

IN THE MATTER OF AN ARBITRATION UNDER THE TREATY BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE REPUBLIC OF BOLIVIA CONCERNING THE ENCOURAGEMENT AND RECIPROCAL PROTECTION OF INVESTMENTS

-and-

THE AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND AND THE GOVERNMENT OF THE REPUBLIC OF BOLIVIA FOR THE PROMOTION AND PROTECTION OF INVESTMENTS

-and-

THE ARBITRATION RULES OF THE UNITED NATIONS COMMISSION ON INTERNATIONAL TRADE LAW (UNCITRAL)

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 In the Matter of Arbitration :
 Between: :
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 GUARACACHI AMERICA, INC. (U.S.A.) and :
 RURELEC PLC (UNITED KINGDOM), :
 :
 Claimants, : PCA Case No. 2011-17
 :
 and :
 :
 PLURINATIONAL STATE OF BOLIVIA, :
 :
 Respondent. :
 :
 - - - - - x Volume 5

HEARING ON THE MERITS

Monday, April 8, 2013

International Chamber of Commerce
112 avenue Kleber
Bosphorus Conference Room
Paris, France

The hearing in the above-entitled matter came on, pursuant to notice, at 8:37 a.m. before:

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- MR. MANUEL CONTHE, Arbitrator
- PROF. RAÚL EMILIO VINUESA, Arbitrator

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1 P R O C E E D I N G S

2 PRESIDENT JÚDICE: Good morning, everyone. I think
3 the four of you speak Spanish; correct? So, we're going to do
4 this in Spanish, but perhaps some of the issues here will be
5 dealt with in English, so there is going to be translation.

6 We would like to apologize because we weren't able to
7 discuss things with you on Friday, so you had to spend the
8 weekend in Paris, quite a sad thing, but thank you very much
9 for your assistance to the Tribunal.

10 For the record, the Tribunal would like to state for
11 the record that it has called upon the entities that have
12 cooperated with experts of Claimants and Respondents, this
13 according to the desire by the Respondent to talk to MEC now
14 called Estudios de Infraestructura in connection with the
15 forecast that constitutes the basis of the calculations made by
16 Compass Lexecon.

17 In this regard, the Procedural Order Number 6 stated
18 that the Parties were going to examine the representatives of
19 these companies. The Parties were going to first examine these
20 individuals, and then the Tribunal is going to ask questions.

21 I would like to ask the Parties if they would like to
22 start with the examination of these individuals, or if what
23 Mr. García Represa and Mr. Blackaby stated are still their
24 intention.

25 MR. SILVA ROMERO: In connection with Bolivia,

08:39 1 Mr. President, I think that the agreement that was arranged
2 with the Tribunal is fine.

3 MR. RUBINS: I'm Mr. Rubins, although I'm flattered by
4 the comparison with Mr. Blackaby.

5 We feel it's perfectly appropriate for the Tribunal to
6 start with its questions.

7 PRESIDENT JÚDICE: Okay. Thank you very much.

8 HERNÁN JALDÍN FLORERO, ÁNGEL TARIFA BERNAL, ALEJANDRO PARODI,

9 DANIEL LLARENS, WITNESSES, CALLED

10 PRESIDENT JÚDICE: We're going to start our
11 examination.

12 The intention of this examination is that these
13 witnesses cover very briefly the bases and the assumptions they
14 used in order to conduct the evaluations in the simulation
15 models. We have time, all the time that you need, but we're
16 going to ask you that you provide brief answers whenever
17 possible.

18 We're going to ask questions of the three
19 institutions. Some of questions are the same for both
20 institutions, and some of them are different.

21 We're going to talk first with CNDC because everything
22 is borne of the CNDC.

23 The first question is where you have given MEC and
24 EdI--has CNDC given information?

25 I'm sorry, I was forgetting that there is a witness

08:40 1 declaration that has to be read. Each of you needs to read the
2 statement.

3 You have to read the Declaration.

4 THE WITNESS: (Mr. Jaldín Florero) I solemnly declare
5 upon my honor and conscience that I shall speak the truth, the
6 whole truth, and nothing but the truth, and my statement will
7 be in accordance with my sincere belief. My statement will be
8 to the best of my knowledge and belief.

