nationalization. As explained above, the alleged valuation exercise undertaken by PROFIN shortly after the nationalization

The Claimants have provided several examples of these decisions with their Rejoinder on Jurisdiction. For ease of reference, these decisions were also listed on slide 51 of the Claimants' Closing Presentation.

⁹⁵ Transcript (Spanish), Day 1, p 185:20-24 and p 187:1-10.

Aliaga First WS, ¶¶ 46-51; Aliaga Second WS, ¶¶ 53-57.

was clearly prepared as confidential negotiating material.⁹⁷ It was not an objective valuation exercise. Indeed, Bolivia has not sought to rely upon it in this arbitration. Instead, it relies on the expert reports of Dr Flores, the many shortcomings of which are explained in detail in Section VI, below.

- 103. Bolivia has tried to rescue its "zero value" defense by noting that it paid compensation to the shareholders of the other two nationalized capitalized power generators, Corani and Valle Hermoso, which it claims were worth more than Guaracachi. Bolivia's argument is seriously flawed. Guaracachi, with four power plants generating over 500 MW of installed capacity, had three times the power generation capacity of Corani (which had a single 150MW hydro plant) and Valle Hermoso (two plants totaling approximately 190MW). Moreover, unlike Guaracachi, Corani and Valle Hermoso had made no investments in new capacity in the years prior to the nationalization.
- 104. While Bolivia referred to the US\$18.4 million settlement with GDF Suez in relation to Corani, 98 it concealed key information about the circumstances surrounding that settlement. As explained on slides 53 and 54 of the Claimants' Closing Presentation, 99 GDF Suez acquired its 50% stake in Corani as part of its October 2008 acquisition of Econergy a US energy company with assets in Brazil, Bolivia, Costa Rica, Chile, US and Mexico for US\$62 million. Econergy had purchased Corani in 2007 from Duke Energy for US\$20 million. By contrast to the Claimants' long-term investment in Guaracachi, Corani was owned by three different foreign companies in the three years prior to nationalization during which time no expansions were undertaken. The October 2011 settlement, which was reached only after an UNCITRAL arbitration was commenced in January 2011, therefore indicates nothing other than that a multinational investor in a company holding a portfolio of projects was able to exit one of those projects following a nationalization with little loss.

See ¶ 6 above; see also, *Informe PROFIN*, **Exhibit R-154**, p 18.

⁹⁸ Transcript (Spanish), Day 1, p 243:9-22.

⁹⁹ Claimants' Closing Presentation, slides 53 and 54.

- 105. As for Valle Hermoso, it was owned by Bolivians who had no treaty protection and no choice but to accept the compensation on offer as anything was better than nothing. Their situation is therefore not comparable to the Claimants.
- 106. There can therefore be no doubt that Bolivia's expropriation of the Claimants' investments was unlawful.

B. BOLIVIA'S ALTERATION OF THE SPOT PRICE FORMATION MECHANISM WAS UNFAIR AND INEQUITABLE

- 107. As explained during the Hearing, the Electricity Law established the merit order principle, an established model in Latin America and elsewhere according to which wholesale electricity prices would be set by the marginal unit. This principle constituted one of the most fundamental provisions of the Electricity Law. It ensured neutrality in the determination of electricity prices, and a system which sends the right economic signals for investments in new capacity. ¹⁰⁰
- 108. Mr Aliaga, the former General Manager of Guaracachi, confirmed the importance of the merit order principle as an incentive for new investments. ¹⁰¹
- 109. With the Spot Price Measure, Bolivia removed liquid-fuelled units from the price fixing mechanism. 102 This effected a fundamental change to the regulatory framework that formed the basis of Claimants' investment, with spot prices no longer fixed based on the marginal cost of the system with uniform neutral prices. Instead, the system is characterized by multiple prices that depend on the particular unit dispatched.
- 110. At the Hearing, the Tribunal raised two issues which the Claimants addressed in their Closing Statement. First, a question was asked as to why there was no complaint about earlier changes to the price fixing rules concerning forced

Transcript (English), Day 1, pp 41:1-47:2.

Claimants' Closing Presentation, slide 56; Transcript (Spanish), Day 2, p 523:20-25.

Transcript (English), Day 1, pp 66:2-68:6.

supply.¹⁰³ Second, an issue was raised as to whether Claimants were not "playing the system" by investing heavily in efficient baseload capacity but retaining some inefficient units that would occasionally be called upon and set high marginal costs.¹⁰⁴

- 111. First, changes to the rules with respect to forced supply addressed the need to respond to particular faults in the network by (for example) bringing on a peaking power unit to ensure voltage maintenance. Forced supply is not a general supply to the system that is permanently available but rather a temporary supply in connection with a technical fault and affecting a specific area. 105 At the Hearing, Mr Lanza explained in clear terms that forced generation units (such as Guaracachi's Aranjuez 1, 2 and 3) are intended to ensure security of supply to a specific area (in the case of Aranjuez 1, 2 and 3, the Sucre area), usually as a result of failures in the transmission network. 106 In such circumstances, it is fully understandable that such units do not set the market price, since their dispatch does not reflect demand in the market. By contrast, if peaking units are called to supply the general grid then they reflect supply and demand and should be taken into account in the fixing of prices in the merit order system. Mr Lanza explained that it is for this reason that these units, when called for dispatch as forced generation units, are not taken into account for the calculation of the marginal cost of the system. 107
- 112. Second, the suggestion that Guaracachi would have been interested in maintaining inefficient units on line in order to obtain higher prices is not reflected in the evidence. Claimants' business model has always been to replace old and inefficient units with new efficient units in order to maximize profits in the long term. Given the tightening of the capacity reserve in light of the lack of

¹⁰³ Transcript (English), Day 2, pp 277:17-278:10.

Transcript (English), Day 2, p 272:8-16.

¹⁰⁵ See Supreme Decree No. 26,093/2001 (ROME 2001), 2 March 2001, **Exhibit C-85**, Article 1.

Transcript (Spanish), Day 3, pp 881:3-882:24.

¹⁰⁷ Transcript (Spanish), Day 3, pp 884:22-886:1.

investment from the other electricity generators, new investment made more sense from 2005 onwards. It was never Claimants' business plan to keep old peaking units to seek to maximize price.

- 113. Indeed, the record is replete with the Claimants' attempts to sell or dispose of older peaking units. The problem arose when capacity reserve began to shrink as investment (other than from Guaracachi) disappeared. At that time, Bolivia was afraid that the peaking units might be needed, and it preferred to have expensive peaking units that could be brought into action if necessary (even at a very high price) than having no electricity at all. After all, according to an electricity industry proverb, there is no electricity as expensive as that which is not supplied. But that decision was the decision of the Government not the decision of Guaracachi. Since the Government prevented Guaracachi from withdrawing the peaking units because it wanted insurance against blackouts, then it had to accept the consequences of this policy on prices in accordance with the existing price-setting mechanism.
- 114. Rurelec knew well that any the increased margins in relation to the dispatch of inefficient units could not be indefinite. Any generator in a position to invest in efficient new capacity would quickly displace these units, Indeed, as the Combined Cycle project came online, reliance on peaking units dropped dramatically.
- 115. In sum, neither Bolivia's attempt to draw a comparison with the regime applicable to forced generation nor Bolivia's after-the-event explanations on an alleged interest by Guaracachi in maintaining peaking units justify the elimination of the fundamental principle of the merit order. In the words of the *Total v Argentina* tribunal when upholding a treaty breach for a similar measure:

Expectations based on such principles are reasonable and hence legitimate, even in the absence of specific promises by the government.

See, e.g., Reply, ¶ 78; Andrade Second WS, ¶ 32; and Aliaga Second WS, ¶¶ 12-13.

Transcript (Spanish), Day 3, pp 893:8-894:16.

Hence, the fair and equitable standard has been breached through the setting of prices that do not remunerate the investment made nor allow reasonable profit to be gained contrary to the principles governing the activities of privately owned generators under Argentina's own legal system. This is especially so in the utility or general interest sectors, which are subject to governmental regulation (be it light or strict), where operators cannot suspend the service, investments are made long term and exit/divestment is difficult. [110]

116. Like Argentina, Bolivia effected a fundamental change to the regulatory regime that attracted the Claimants' investment. Such conduct constitutes unfair and inequitable treatment in violation of the Treaties.

C. BOLIVIA FAILED TO PROVIDE EFFECTIVE MEANS OF ASSERTING CLAIMS AND ENFORCING RIGHTS WITH RESPECT TO CAPACITY PAYMENTS

- 117. In its pleadings, the Claimants demonstrated that Bolivia denied them an "effective means of asserting claims and enforcing rights" with respect to the Capacity Price Measure. The Hearing testimony confirmed what the evidence already showed: Guaracachi was denied any effective means of seeking redress from the introduction of Resolution No. 40, which reduced one of Guaracachi's two sources of income by approximately 13%. ¹¹¹
- 118. The "effective means" provision of the US Treaty ensures that qualifying foreign investors will have access to efficient judicial recourse. That protection is found in the US Treaty at Article II(4), which provides as follows:

Each Party shall provide effective means of asserting claims and enforcing rights with respect to covered investments. 112

119. This protection is extended to UK investors, such as Rurelec, through the most-favored-nation clause (Article 3) of the UK Treaty. In the leading case applying

Claimants' Closing Presentation, slide 57; *Total v Argentina*, Decision on Liability, 27 December 2008, **Exhibit CL-69**, ¶ 333.

Compass Lexecon First Report, ¶ 126; Compass Lexecon Rebuttal Report, ¶ 164.

Claimants' Closing Presentation, slide 58; US-Bolivia Treaty, **Exhibit C-17**, Article II(4).

the "effective means" standard – White Industries v India – the standard was "imported" via a most favored nation clause. 113

- 120. To satisfy this standard, the Claimants need to demonstrate that they sought to vindicate their rights through the Bolivian courts and were denied the effective means to do so. 114 The undisputed chronology of Guaracachi's administrative and legal challenges shows just that:
 - In February/March 2007, Guaracachi challenged Resolution No. 40 through an administrative proceeding; 115 at the same time, Guaracachi also filed a parallel nullification proceeding. 116
 - On 3 April 2008, after the challenge to Resolution No. 40 had been rejected by the relevant regulatory bodies, Guaracachi filed an action before the Supreme Court. 117
 - On 10 June 2008, Guaracachi's parallel nullification proceeding was placed before the Supreme Court. 118
 - As of May 2013, approximately five years later, both of Guaracachi's appeals remain unresolved, with no real prospect of adjudication.
- 121. At the Hearing, like in its written submissions, Bolivia advanced several defenses on the merits of the "effective means" claim.
- 122. *First*, Bolivia continues to suggest that the relevant test is a subjective one, relying upon the testimony of Mr Quispe. This is incorrect. The Claimants have established in their pleadings and opening statement that the relevant test is

Claimants' Opening Presentation, slide 93; White Industries Australia Limited v Republic of India (UNCITRAL), Final Award, 30 November 2011, Exhibit CL-73, ¶¶ 11.2.3–11.2.4.

To be sure, there is no separate fair and equitable treatment claim in relation to the Capacity Price Measure. The Claimants therefore need not prove that the alteration of the capacity price regime was arbitrary or unexpected.

Statement of Claim, ¶¶ 217–18.

Petition for Annulment of Resolution CNDC No. 209/2007-1, 12 February 2007, **Exhibit C-130**; Recurso de Revocatoria contra la Resolución CNDC 209/2007-1 y otras resoluciones, 15 February 2007, **Exhibit R-92**.

Appeal by Guaracachi of Resolution SSDE No. 1612/2008, 3 April 2008, **Exhibit C-151**.

Appeal by Guaracachi of Resolution SSDE No. 1706/2008, 10 June 2008, Exhibit C-153.

entirely objective.¹¹⁹ It is irrelevant whether waiting six years for a Supreme Court decision is common in Bolivia. The Claimants need not establish that the treatment they received was discriminatory. The Claimants need only demonstrate that an effective means to enforce rights was unavailable.

- 123. As a consequence, a significant portion of Mr Quispe's testimony is irrelevant. It is irrelevant whether the courts are seeking to address endemic delay or that other litigants have suffered similar delays. Precisely because of the heightened protection provided by the Treaties, Claimants have a right to an absolute standard. That standard is not perfection, but it is real and objective and has not been satisfied by a process paralyzed for over five years.
- 124. *Second*, Bolivia suggests that the time elapsed since the nationalization should be disregarded for purposes of assessing delay, because any favourable decision from the Supreme Court would not benefit the Claimants, but EGSA. ¹²⁰ The change of control is irrelevant. As Mr Quispe confirmed at the Hearing, if the Bolivian Supreme Court were to decide that the Capacity Price Measure was unlawful, it would be annulled *ab initio*. ¹²¹ As a consequence, the losses suffered by Guaracachi prior to nationalization would still be recoverable.
- 125. *Third*, Bolivia contends that Guaracachi could have obtained a suspension of the Resolutions in question, and that this was an "effective remedy" that defeats the Capacity Price claim. In his first statement, Mr Quispe described the administrative justice system in Bolivia. Guaracachi followed to the letter the route he described. In his second statement, Mr Quispe suggested for the first time that a suspension might be obtained by relying on Art. 59 of the Ley de Procedimientos Administrativos and Articles 167 and 169 of the Civil Procedure Code. No authority was cited in support of that proposition.

¹¹⁹ Statement of Claim, ¶¶ 214-215; Reply, ¶¶ 153-155.

¹²⁰ Rejoinder, ¶ 407.

Claimants' Closing Presentation, slide 59; Transcript (Spanish), Day 3, pp 973:18-974:20.

¹²² Quispe First WS, ¶¶ 16-21.

¹²³ Transcript (Spanish), Day 3, pp 938:7-940:6.

- 126. Fourth, Bolivia suggests that there were numerous examples of court decisions involving the exercise of these provisions, relying on the testimony of Mr Quispe. In his third witness statement, however, Mr Quispe only refers to a single decision that involved none of the provisions he had identified. On questioning at the Hearing, he confirmed that he had identified three relevant decisions, and that two of them were specifically contrary to his thesis. He was shown a number of other authorities and acknowledged that none supported the granting of a suspension of an administrative act, because such acts are presumed valid until struck down by a competent court. Indeed, he was unable to identify a single instance from the over 160 pending cases in the electricity and hydrocarbon sectors for which he was responsible in which a suspension had been granted.
- 127. During the course of his cross-examination, when asked how many cases he was aware of where there had been a suspension of an administrative act, Mr Quispe's first response was "muchos casos". This later softened to "algunos otros casos" and finally descended to "un caso". The true position of the Bolivian courts, based on a long line of "uniforme jurisprudencia", is summed up in a key Supreme Court decision. In that decision, the Supreme Court concluded that it is impossible to suspend the execution of an administrative act by submitting a claim to the Bolivian courts. Thus, under Bolivian law, Guaracachi could not have availed itself of any remedies other than those it exercised in 2007 and 2008.