9 THE WITNESS: (Mr. Tarifa Bernal) I solemnly declare
10 upon my honor and conscience that I shall speak the truth, all
11 the truth, and nothing but the truth and that my statement will
12 be in accordance with the best of my knowledge and belief.

13 THE WITNESS: (Mr. Parodi) I solemnly declare upon my
14 honor and conscience that I shall speak truth, the whole truth,
15 and nothing but the truth and that my statement will be to the
16 best of my knowledge and belief.

17 THE WITNESS: (Mr. Llarens) I solemnly declare upon my
18 honor and conscience that I shall state the truth, the whole
19 truth, and nothing but the truth and that my statement will be
20 to the best of my knowledge and belief.

21 PRESIDENT JÚDICE: Thank you very much.

22 The questions will be posed now. I would like for you
23 to identify yourself.

24 (Pause.)

25 PRESIDENT JÚDICE: Excuse us for this short delay.

08:45 1 The first questions are going to be posed to the CNDC.

2 The first the question is the following:

3 The CNDC has given MEC, EdI, and Mr. Paz information
4 from your system, from your organization?

5 THE WITNESS: (Mr. Jaldín Florero) No, we have not
6 provided any information, but the data and the results of the
7 operations of the CNDC are available in its Web page for all
8 the market agents.

9 PRESIDENT JÚDICE: Thank you very much.

10 I think Mr. Paz has requested information--for that
11 information to be prepared by CNDC. Do you confirm this?

12 THE WITNESS: That has to do with results of some
13 calculations that Guaracachi requested of us, but the data is
14 available on the Web page.

15 PRESIDENT JÚDICE: Apart from everything that's
16 available and can be used by whoever wants to use that
17 information, you have provided information to Mr. Paz but not
18 to MEC and not to EdI.

19 THE WITNESS: (Mr. Jaldín Florero) Yes, not to MEC and
20 not to EdI.

21 PRESIDENT JÚDICE: If I understand correctly, the
22 information that is available is available for studies for MEC
23 and for Bolivia and for Guaracachi, and it's also available to
24 any entity that would like to access to that data?

25 THE WITNESS: (Mr. Jaldín Florero) Part of the

08:47 1 information is open to the public, and part of the information
2 is only available for the market agent.

3 PRESIDENT JÚDICE: Okay, for the market agent.

4 THE WITNESS: (Mr. Jaldín Florero) So, EdI and MEC are
5 not agents. EdI and MEC are not agents of the electricity
6 market.

7 PRESIDENT JÚDICE: So, perhaps some of the information
8 is not available to them?

9 THE WITNESS: (Mr. Jaldín Florero) Not all the
10 information is open to the public.

11 PRESIDENT JÚDICE: Very well. Do you know whether the
12 information used by MEC, by EdI, and by Guaracachi or by the
13 State of Bolivia would have been the same because you haven't
14 provided those data?

15 THE WITNESS: (Mr. Jaldín Florero) No, I don't know
16 that.

17 PRESIDENT JÚDICE: The software used is SDDP and NCP,
18 Nuevo Corto Plazo. This software has been used to look at the
19 demand and all the expected availability, or does the software
20 apply only actual data?

21 THE WITNESS: (Mr. Jaldín Florero) Demand and
22 availability are information that is prepared without using
23 those models. These models used as data demand and
24 availability. What these models do is to optimize hydrothermal
25 dispatch, so SDDP is the model that we use. We call that a

08:49 1 medium term for four years, and SDDP is a short-term model.

2 PRESIDENT JÚDICE: Like the name indicates.

3 THE WITNESS: (Mr. Jaldín Florero) Yes.

4 PRESIDENT JÚDICE: And are these models that use real
5 data, or they use forward-looking data?

6 THE WITNESS: (Mr. Jaldín Florero) These models use
7 forward-looking data.

8 PRESIDENT JÚDICE: They're used for forecasting actual
9 data, or are they a study that don't use other data?

10 THE WITNESS: (Mr. Jaldín Florero) These models are
11 not to be used with actual data. They are forward-looking.
12 They are related to the operations going forward. So, for the
13 medium term, what we'd do is we would conduct a forecast for
14 the following four years, and for the SDDP model we'd it one
15 week ahead. For the week ahead is what I'm trying to say.