Quispe Third WS, Annex 3.

Those three cases were submitted by Bolivia as **Exhibit RL-142**. As acknowledged at the Hearing, Mr Quispe provided all three cases to Bolivia, but he decided to rely on only one of them and ignore the two others, presumably because they did not support his position. See Transcript (Spanish), Day 3, pp 946:20-948:19.

Claimants' Closing Presentation, slide 60; Transcript (Spanish), Day 3, p 965:4-17.

Claimants' Closing Presentation, Slides 61 and 62. Transcript (Spanish), Day 3, pp 942:20-25 and 951:14-24.

Auto Supremo 38/2004, 2 April 2004, **Exhibit CL-186**, second paragraph.

Claimants' Closing Presentation, slide 63. Auto Supremo 028A/2010, 8 January 2010, **Exhibit CL-191**.

128. In the end, contrary to the submissions of Bolivia and Mr Quispe, the facts speak for themselves. Guaracachi has had its challenges before the Supreme Court effectively shelved: there remains no sign of a decision forthcoming this year, next year, or any time soon. That is the antithesis of "effective means" to enforce rights, and Bolivia has therefore breached the Treaties.

VI. THE CLAIMANTS ARE ENTITLED TO FULL COMPENSATION

A. INTRODUCTION

- 129. Bolivia's strategy on the quantification of damages has been very clear from the start of the proceedings: it began with zero, and worked backwards, employing a range of inapposite premiums, adjustments and assumptions to nullify any compensation due to the Claimants for the seizure of a substantial and profitable enterprise.
- 130. Bolivia's attempt to obscure the issues and to understate Guaracachi's equity value is transparent. The Government nationalized Guaracachi, one of the largest companies in Bolivia and the leading electricity generator, which was about to double its profitability with the coming online of the Claimants' signature Combined Cycle Gas Turbine project. It was nationalized for the obvious reason that it was a valuable asset for the Government to have under its control particularly with the imminent Combined Cycle Gas Turbine project.
- 131. In the sections below, the Claimants explain the issues that have the most significant impact on the quantification of damages in this case, including the critical components of the discount rate the size premium, country-risk premium and market-risk premium and projections of capacity and energy dispatch. We reiterate the key reasons why the Tribunal should discard the extreme positions adopted by Dr Flores and endorse the model presented by Dr Abdala.

See Notice of Arbitration, ¶ 31; Compass Lexecon Rebuttal Report, ¶ 66.

Transcript (English), Day 2, p 385:17-19; Transcript (English), Day 3, pp 529:4-5 and 685:21.

B. GUARACACHI IS NOT A GREENFIELD PROJECT

- 132. At the outset, it is important to frame the damages analysis by an understanding of the distinction between an established utility company such as Guaracachi and a start up or "greenfield" project.
- 133. Guaracachi was an established electricity enterprise, which held over a third of the effective capacity of the Bolivian market. Under the Claimants' management, the company doubled its effective capacity. At the time of nationalization, Guaracachi had five years of positive dividend history and profitability, resulting from the Claimants' contributions and the work of their management team in modernizing and expanding the business. The health of this business is reflected in the profits that Guaracachi recorded in the year following nationalization, totaling approximately US\$12.6 million. These profits were achieved entirely based on pre-nationalization investment, and without the benefit of the Combined Cycle Gas Turbine project (which came online in 2012).
- 134. An established utility company such as Guaracachi is far less risky than a greenfield project. An established utility holds multiple assets, while a greenfield project is normally based upon the success of a single asset. Secondly, existing companies have an established revenue stream, while a greenfield project's revenues are uncertain. An established company enjoys a certain flexibility in its lending arrangements, such as the equity bridge-financing from which Guaracachi benefitted in 2008 and 2009. This can be contrasted with a greenfield project, in which the assets and revenue streams are contingent on specific financing structures. The steady cash flows of established enterprises facilitate an increased level of debt financing. And while existing operations for

Notice of Arbitration, ¶ 31.

Compass Lexecon Rebuttal Report, ¶¶ 15-24.

²⁰¹¹ Annual Report of Empresa Eléctrica Guaracachi S.A, Exhibit C-224, p 4.

Claimants' Closing Presentation, slide 66.

an established utility company support future construction activities, for a greenfield project, there is a substantial construction risk.

135. Guaracachi was not an idea about an opportunity. It was a regulated utility with a proven track record that was expanding and improving, and implicated only limited business risk. As Mr Conthe put it, "electric utilities were considered [...] good securities for widows and orphans, because of [the fact that] the risk was very, very low". This should be borne in mind when assessing the relevance of the threshold rates of return of greenfield projects, which is addressed below. 137

C. DISCOUNT RATE

136. Dr Flores's position on the discount rate is an exercise in mismatch. He has applied two key adjustments to the classic capital asset-pricing model (*CAPM*) for determining the cost of equity: a size premium and a 1.5 multiplier applied to the country-risk premium. These adders are based on academic theories, rather than on real-life valuation practice.

1. Size premium

137. The size premium is recognized to be an "anomaly", an observation reflected in some academic studies that shares in smaller companies traded on US stock markets yield higher returns than larger companies. There has always been disagreement about the propriety of a size premium to boost the discount rate in valuations of small companies. Many leading scholars take the view that smaller companies do not on average attract a higher return, and that therefore all risks relevant to a willing buyer and seller are already incorporated in the CAPM-

¹³⁶ Transcript (Spanish), Day 5, p 1650:21-24.

¹³⁷ See below, ¶¶ 157-158.

See Econ One First Report, ¶¶ 69-76; Econ One Rebuttal Report, ¶¶ 126-152.

Horowitz J., Loughran T., N.E. Savin, "Three Analyses of the Firm Size Premium", (2000) 7 *Journal of Empirical Finance*, **Exhibit C-248**, p 143.

See Compass Lexecon Rebuttal Report, ¶ 62.

derived discount rate and cash flows.¹⁴¹ The most recent empirical research, by Professors Fama and French, confirm this view. Dr Flores ignored this important study, purportedly because it is too recent to have engendered sufficient secondary commentary.¹⁴² Professors Fama and French, who were among the pioneers of the size-premium theory,¹⁴³ reviewed 23 markets in four regions around the world, and confirmed that no size premium could be observed anywhere.¹⁴⁴ Dr Flores was unable to point to any criticism of their findings to date.¹⁴⁵

138. Dr Flores justifies his inclusion of a size premium primarily on the basis of a report by Morningstar/Ibbotson. This very report undermines the applicability of the size premium in the present case. First, as the report observes, "virtually all of the small stock effect occurs in January, as the excess outcomes for small company stocks are mostly negative in other months of the year." If January is excluded, Ibbotson and Morningstar confirm that small US companies in fact yield lower returns than larger companies. Only two explanations for this odd phenomenon are proffered, "window dressing" by stock portfolio managers and tax optimization. Neither explanation bears any relevance to the valuation of

Dimson E. and Marsh P., "Murphy's Law and Market Anomalies" (1998) **Exhibit C-246**; Horowitz J., Loughran T., N.E. Savin, "Three Analyses of the Firm Size Premium", (2000) *Journal of Empirical Finance*, Vol. 7, **Exhibit C-248**. See Compass Lexecon Rebuttal Report, ¶

Transcript (Spanish), Day 5, pp. 1560:16-1561:10. Later, however, Dr Flores indicated that he did not rely on this study as it was "quite difficult to understand": Transcript (Spanish), Day 5, p 1564:4-5.