16 So, if we're talking about the short-term operations
17 scheduling or the medium-term operation schedule, I have to
18 have as entered data the forecast demand and the maintenance
19 data that has been forecasted. But the model is not being
20 adopted in connection with actual data or it has nothing to do
21 with the future--sorry, has nothing to do with the past.

22 It has nothing to do with the past. The update is
23 done in the short term, and then we conduct the weekly
24 scheduling, and we do this from Saturday onwards. So, on
25 Monday I conduct the update of the best information that's been

08:51 1 forecast.

2 PRESIDENT JÚDICE: The actual data is being used for
3 the forecast that you conduct?

4 THE WITNESS: (Mr. Jaldín Florero) Yes, for demand,
5 but in connection with maintenance, agents have the
6 information; when they conduct the forecasts from Monday
7 through Tuesday, they have the information.

8 PRESIDENT JÚDICE: What about the long term? Is it
9 the same thing?

10 THE WITNESS: (Mr. Jaldín Florero) For the long term,
11 we conduct two yearly studies, every six months. For that
12 study, it becomes current May 1st and November 1st, and then
13 the statements are conducted February 10 and August 10. And
14 with the information that was declared for the agents on
15 10 February, we do the scheduling for the operation that's
16 going to become current as of March 1st for four years, and the
17 same thing happens with the declarations for 10 August. That
18 is going to become current as of November 1st.

19 PRESIDENT JÚDICE: Thank you.

20 We have information that Mr. Paz requested information
21 from June '08 to April 2010 with or without the amendment of
22 operational Rule Number 3 in connection with Spot Prices, and
23 then a historical study has been conducted. That study, is it
24 based on historical data or on actual data, or rather--or an
25 estimated data?

08:52 1 THE WITNESS: (Mr. Jaldín Florero) What has happened
2 is that the study was conducted on the basis of current Node
3 Prices, so we studied the prices with or without the Decree.
4 This price variation was applied to the actual data that came
5 from the relevant semester's operation.

6 As I told you, the Node Price studies have a currency
7 of six months, as I said. So, we have seen the price
8 variability with and without the Decree, and we conducted the
9 corrections or the variations on the basis of the work done.

10 PRESIDENT JÚDICE: This is the last question I have on
11 behalf of the Tribunal, and the lawyers may have other
12 questions.

13 Has there been any study conducted about the impact on
14 the Stabilization Fund, and what criteria has been used?

15 THE WITNESS: (Mr. Jaldín Florero) Yes, we found the
16 same variation, and that variation was introduced to the
17 variation in the Stabilization Fund.

18 PRESIDENT JÚDICE: Now, for MEC and EdI, I'm going to
19 ask the questions of both of you, and MEC can answer this
20 because MEC worked on this first, but either of you can answer.

21 Have you given Compass Lexecon's information for
22 Compass Lexecon to be able to prepare their Expert Witness
23 Statements?

24 THE WITNESS: (Mr. Llarens) Yes.

25 PRESIDENT JÚDICE: Did you use CNDC data or other

08:54 1 data?

2 THE WITNESS: (Mr. Llarens) basically we used CNDC
3 data.

4 PRESIDENT JÚDICE: Basically, that means that you also
5 used other data?

6 THE WITNESS: (Mr. Llarens) Well, all the data are
7 CNDC data, those in connection with the scheduling of the
8 operation, and also the POES prepared by them.

9 PRESIDENT JÚDICE: Another question: Have you changed
10 the data of CNDC or you submitted them in the way that you have
11 received them or you organized them in a manner that was
12 understandable for Mr. Abdala?