Fama E. and French K., "The Cross-Section of Expected Returns", (1992) *The Journal of Finance*, Vol. 47, **Exhibit C-240**, pp 449-450.

Fama E. and French K. "Size, Value and Momentum in International Stock Returns", (2012) Vol. 105(3), *Journal of Financial Economics*, **Exhibit C-272**, p 460 ("There is no size premium in any region during our sample period.").

¹⁴⁵ Transcript (Spanish), Day 5, p 1562:13-14.

Econ One First Report, ¶¶ 75-76. See Ibbotson/Morningstar, "Market Results for Stocks, Bonds, Bills and Inflation 1926-2009" (2010), **Exhibit EO-13**.

Ibbotson/Morningstar, "Market Results for Stocks, Bonds, Bills and Inflation 1926-2009" (2010), Exhibit EO-13, p 98.

Ibbotson/Morningstar, "Market Results for Stocks, Bonds, Bills and Inflation 1926-2009" (2010), Exhibit EO-13, p 98.

long-term direct investments like the Claimants' stake in Guaracachi. They are relevant only to fund managers and to short-term stock market speculators. Thus, even if the size premium is real (contrary to the most recent evidence), it is the result of factors irrelevant to the present valuation exercise.

- 139. In defending the application of a size premium, Dr Flores offered very little support for his position. In both reports, he applied a massive 6.28% premium solely on the basis of Guaracachi's book value. 149 Dr Flores then compared this figure to that of companies traded on the New York Stock Exchange, placing Guaracachi in Morningstar/Ibbotson's smallest decile (and highest size premium category). This is despite the fact that Dr Flores denies that book value can be used as a valid indicator of company price. 150 Dr Flores made no attempt to link the size premium to actual additional risk factors that might apply to Guaracachi based on its business operations; his approach was purely arbitrary. The logical extension of Dr Flores's absolutist position is that *every company in Bolivia*, including the National Bank of Bolivia and YPFB, would attract a size premium. 151 This clearly cannot be the case.
- 140. Meanwhile, Dr Flores disregarded the most important consideration: whether a willing buyer and willing seller would have utilized a size premium in forming an agreed price for Guaracachi. The evidence shows that they would not. None of the available Latin American investment bank valuations employs a size premium.

 The reports of all professional valuators in the record have taken the approach recommended by Professor Damodaran, who deems a size premium to be a

See Econ One First Report, ¶¶ 75-76; Econ One Rebuttal Report, ¶¶ 126-135.

Econ One Rebuttal Report, ¶¶ 50-73.

Empresa Eléctrica Guaracachi S.A. 2012 Stock Exchange Statistics as of September 30, 2012, **Exhibit C-338**, p 1; Ibbotson/Morningstar, "Market Results for Stocks, Bonds, Bills and Inflation 1926-2009" (2010), **Exhibit EO-13**, p 86 (Table 7.2).

Santander Investment Bank Reports Sample, **Exhibit C-300**. Dr Flores was unable to identify a single investment bank valuation in Latin America reflecting a size premium. Transcript (English), Day 5, p 1254: 6.

"sloppy" substitute for building a valuation carefully based upon the company's fundamentals. 153

- 141. Even if the Tribunal were to consider that the smaller companies attract higher returns *per se* and that this should be reflected in a size premium to the discount rate, this can only be the starting point of its inquiry. The Tribunal would then need to consider whether Guaracachi was in fact "small" in terms of its risk profile, in light of the circumstances of its business. ¹⁵⁴ Small company risks fall into two basic categories: risks relating to hidden defects and risks relating to a volatility of revenues. ¹⁵⁵ Neither pertained to Guaracachi.
- 142. First, Guaracachi was not afflicted by hidden defects. All of the information necessary to assess the value of the company over time was publicly available to willing buyers in the market. Guaracachi was covered by analysts such as Fitch Ratings and Pacific Credit Ratings, both of which issued reports on Guaracachi's financial position during the Claimants' ownership of the company. Further, as the subsidiary of a publicly traded company, Rurelec, Guaracachi's financial results and operations were audited and publicly disclosed. Guaracachi's operations also benefitted from the contribution of Rurelec's industry experts, as well as from Guaracachi's sophisticated local management team, giving a potential acquirer assurance that the business was conducted in accordance with accepted business practices.

Damodaran A., "Alternatives to CAPM: Part 2: Proxy Models" (available at: aswathdamodaran.blogspot.com.ar/2011/04/alternatives-tocapm-part-2-proxy.html), 29 April 2011, **Exhibit C-370**, p 2.

Tarbell J., "The Small Company Risk Premium: Does it Really Exist?" American Society of Appraisers, 18th Annual Advanced Business Valuation Conference, New Orleans, Louisiana (1999), **Exhibit C-247**, p 2.

See generally Tarbell J., "The Small Company Risk Premium: Does it Really Exist?" American Society of Appraisers, 18th Annual Advanced Business Valuation Conference, New Orleans, Louisiana (1999), **Exhibit C-247**, p 4; Claimants' Closing Presentation, slide 65.

See Compass Lexecon Rebuttal Report, ¶¶ 21-23.

See, e.g., 2006 Annual Report of Rurelec plc, **Exhibit C-113**, pp 8, 13-17, 20, 56, 59, 60, 63-67, 69, 72-73.

- 143. Secondly, Guaracachi was not exposed to revenue volatility. It operated in an industry subject to price regulation, where demand fluctuation was minimal. Even Mr Paz admitted that demand in the electricity sector was bound to increase steadily and significantly. This market growth was reflected in Guaracachi's ability to declare dividends in each year of the Claimants' ownership of the company. 159
- 144. In light of Guaracachi's strong fundamentals, Dr Flores's application of a size premium amounts to the inappropriate application of a one-size-fits-all size premium, of the sort that Professor Damodaran strongly criticizes. ¹⁶⁰
- 145. Even assuming for argument that a size premium could be applied simply on the basis of Guaracachi's book value, Dr Flores selected an excessive premium level. Dr Flores admitted on cross-examination that the Morningstar/Ibbotson report dictates the application of a 4.91% size premium for a company of Guaracachi's size, ¹⁶¹ and not 6.28% as he advanced in his reports.

2. Country-risk premium

146. Dr Flores applies a 1.5 multiplier to the undisputed country-risk premium used by Dr Abdala. His sole authority for doing so is Professor Damodaran. But Dr Flores eventually recognized that even Professor Damodaran recommends the

Paz Third WS, ¶¶ 105-106; CNDC, "Mean Prices by Capacity May 2010 – April 2014", 15 March 2010, **Paz Annex 37**, p 42. There was some confusion as to which sources Mr Paz relied on for his demand projections. Whereas he referred to the PMP in his first witness statement (at ¶ 106), his third statement states that he used the 2010-2020 POES for the projection of demand (¶ 44), as did Mr Garcia Represa during the Opening (Transcript (Spanish), Day 1, pp 271:24-272:2; Bolivia's Opening Presentation, slide 136): Claimants' Closing Presentation, slide 77.

See Compass Lexecon Rebuttal Report, p 13 (Table II).