13 THE WITNESS: (Mr. Llarens) No, no changes on the
14 information provided to us by CNDC.

15 PRESIDENT JÚDICE: I also have questions for you, sir.

16 Your reports, were they based on the CNDC data, or
17 were they based from data from other sources?

18 THE WITNESS: (Mr. Parodi) Only based on the
19 information provided to me, Mercados Energéticos.

20 PRESIDENT JÚDICE: Have you or have you not made
21 changes to the information received by the CNDC--received from
22 the CNDC?

23 THE WITNESS: (Mr. Jaldín Florero) No, none
24 whatsoever.

25 PRESIDENT JÚDICE: I have different questions for you.

08:56 1 Could you please summarize briefly the assumptions
2 that Compass Lexecon requested to be applied by MEC in the
3 reports? Mr. Abdala said that he requested some things. Could
4 you please clarify.

5 THE WITNESS: (Mr. Llarens) The work that we conducted
6 with Compass Lexecon included two periods, the historical
7 period August '08 to mid-2010, and a forward-looking assessment
8 of the market. These are two different tasks because in one of
9 them we analyzed what actually happened on the basis of
10 historical data, and the other task has to do with an estimate
11 of what may happen in the future on the basis of the best
12 knowledge that one had at the time in connection with market
13 variables.

14 These two tasks has to do with different tools and
15 different criteria, and different calculations.

16 We gave Compass the ability to conduct the
17 simulations, and we also provided our understanding on how the
18 wholesale market works in Bolivia.

19 So, we structured our calculations. First we
20 conducted a test stage to make sure that everything worked
21 correctly. We conducted a large number of simulations to make
22 sure that everything worked correctly, and once everything was
23 adjusted and we understood that this showed a reasonable
24 scenario on the basis of our knowledge of the Bolivian
25 situation, we conducted simulations to provide the results that

08:58 1 Compass Lexecon had asked of us. The results that we were
2 asked had to do with the historical period. They wanted us to
3 determine the marginal cost of energy in Bolivia if the Decree
4 had not been enforced because the Aranjuez unit was a candidate
5 to provide marginal cost, and it got annulled later, the
6 Aranjuez unit D.

7 And then we conducted the calculations for the
8 historical period August 2008 and mid-2010. We operated the
9 system every 15 minutes. The operation of the system showed
10 that the natural gas in Bolivia was insufficient to meet
11 demand, and the marginal unit was Aranjuez diesel, according to
12 our determination, and the new marginal cost of the system
13 without the application of the Decree was calculated.

14 So, you have to do an assessment that is two years
15 long in 15-minute integrals, and this has nothing to do with
16 the programming and estimation, and has to deal with real data
17 from the system. We did this every 15 minutes to be able to
18 determine the marginal cost variation. This is what we did for
19 the historical period. Now, in the forward-looking period, the
20 situation is much more complex.

21 You have to analyze 10 years of operations; and,
22 according to the capacities of the simulation models, as you
23 were mentioning, we used SDDP as the simulation model, we used
24 the maximum capacities for the simulation, and we had to
25 conduct tests according to different scenarios, and we had to

09:00 1 adjust databases to the information that we had. The CNDC
2 data, in connection with the SDDP, are limited. They're time
3 limited. They only deal with four years into the future, and
4 they contain data that need to be corrected to represent a
5 longer period of time. In this case we wanted to conduct
6 simulations until 2018.

7 So, we had to adjust the SDDP databases for the whole
8 period going from 2011 to 2018 both in the generation part in
9 demand and in other technical aspects of the database.

10 So, we had to adjust the databases so that they
11 represent not a short term, four years, but rather a longer
12 period of time, nine years.

13 So, this meant that we had to include much more
14 information into the database. This information was not
15 originally in the database. We had to add it to the database.

16 The data source that we used was the POES from
17 Bolivia. The POES contains information that is aggregated,
18 that is not very detailed, but it includes sufficient
19 information, and this information has to be entered in the
20 simulation models, but you have to follow a certain structure
21 in order to be able to structure the data.

22 So, we structured this database that went until 2018;
23 and, once we did this in a reasonable scenario for this
24 valuation, we conducted the simulations that were
25 forward-looking in nature. This forward-looking simulation

09:02 1 provided a large amount of results. The future ultimately is
2 something that depends on statistical variables. No one knows
3 how much rain is going to take place in the future. So, this
4 depends on the different weather conditions or hydrological
5 conditions.

6 So, we had to choose the information that was useful
7 for calculation purpose and the useful data is dispatch, how
8 much energy is generated by EGSA units and what the marginal
9 costs are to value that energy.

10 The results for Compass Lexecon was a dispatch of the
11 generation units marginal costs to value energy and the
12 consumption of fuel that results from this generation dispatch.

13 Generation dispatch also involves something called the
14 economic dispatch. It's called economic dispatch because it
15 involves a minimum cost, but then you have forced dispatch that
16 is required because of other operational conditions in the
17 system, and we also provided Compass with these variables. We
18 did this applying the Decree and then without the application
19 of the Decree. And this was the process that we followed, and
20 we calibrated the models, we tested the models, we adjusted the
21 databases, once everything was done, we provided the results
22 that were requested of us by Compass.

23 PRESIDENT JÚDICE: Thank you very much.

24 Now, I have two questions for you. The first one is
25 the following one. You started to work on this after MEC, and

09:04 1 there is data in the proceeding that indicates that Mr. Abdala
2 has requested simulations based on some comments or criticism
3 by Econ One, the other Expert from the other side, but you have
4 also accepted data prepared by MEC or you have changed the
5 data. What is the situation?

6 THE WITNESS: (Mr. Parodi) I used the model that was
7 calibrated by Mercados Energéticos. There was no change to it.
8 I did not change the model or the databases.

9 PRESIDENT JÚDICE: So, you continue with the work as
10 if it were MEC, but you just included some simulations to help,
11 I guess, Mr. Abdala, Compass Lexecon to present situations
12 based on some comments of the other Expert?

13 THE WITNESS: (Mr. Jaldín Florero) Correct.

14 PRESIDENT JÚDICE: Second question: In addition to
15 this, what type of work have you conducted to help Compass
16 Lexecon?

17 THE WITNESS: (Mr. Parodi) No other work.

18 PRESIDENT JÚDICE: So, these are the questions by the
19 Tribunal, and now the Parties may ask questions from the point
20 of view of the Tribunal without limitations. And I know that
21 the Parties have said or they agreed that they are not going to
22 ask anything beyond what is related to these issues, but for
23 the Tribunal, the Parties have the full right to ask as many
24 questions as they want. Thank you very much.

25 Who will be the first one?

09:06 1 MR. RUBINS: Thank you, Mr. President.

2 I'm just passing out the exchange of letters from
3 Mr. Paz of EGSA to the CNDC and the letter back from the CNDC
4 to EGSA, and it's only about this that I'd like to clarify.

5 First, gentlemen, and I suppose it matters relatively
6 little which of you answers the question. I assume you both
7 know the answers. Only one of you need to answer the question.

8 EXAMINATION BY COUNSEL FOR CLAIMANTS

9 BY MR. RUBINS:

10 Q. Do you recognize these two documents?

11 A. (Mr. Jaldín Florero) Yes, we do recognize them.

12 Q. Okay. If you look at the request from Guaracachi, you
13 can see what Mr. Paz asked for, and you can see in the middle
14 of the page, in the middle of the paragraph it says--he asks
15 you to, and I will I will read it in Spanish because that's all
16 there is--"to develop two impact studies regarding marginal
17 cost, nodal prices, and revenue for the energy that's expected
18 for EGSA."

19 And I'd like to know if when you received this you
20 understood Mr. Paz to be asking you for purely historical data
21 or some form of past projections, for example, a projection of
22 expected Spot Prices and resulting revenues as of, let's say,
23 2008 for the 2008 to 2010 period, for example. Which of those
24 did you understand him to be asking you for?

25 A. (Mr. Jaldín Florero) What we understood is what we

09:09 1 did; that to say, we understood what the impact would be if the
2 Decree had not been passed; that is to say, the situation with
3 and without Decree. And, with that understanding, we developed
4 both pieces of work on the nodal prices, the current one, and
5 we understood that we had to use actual data there. That is
6 what we understood in our letter. So, that is to say, the
7 letter is a result of what we understood from Mr. Guaracachi's
8 request.