Damodaran A., "Alternatives to CAPM: Part 2: Proxy Models" (available at: aswathdamodaran.blogspot.com.ar/2011/04/alternatives-tocapm-part-2-proxy.html), 29 April 2011, **Exhibit C-370**, p 2.

Transcript (Spanish), Day 5, p 1571:14-19; Ibbotson/Morningstar, "Market Results for Stocks, Bonds, Bills and Inflation 1926-2009" (2010), **Exhibit EO-13**, p 92 (Table 7.7).

¹⁶² Transcript (Spanish), Day 5, p 1582:4-15.

Transcript (Spanish), Day 5, p 1583:18-24; Damodaran, A., "Measuring Company Exposure to Country Risk: Theory and Practice", Stern School of Business, September 2003, **Exhibit EO-25**.

application of a multiplier only for short-term valuations.¹⁶⁴ The valuation of the Claimants' investment in Guaracachi, which spanned some 28 years, is clearly a long-term valuation, as Dr Flores was forced to concede this point.¹⁶⁵

- 147. Professor Damodaran's spreadsheet for the calculation of country-risk premium includes the multiplier as an *option* to be applied only in particular circumstances at the valuator's discretion, rather than as a mandatory component as Dr Flores suggests. Professor Damodaran's description of the country-risk premium in notes to the spreadsheet clarifies the limited application of the 1.5 multiplier.
- 148. Despite relying exclusively on Professor Damodaran to justify the application of this multiplier, Dr Flores is selective in the application of his work. There is no suggestion in Dr Flores's reports that Professor Damodaran does not endorse a multiplier for long-term valuations. Moreover, rather than applying the multiplier to Professor Damodaran's base default spread for Bolivia of 550 basis points, he used Dr Abdala's base of 702 basis points, obtained using a completely different methodology. It is this mismatch that boosted Dr Flores' premium to 1053 basis points, as compared to Professor Damodaran's result (for short-term valuations) of 8.25%.
- 149. At least two benchmarks demonstrate that Dr Flores's assessment of country risk must be exaggerated. First, none of the Latin American utility company valuations on the record uses a multiplier in calculating country-risk premiums. ¹⁶⁹ Second, Bolivia issued bonds in October 2012 at a yield implying a country-risk

Transcript (Spanish), Day 5, pp 1584:3-15-1585:7.

Transcript (Spanish), Day 5, p 1587:8-10. Dr Flores considers four years "midterm": Transcript (Spanish), Day 5, p 1586:21-24.

Claimants' Closing Presentation, slide 67; Damodaran A., Country Risk Premium Spreadsheet Calculations, January 2010, **Exhibit C-308**.

Claimants' Closing Presentation, slide 67; Damodaran A., Country Risk Premium Spreadsheet Calculations, January 2010, **Exhibit C-308**.

Claimants' Closing Presentation, slide 67; Damodaran A., Country Risk Premium Spreadsheet Calculations, January 2010, **Exhibit C-308**.

Santander Investment Bank Reports Sample, **Exhibit C-300**.

premium of 309 basis points.¹⁷⁰ Although this occurred after the valuation date, it is the only direct measure of Bolivian country risk available, and even accounting for the elapse of time, cannot be reconciled with Dr Flores's estimate, which is three times higher.

3. Market-risk premium

150. Dr Flores has been equally selective in his reliance on Professor Damodaran in determining the market-risk premium. Dr Flores criticized Dr Abdala's adoption of a 5% market-risk premium, arguing that this lies at the lowest point of Professor Damodaran recommended range of 5 – 6%. But Dr Flores was relying on outdated information. Professor Damodaran's market-risk premium for 2010 was a range of 4.5 – 5%. In his January 2010 country-risk premium spreadsheet. Professor Damodaran's market-risk premium of 4.5% in his January 2010 country-risk premium spreadsheet. Dr Abdala's market-risk premium of 5% thus corresponds to the upper limit of Professor Damodaran's 2010 range. By contrast, Dr Flores's inflated market-risk premium of 6.7% bears no relation at all to Professor Damodaran's assessment.

4. Benchmarks for the discount rate

151. Dr Abdala has validated his estimate of Guaracachi's WACC using several industry benchmarks. Dr Flores has undertaken no such benchmarking exercise.

Compass Lexecon Rebuttal Report, ¶ 74.

Econ One First Report, ¶¶ 57-60.

Damodaran A., "Equity Risk Premiums (ERP): Determinants, Estimation and Implications – A Post-crisis Update," Stern School of Business, October 2009, **Exhibit C-177**, p 67.

Damodaran A., "Equity Risk Premiums (ERP): Determinants, Estimation and Implications – The 2010 Edition", Stern School of Business (February 2010), **Exhibit EO-29**, p 68.

Claimants' Closing Presentation, slide 67; Damodaran A., Country Risk Premium Spreadsheet Calculations, January 2010, **Exhibit C-308**.

- 152. First, Dr Abdala considered the WACCs for Latin American electricity generators valued by Santander investment bank. 175 The median WACC in these reports was 9.19%, closely comparable to Dr Abdala's WACC of 10.63%. Dr Flores's 19.85% WACC is more than double this benchmark. Of the companies considered in this benchmarking exercise, even the most extreme WACCs (for Argentine companies) were far lower than Dr Flores's estimate. Similarly, Dr Flores' cost-of-debt/cost-of-equity ratio of 3.51 is out of proportion with the 1.53 median ratio for the Santander sample. 176 Dr Abdala's ratio, 1.83, is much closer both to reality and to the sample's median ratio. Dr Flores's mismatch between the cost of debt and cost of equity suggests that creditors do not care about risks that are causing equity-holders to demand high returns.
- 153. A second benchmark for Dr Abdala's WACC is the discount rate set by Bolivia for the calculation of tariffs for electricity distributors between November 2007 and October 2011, reflecting Bolivia's judgment as to the risks associated with these companies in Bolivia. This discount rate was 10.1%, closely comparable to Dr Abdala's calculation of 10.63%.
- 154. Third, the Tribunal should take account of relevant discount rates applied by the Bolivian Government to energy businesses. For example, pursuant to Bolivian law, the discount rate applicable to electricity generators in 2000 (the most recent law promulgated) is 12% in real terms. To compare this figure (equivalent to 14.5% in nominal terms) to the case at hand, certain adjustments must be made (as Dr Flores observed). In particular, the risk-free rate component of this

Claimants' Closing Presentation, slide 67; Santander Investment Bank Reports Sample, **Exhibit C-300**. The fact that certain of these reports were issued in the six months following the nationalization is not relevant. As Dr Abdala observed, these reports were used only as benchmarks, not as information included in the DCF: Transcript (English), Day 5, pp 1100:21-1101:7.

Claimants' Closing Presentation, slide 68; Santander Investment Bank Reports Sample, **Exhibit** C-300.

Claimants' Closing Presentation, slide 74; SSDE Resolution Number 229/07, and AE Resolution Number 143/11.

¹⁷⁸ Claimants' Closing Presentation, slide 74; Resolution Ministerial 1/2000.

¹⁷⁹ Transcript (Spanish), Day 5, pp 1541:22-1543:18.

discount rate decreased between 2000 and 2010 by 2.81%.¹⁸⁰ Similarly, the market-risk premium also fell over the same period.¹⁸¹ Having accounted for this evolution, the 2010 equivalent of the Bolivian regulatory rate would be below 11% in nominal terms.

- 155. Finally, an important benchmark for Dr Abdala's estimate of Guaracachi's discount rate is Guaracachi's own estimate of its cost of capital. In 2008, Guaracachi considered that the cost of equity for the combined-cycle project was 12.5%. As Guaracachi's 2008 WACC would naturally be lower than the cost of equity, this indicates that Guaracachi itself considered its WACC to be in the vicinity of 10.63%, approximately two years before the nationalization.
- 156. Dr Flores has not offered the Tribunal a single benchmark to support his discount rate of nearly twenty percent. He has referred only to the internal rate of return (*IRR*) of various greenfield projects, a concept that he conflates with the cost of capital. Dr Flores's view of the relevance of the IRR is entirely contrary to basic corporate finance principles.
- 157. The IRR is the rate that makes the net present value of all cash flows associated with an investment equal to zero. 184 The IRR is thus not equivalent to the cost of capital. 185 It is an *ex ante* estimation of the future return that an investment will yield, undertaken to decide whether to commit capital to the project in question. A

Claimants' Closing Presentation, slide 74; US Federal Reserve website (http://www.federalreserve.gov/).

Ibbotson/Morningstar, "Market Results for Stocks, Bonds, Bills and Inflation 1926-2009" (2010), **Exhibit EO-13**, p 125. This, naturally, would result in reduction in the discount rate of less than 1.4%, as the market-risk premium is relevant only to the cost of equity. It also should be noted that the way in which the 2000 discount rate has been actualized is comparable with Dr Flores's methodology in his actualization of Guaracachi's different corporate bond issuances: Econ One Second Report, ¶ 49.

Claimants' Closing Presentation, slide 74; Minutes of the Meeting of the Board of Directors of Empresa Eléctrica Guaracachi S.A, 3 September 2008, **Exhibit C-162**, "Resumen".

¹⁸³ Transcript (Spanish), Day 5, pp 1532:21-24 and 1563:11-14.

Transcript (English), Day 5, p 1062: 11-13; Damodaran, A., "Measuring Investment Returns", Undated Presentation, **Exhibit R-170**, p 40; Damodaran A., *Corporate Finance: Theory & Practice* (2nd ed, 2001), **Exhibit C-369**, p 302.

Claimants' Closing Presentation, slide 70.

project will normally proceed if the IRR exceeds the project's cost of capital (measured by the WACC), because in such circumstances the net present value of the project will be positive. ¹⁸⁶ This was recognized by Dr Flores himself in his direct examination. In his "Project B" example, the IRR of 30% exceeds a hypothetical cost of capital of 20%, meaning that the project is worthwhile. ¹⁸⁷ Through this example, Dr Flores acknowledged that the IRR and discount rate are simply not the same thing – contrary to his argument that a 20% WACC is reasonable for Guaracachi because the company might have expected a 20% IRR. The same truism is reflected in Guaracachi's own 2008 analysis of the profitability of its combined-cycle project, which clearly distinguishes between the IRR and the (significantly lower) discount rate for the project. ¹⁸⁸

158. In any event, the IRRs of certain projects to which Dr Flores made reference are wholly irrelevant to Guaracachi. IPSA Group plc's projects in South Africa and the Hichens Harrison & Co assessment of the combined-cycle conversion project pertain to greenfield projects. As discussed above, Guaracachi was an established utility company in May 2010, subject to substantially lower risks than a generic, unidentified greenfield project.

D. PROJECTIONS OF CAPACITY AND ENERGY DISPATCH

159. The key objective in the projection of cash flows forming part of a DCF is the simulation of a market transaction. This requires certain assumptions to be made, on the basis of sector and valuation experience. The valuator must assume future revenue streams just as an informed buyer or seller would have done at the relevant time, using all available information.

Claimants' Closing Presentation, slide 70.

Claimants' Closing Presentation, slide 71.

Claimants' Closing Presentation, slide 73; Minutes of the Meeting of the Board of Directors of Empresa Eléctrica Guaracachi S.A, 3 September 2008, **Exhibit C-162**, "Resumen".

See Letter from Hichens, Harrison & Co to Rurelec plc, Undated, **Exhibit EO-67**; IPSA Group plc, Pre-listing Statement, Undated, **Exhibit EO-63**.

See above, Section VI.B.

- 160. The way in which Compass Lexecon calculated capacity and dispatch was clear. Dr Abdala made the "judgment calls" about market expectations on the basis of his electricity-sector experience. MEC, and later EdI, carried out his instructions. 192
- 161. By contrast, the *modus operandi* for Bolivia's case on revenue projections remains opaque. It was revealed for the first time during the Hearing that Dr Flores and Mr Paz had telephone conversations and meetings to arrive at the assumptions underlying Dr Flores's model. Whether Dr Flores or Mr Paz was in fact responsible for developing the assumptions underlying Bolivia's valuation model remains unclear. At the Hearing, Dr Flores explained that he was unfamiliar with the electricity market and had to rely on Mr Paz's knowledge as a result. Indeed, it was revealed that Mr Paz was essentially responsible for selecting the information that was included in the projections, not Dr Flores. This is despite the fact that Dr Flores's reports give no indication that he was not ultimately responsible for developing Bolivia's assumptions, and he described Mr Paz's function as mechanical. As a result, Bolivia and its fact and expert witnesses seem unable to explain clearly how the assumptions were reached for their model.
- 162. Neither Mr Paz nor Dr Flores seemed to know or to understand whether Mr Paz functioned as an expert witness. ¹⁹⁸ Meanwhile, Mr Paz's precise status has an impact on the credibility of the assumptions underlying Dr Flores's valuation of Guaracachi. Mr Paz was not independent, and therefore was not qualified to act as

Compass Lexecon Rebuttal Report, ¶¶ 106-107.

¹⁹² Transcript (Spanish), Day 5, p 1328:4-7.

¹⁹³ Transcript (Spanish), Day 5, p 1519:14-21.

¹⁹⁴ Transcript (Spanish), Day 5, pp 1609:23-1610:22.

¹⁹⁵ Transcript (Spanish), Day 4, p 1195:12-22.

Econ One First Report, ¶¶ 19 and 24.

¹⁹⁷ Transcript (Spanish), Day 5, p 1610:19-22.

¹⁹⁸ Transcript (Spanish), Day 5, pp 1609-1610; Transcript (Spanish), Day 4, pp 1197:19-1198:3.

an expert in this case. In particular, it was in Mr Paz's interest to downplay the value of Guaracachi in May 2010 because it served the interests of his ultimate employer, the Bolivian State, in this arbitration. ¹⁹⁹

- 163. Whatever his precise role and motivations, Mr Paz created his own self-serving criteria for information to be incorporated into dispatch projections. In his written testimony, he insisted that information produced by the CNDC is the only information that a willing buyer and seller would ever consider in arriving at a price for a power generation enterprise. But under cross-examination Mr Paz was forced to expand his irrationally narrow test, accepting that "due diligence" and "technical studies" would also be relevant to market participants.
- 164. This change in approach was not unexpected, because Mr Paz had not in fact held to his purported information-selection rule. In particular, he excluded the Karachipampa plant from his projections, effectively assuming that it would be taken offline, although a CNDC document published just the day before the nationalization confirmed that the plant would remain online indefinitely. When faced with this inconsistency, Mr Paz insisted that the CNDC PMP was to be preferred over the Node Price Study in which this information on Karachipampa appeared. But the CNDC itself explains that Node Price Studies are no less reliable than the PMP for projection purposes. 203
- 165. In fact, the selection of information for inclusion in valuation models is much simpler than Mr Paz made it out to be. There is only one clear rule about the

¹⁹⁹ See Transcript (Spanish), Day 4, pp 1190:8-1191:17.