9 Q. Now turning to your study, if we turn to the second
10 page and we see the table, the first table on that page, on the
11 left side, the title of this table in Spanish is "Energy price
12 taking into account the estimation of Node Prices."

13 Do you see that?

14 A. Yes, yes, I can see that.

15 Q. In the actual scenario in your study, that is to say,
16 with the actual Spot Price regime in place, is the Node Price
17 also an estimation in this table?

18 A. (Mr. Jaldín Florero) This table has to do with the
19 Node Price studies, both studies with Decree and without
20 Decree; and, in this table, we did not have actual data.

21 Q. Okay.

22 A. (Mr. Jaldín Florero) That's what you see in the title
23 itself.

24 And as I explained before, this is the table that
25 allowed us to establish the impact of the Decree, and this is

09:11 1 the table that has to do with the variation with and without a
2 decree based on Node Prices.

3 Q. So, looking at the first line underneath the title,
4 "Marginal cost with DS number," et cetera, the Spot Price
5 revenues with the supreme Decree in place, these prices are not
6 historical prices; correct?

7 A. (Mr. Jaldín Florero) They're not historical prices.
8 Once again, it's the second time I say that. These are the
9 studies of Node Prices. It says--the title says "cost of
10 energy taking into account the estimation of Node Prices."

11 Q. Right.

12 So, it's not surprising that this is the actual
13 scenario. This is with the change in Spot Price regulation in
14 place. It's not surprising that these numbers do not
15 correspond to the historical Node Prices for that period;
16 correct?

17 A. (Mr. Jaldín Florero) It is impossible for something
18 that is expected to correspond to the actual historical price.

19 Q. That sounds right to me.

20 And you understand that the difference between the
21 results of the impact of the change in Spot Price regime
22 between your study and the results acquired by MEC are the
23 results of that, the fact that these are not historical prices?
24 Do you understand that?

25 A. (Mr. Jaldín Florero) What I can understand is that

09:14 1 CNDC has experience in estimating sensitivities, and we have
2 models that are recognized by the market; and, throughout the
3 study period by CNDC, projections are made for prices.

4 And in addition to that, there is a seasonal study
5 where it is--where the differences are indicated between what
6 actually happened and the expected information, and the
7 variation level is below 5 percent. Based on CNDC's periods,
8 this price variation was established to actually apply to real
9 prices, to actual prices.

10 Q. Understood. But I think now we've clarified the
11 nature of the information that Mr. Paz used which was, as you
12 say, an estimation based on expectations at the beginning of
13 the period that was surveyed; right?

14 A. Yes, that is correct.

15 My colleague is adding that this variation, price
16 variation, was applied to what actually happened in those six
17 months. That is clear. That is what we said from the very
18 beginning.

19 Q. Just for the record, the documents that we have been
20 looking at were Annex 42 and Annex 43 of Mr. Paz's first--of
21 his statement. I guess they're all numbered sequentially. And
22 that is all I have to ask. Thank you.

23 Thank you very much, gentlemen. You have been very
24 helpful.

25 PRESIDENT JÚDICE: Thank you very much, Mr. Rubins.

09:16 1 Now I give the floor to the attorneys of the
2 Respondent. Mr. García Represa?

3 MR. SILVA ROMERO: Yes, Mr. President. Both of us
4 will be asking question, and my colleague with start with the
5 questions.

6 EXAMINATION BY COUNSEL FOR RESPONDENT

7 BY MR. GARCÍA REPRESA:

8 Q. I would like to begin with a question directed to the
9 CNDC people just to get some examples about what was mentioned.
10 You responded to the Tribunal software SDP--SDDP--and we
11 understand that this has a time restriction, and you cannot
12 make any projections beyond eight or nine years; is that
13 correct?

14 A. (Mr. Jaldín Florero) No, it's not. SDDP was used with
15 weekly representations, and back then, demand was represented
16 in three block periods. But for long-term studies, the
17 representations are taken into account monthly demand, and
18 that's when we used the SDDP for over four years.