Paz Third WS, ¶ 48; Claimants' Closing Presentation, slide 76.

Transcript (English), Day 4, p 936:5-21; Transcript (Spanish), Day 4, pp 1203:15-1204:11; Transcript (English), Day 4, p 954:3-8.

CNDC, "May-October 2010 Node Prices", 30 April 2010, **Paz Annex 8**, p 10. At the Hearing, Mr Paz referred to counsel's instructions to exclude the plant as a mistake: Transcript (Spanish), Day 4, pp 1221:7-1223-4.

Transcript (Spanish), Day 5, p 1327:16-20. Mr Paz also disregarded his own (original) information-selection criterion by assuming (correctly) that the combined-cycle project would come online in November 2010, despite the fact that CNDC information (incorrectly) referred to a start date of May 2010. Transcript (Spanish), Day 4, p 1225:7-12. Cf CNDC, 2010-2020 POES, November 2009, **Paz Annex 40**, p 4.

information to be used for valuation assumptions. The Parties' experts agree that all information available to the market as of the valuation date should be taken into account.²⁰⁴ This may include, but will not be limited to, CNDC information. It will also encompass "due diligence",²⁰⁵ as Mr Paz admitted, which would normally reveal how the most recently-published CNDC POES diverges from reality. In other words, this exercise does not amount to a choice between the 2009 and 2010 POES. Transacting parties would select whatever information from these and other sources is most realistic in light of the circumstances and observable facts.

166. For example, a willing buyer and seller would have disregarded information presented in the 2009 POES about the Rositas hydroelectric plant, affecting their assumptions about future online capacity and dispatch. The project has been contemplated since at least 1973,²⁰⁶ and its actual start date has slipped yearly. It was clear from public sources that none of the projected 2010 project costs (US\$32 million) had been allocated or spent by the valuation date in mid-2010.²⁰⁷ As Dr Abdala explained,²⁰⁸ any reasonable observer would have concluded that the 2009 POES's prediction that Rositas would be operational in 2018 was unrealistic. Based upon the information that the market would have had at its disposal in May 2010, Dr Abdala considered that the plant's actual launch date was too speculative to include in dispatch models.²⁰⁹

Transcript (English), Day 5, p 1183:11-18. See also Transcript (English), Day 5, p 1077:21-24.

²⁰⁵ Transcript (English), Day 4, p 936:5-21; Transcript (Spanish), Day 4, pp 1203:15-1204:11.

Transcript (Spanish), Day 4, pp 1236:21-1237:3; Transcript (English), Day 5, p 1181:5-10; *Reporte Energia*, Magazine No. 7, January 2009, **Exhibit C-294**, p 12.

²⁰⁷ CNDC, 2010-2020 POES, November 2009, **Paz Annex 40**, p 9; CNDC, 2011-2021 POES, December 2010, **Paz Annex 39**, p 107; Claimants' Closing Presentation, slide 78.

²⁰⁸ Transcript (English), Day 5, pp 1078:19-25 and 1083:11-1084:8.

²⁰⁹ Transcript (English), Day 5, pp 1077:14-1079:8.

E. BENCHMARKS FOR GUARACACHI'S EQUITY VALUE

- 167. The Tribunal can draw confidence from the fact that Dr Abdala benchmarks his DCF valuation against results yielded by other methodologies.²¹⁰ Dr Flores has not even attempted to do this for his own null valuation.
- 168. At the Hearing, Dr Flores claimed for the first time that he had benchmarked his valuation, referring to the sale of Guaracachi in 2003 and 2006.²¹¹ These references cannot be characterized as the application of an alternative valuation methodology. They do not provide any comparable indication of Guaracachi's equity value at the appropriate time, nor any means to render the transactions comparable to the expropriation of Guaracachi in May 2010. When pressed, Dr Flores admitted that he had never attempted to calculate value using anything other than DCF methodology.²¹²
- 169. Dr Flores also acknowledged that the market multiple comparables methodology employed by Dr Abdala is an appropriate valuation tool.²¹³ In fact, Dr Flores has used it in previous valuations, ²¹⁴ but contended that no useful comparisons could be made in the present case because Bolivia presents a wholly unique business environment.²¹⁵ Dr Flores offered no authority or evidence for this remarkable contention, nor any explanation why adjustments could not have been made to the value of otherwise comparable companies to account for the specificities of the local economy.²¹⁶ Nor did he provide evidence that there were no comparable companies available to examine. In fact, Dr Flores did manage to identify comparable companies from other companies for the purposes of estimating working capital: in this context, Dr Flores used Professor Damodaran's company

Compass Lexecon First Report, ¶¶ 99-105; Compass Lexecon Rebuttal Report, ¶¶ 25-52.

²¹¹ Transcript (Spanish), Day 5, pp 1598:24-1599:2.

²¹² Transcript (Spanish), Day 5, p 1599:3-9.

²¹³ Transcript (Spanish), Day 5, p 1599:13-14.

²¹⁴ Transcript (Spanish), Day 5, p 1599:14-15.

Transcript (Spanish), Day 5, pp 1600:25-1601:2.

²¹⁶ Transcript (Spanish), Day 5, p 1601:12-14.

database without comment or complaint.²¹⁷ Although he claimed that there was insufficient information in the database to conduct a fuller benchmarking valuation,²¹⁸ Professor Damodaran's database provides ample material (including financial ratios) for the derivation of useful comparisons with Guaracachi.²¹⁹

- 170. Another benchmark that the Tribunal has at its disposal is Guaracachi's 2009 book value of US\$133.7 million. Dr Flores himself used this figure to classify Guaracachi's equity value for the purpose of setting his size premium. Contrary to Dr Flores's suggestion, book value tends to underestimate company value, because it is a backward-looking measure. It cannot account for the value of future opportunities, such as the profitability that was soon to be expected from the combined-cycle project.
- 171. Naturally, there will be some discrepancy between a company's book value and its market value. It is for this reason that Dr Abdala used book value only as a "sanity check". But the book value of a company, based on strict accounting rules, is nevertheless intended to provide accurate information to the market that reflects the economic reality of the company. Indeed, Bolivia imposed the UFV adjustment on book value (which Dr Flores suggests render Guaracachi's adjusted 2009 accounts unreliable) to *correct* the distortion in value of corporate assets that had been caused by high inflation in the country. 224

Transcript (Spanish), Day 5, pp 1603:17-1604:1; Econ One First Report, ¶ 85.

²¹⁸ Transcript (Spanish), Day 5, p 1604:9-11.

Extract of data on companies in emerging countries published by Damodaran in 2010, **EO-32**.

Econ One First Report, p 30, fn 109.

Econ One Second Report, ¶ 52.

²²² Compass Lexecon First Report, ¶ 55.

See Compass Lexecon First Report, ¶ 55; Compass Lexecon Rebuttal Report, ¶ 26.

See Transcript (English), Day 4, 797:1-11. Even adjusting for the effect of the 2007 and 2009 accounting changes, Guaracachi's book value remains inconsistent with Dr Flores's negative equity valuation.