19 Q. So, you can use it, for example, for over 10 years
20 with projections clearly?

21 A. (Mr. Jaldín Florero) CNDC has done that, with that
22 simulation, for 10 years. You need to think of monthly stages.

23 Q. And you also mentioned to answer my colleague's
24 questions--

25 PRESIDENT JÚDICE: I don't know if this is very clear

09:18 1 in the transcription. You said that for over 10 years you have
2 done or you have not done?

3 THE WITNESS: (Mr. Jaldín Florero) We have included
4 projections up to the latest POES update. We have done 2013 to
5 2025 to address the patriotic agenda mentioned by President
6 Morales.

7 BY MR. GARCÍA REPRESA:

8 Q. And you also mentioned how you had estimated the
9 historical damages based on Spot Prices, Decree 25,999.

10 Now, if the Tribunal ordered the annulment of that
11 operational standard Rule Number 3, would you do anything
12 different from what you have done in this arbitration?

13 A. (Mr. Tarifa Bernal) Your question is not very clear.

14 Q. In case the annulment of Supreme Decree was declared,
15 the Decree that actually established the dual units as
16 candidates for marginal costs, the economic liquidation would
17 be different in this case?

18 A. (Mr. Tarifa Bernal) Well, no, it wouldn't.

19 Let's imagine that there is an annulment of this
20 Decree. The market is already consolidated; that, on the one
21 hand, we need to have a very clear provision to introduce
22 adjustments based on the same abrogation of the Decree. But if
23 that was the case, the estimation methodology should be the
24 same.

25 Q. Thank you. And I have the last question for you. I

09:20 1 don't know who is in a better position to answer my question.

2 You mentioned two studies that cover six months, and I
3 have two questions. I understand that you were referring to
4 the PMP or midterm programming or planning.

5 A. (Mr. Jaldín Florero) Well, we have done this based on
6 Node Prices rather than medium term.

7 But I would like to clarify that the Node Price
8 studies is part of the Node Price studies.

9 Q. But I'm not referring to historical data. I am
10 thinking of future projections, and you mentioned that for
11 future projections, long-term future projections, CNDC has
12 six-month studies. Is that what you call midterm programming
13 or PMP?

14 A. Yes.

15 Q. And you also said that the Node Price study is an
16 extract from the PMP, and I don't know if you know, but the
17 Tribunal has been asked to take into account the Node Price
18 that was current as of the date of nationalization that
19 banned--that expected the operation of the Karachipampa unit
20 during the following six months and also the Node Price Report
21 in which it shows that Karachipampa was withdrawn in
22 August 2010. Could you explain to us why there was this
23 difference, and also what would be the term used in the
24 documents?

25 A. (Mr. Jaldín Florero) Well, based on the current

09:22 1 regulation in Bolivia, the Node Price report is based on the
2 first half of the year prices, and the PMP should be presented
3 first to the electricity authority, the regulator, up to
4 September 15 or March 15. Node Price studies are results that
5 come up after the observations by the regulator.

6 So, to the PMP published by CNDC, modifications are
7 introduced based on the modifications that could be introduced
8 by the agents or the regulator.

9 The final Node Price result is based on the database
10 that covers the four years for the medium term. So, the medium
11 term, the database is corrected based on the observations by
12 the agent or the regulators. For us, Node Prices come from the
13 midterm database.

14 Q. And those Node Prices are current only for six months;
15 correct?

16 A. (Mr. Jaldín Florero) Well, even though the past
17 horizon is for four years, the Node Price report for six months
18 is only current for six months, and it has not been renewed.