F. IMPLIED RETURN OVER TIME AND PRIOR SALES OF EQUITY

- 172. Bolivia and Dr Flores have suggested that the rate of return on the Claimants' original investment implicit in an award of the Tribunal in the amount of US\$77.5 million would be unrealistic, confirming that the damages claim is exaggerated. This is simply not the case. It was immediately recognized that Guaracachi was worth substantially more than the US\$35 million that the Claimants paid to acquire it. According to an independent valuator, Rurelec's stake in Guaracachi's assets was worth approximately US\$61.88 million in 2006. On this basis, and accepting Dr Abdala's 2010 valuation as correct, the Claimants' investment grew in value by approximately US\$15.62 million over a four-year period, yielding an annualized return of just 6%. This return is particularly modest given the significant additional investments that Guaracachi made.
- 173. Bolivia has also suggested that sales of Guaracachi shares prior to the Claimants' acquisition (both transactions carried out at a loss for the seller) are impossible to reconcile with the increase in value posited by the Claimants for the 2006-2010 period. As Mr Earl explained, Bolivia's capitalization program was very successful. The investments committed and made by the capitalized companies in the early 2000s brought new capacity online that was not immediately needed. This resulted in the rapid growth of the capacity reserve from less than 5% on capitalization to over 30% by 2002, a fall in capacity prices, and ultimately lower profits for generators. Guaracachi's prior owners, including GPU and Integrated Energy, were negatively affected by this situation. 229
- 174. By 2006, however, the reserve margin had begun to fall as increasing demand outpaced new investment. The Claimants pursued a strategy of intense

²²⁵ Transcript (English), Day 2, pp 376:12-377:17.

See 2006 Annual Report of Rurelec plc, **Exhibit C-113**, pp 59 and 69.

Reply on the Merits, ¶ 194.

²²⁸ Transcript (English), Day 2, p 377:18-25.

²²⁹ Transcript (English), Day 2, pp 377:18-378:8.

investment, with the goal of displacing Guaracachi's competitors and obtaining higher spot prices. ²³⁰ By the nationalization date, Guaracachi was a highly successful company that was radically different from the one acquired by the Claimants, and one whose fortune was only to improve with the addition of 185MW of capacity in 2012. Bolivia is still reaping the rewards of the Claimants' investments, as evidenced by Guaracachi's 2011 profits of US\$12.6 million. ²³¹

G. SPOT-PRICE CLAIM

175. Dr Flores's calculation of actual pre-nationalization spot-price revenues is demonstrably flawed, as he failed to rely on accurate historical data. Dr Flores based himself on Mr Paz's characterization of the calculations that he had requested from the CNDC.²³² Although Mr Paz was of the view that the CNDC's calculations were based on historical data,²³³ the CNDC had in fact made projections. Indeed, Mr Jaldín Florero of the CNDC confirmed at the Hearing that the CNDC's calculations could not possibly correspond to actual historical prices.²³⁴ As a consequence, Dr Flores's valuation of pre-nationalization spot-price losses is out of keeping with the historical reality, and cannot be relied upon by the Tribunal. So, too, must Dr Flores's calculations for the post-nationalization period, as he relied directly on the pre-nationalization figures of the CNDC to calculate post-nationalization spot price revenues.²³⁵ Dr Flores himself acknowledged that a defect in his pre-nationalization valuation would require this result.²³⁶

²³⁰ Transcript (English), Day 2, pp 295:25-298:1.

See 2011 Annual Report of Empresa Eléctrica Guaracachi S.A, Exhibit C-224, p 4.

Transcript (Spanish), Day 5, p 1613:4-16. See Letter from EGSA to the CNDC, 11 June 2012, Paz Annex 42; Letter from the CNDC to EGSA, 3 July 2012, Paz Annex 43.

²³³ Transcript (Spanish), Day 4, pp 1245:24-1246:9.

Transcript (Spanish), Day 5, p 1319:9-18; Claimants' Closing Presentation, slide 79.

Transcript (Spanish), Day 5, p 1615:16-21. Mr Paz explained that he had not thought to ask the CNDC to project the post-nationalization spot price losses: Transcript (English), Day 4, p 1248:9-17. Dr Flores, on the other hand, said he had asked Mr Paz, but it was determined that "it wasn't worth it": Transcript (Spanish), Day 5, pp 1615:22-1616:9.

²³⁶ Transcript (Spanish), Day 5, pp 1616:25-1617:4.

H. INTEREST

- 176. The Claimants reiterate that an interest equivalent to Guaracachi's WACC is the only route to full compensation. Applying the WACC as an interest rate ensures that the Claimants are compensated for their lost opportunity to invest the compensation to which they were entitled for Bolivia's Treaty breaches. The Tribunal in *ConocoPhillips v PDVSA* has recently confirmed the logic of the principle that the interest rate should be "a reasonable proxy for the return the Claimants could otherwise have earned on the amounts invested and lost". For ConocoPhillips, that was the cost of equity of 10.55%, as the company in question carried no debt. For Guaracachi, the equivalent figure is Dr Abdala's WACC of 10.63%.
- 177. The Claimants also emphasize that the Tribunal should award compound interest, in line with the *jurisprudence constante* to this effect in international investment law.²³⁹

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Compañía de Aguas del Aconquija S.A. and Vivendi Universal (formerly Compagnie Générale des Eaux) v. Argentine Republic (ICSID Case No. ARB/97/3), Award, 20 August 2007, Exhibit CL-45, ¶ 9.2.8; Reply on the Merits, ¶ 216.

Phillips Petroleum Company Venezuela Limited (Bermuda) and ConocoPhillips Petrozuata B.V. (The Netherlands) v. Petroleos de Venezuela, S.A. (Venezuela), ICC (Arbitration Case No. 16848/JRF/CA), Final Award, 17 September 2012, Exhibit CLA-177, ¶ 294-296.

Gemplus SA v. United Mexican States (ICSID Case No ARB(AF)/04/3 & ARB(AF)/04/4), Award, 16 June 2010, Exhibit CLA-67, ¶¶ 16-26.

VII. THE CLAIMANTS' REQUEST FOR RELIEF

- 178. On the basis of the foregoing, without limitation and fully reserving its right to supplement this request, the Claimants respectfully request the following relief:
 - (a) DECLARE that Bolivia has breached the Treaties and international law, and in particular, that it has:
 - expropriated the Claimants' investments without prompt, just, adequate and effective compensation, in violation of Article III of the US Treaty and Article 5 of the UK Treaty and international law;
 - (ii) failed to accord the Claimants' investments fair and equitable treatment and full protection and security, and impaired them through unreasonable and discriminatory measures, in violation of Article II.3 of the US Treaty and Article 2(2) of the UK Treaty; and
 - (iii) failed to provide the Claimants with effective means of asserting claims and enforcing rights with respect to covered investments, in violation of Article II.4 of the US Treaty and Article 3 of the UK Treaty.
 - (b) ORDER Bolivia to compensate the Claimants for Bolivia's breaches of the Treaties and international law in the amount of US\$136.4 million, plus interest until full payment of the award is made;
 - (c) AWARD such other relief as the Tribunal considers appropriate; and
 - (d) ORDER Bolivia to pay the costs of these arbitration proceedings, including the fees and expenses of the Tribunal, the fees and expenses of the institution which is selected to provide appointing and administrative

services and assistance to this arbitration, the fees and expenses relating to the Claimants' legal representation, and the fees and expenses of any expert appointed by the Claimants or the Tribunal, plus interest.

Respectfully submitted on 31 May 2013

Freshfields Bruckhaus Deringer

Nigel Blackaby Noah Rubins Caroline Richard Jeffery Commission Francisco Abriani Belinda McRae

Monday

for the Claimants