19 Q. And for the long term, which one would you choose?
20 The PMP or the Node Price report?

21 A. (Mr. Jaldín Florero) Once again, for me, it's the
22 same.

23 MR. SILVA ROMERO: Mr. President, now I have some
24 questions for MEC's representative, Mr. Llarens.

25 BY MR. SILVA ROMERO:

09:24 1 Q. I understand that you were hired by Rurelec; correct?
2 A. (Mr. Llarens) Yes.
3 Q. And I also understand that the instructions to conduct
4 the study were given to you by Mr. Abdala; correct?
5 A. (Mr. Llarens) Yes.
6 Q. Did you actually develop MEC's study?
7 A. (Mr. Llarens) I worked on it together with the team
8 that I lead.
9 Q. How many people worked on your team?
10 A. (Mr. Llarens) There were only two additional persons.
11 Q. But you did not sign the study that you provided to
12 Mr. Abdala?
13 A. (Mr. Llarens) I am responsible for the team that
14 actually produced the results for Mr. Abdala.
15 Q. That is not my question. My question is whether you
16 signed the report.
17 A. (Mr. Llarens) I did not sign the report.
18 Q. You mentioned your knowledge about--of Bolivia not too
19 long ago; correct?
20 A. (Mr. Llarens) Yes.
21 Q. Have you worked before in Bolivia?
22 A. (Mr. Llarens) Yes, I have.
23 Q. I understand that in June 2012 the CNDC invited MEC to
24 participate in the bidding terms; is that correct?
25 A. (Mr. Llarens) I am not in charge of the business

09:25 1 portion of it.

2 Q. So, you're not aware of the bidding terms to study the
3 maintenance and the operational cost of the new generation
4 units so as to obtain the information necessary to approve each
5 type of technology and the maximum operational costs?

6 A. Well, once again, the Commercial Director, the
7 Business Director was in charge of that.

8 Q. And so, you're telling me that you did not participate
9 in developing the various proposals for being awarded a
10 bidding?

11 A. (Mr. Llarens) No, I did not participate in that case.

12 MR. GARCÍA REPRESA: I also have some other questions,
13 if you allow me.

14 BY MR. GARCÍA REPRESA:

15 Q. To address the questions of the Tribunal, you said
16 that you used CNDC data without changes. Do you remember that?

17 A. (Mr. Llarens) Yes.

18 Q. And later on you said that you made adjustments to the
19 database; correct?

20 A. (Mr. Llarens) Yes.

21 Q. You were based on projections up to 2018; correct?

22 A. (Mr. Llarens) Yes.

23 Q. And that was based on instructions by Compass Lexecon;
24 correct?

25 A. Well, basically because as I mentioned before--may I

09:27 1 answer?

2 Q. First, did you receive instructions from Compass
3 Lexecon to do your projections up to 2018?

4 A. (Mr. Llarens) No.

5 Q. You used the POES 2011-2021; correct? I think that
6 we're overlapping a little bit.

7 So, you used the POES 2011-2021; correct?

8 A. (Mr. Llarens) Yes.

9 Q. And no one told you that you could not use information
10 after 2010, May 2010?

11 A. (Mr. Llarens) Well, I understand that I need to use
12 the best information available.

13 Q. What are you referring to?

14 A. (Mr. Llarens) As of May 2010?

15 Q. And you know that the POES that you used was published
16 in May 2010?

17 A. (Mr. Llarens) Well, I understand that POES actually
18 captures information and publishes it in a document that was
19 published in December 2010.

20 Q. So, you understand that this document that you used
21 was published in December 2010 but not before.?

22 A. (Mr. Llarens) Well, I understand that document
23 includes the information current to that date.

24 Q. POES 2011-2021 goes only up to 2021; correct?

25 A. (Mr. Llarens) Yes.

09:28 1 Q. And one of the adjustments that introduced to POES was
2 the start-up of the combined cycle process.

3 MR. RUBINS: I'm the only one listening to the
4 translation. I think for the transcript when counsel asks a
5 question, you might want to just pause for like two seconds in
6 order to give the translator an opportunity to take a breath.

7 PRESIDENT JÚDICE: Yes, the idea is to have some
8 breaks, some pause in between.

9 MR. RUBINS: Otherwise, it's impossible to tell which
10 one is the question and which one is the answer, and you are
11 going to say yes, say yes instead of um-hmm'ing your answer
12 because that is not a very good answer.

13 BY MR. GARCÍA REPRESA:

14 Q. So, when you--

15 A. (Mr. Llarens) Could you please repeat your question?

16 Q. You modified POES 2011-2021, to include the combined
17 cycle with the--in connection with November 1st, 2010; correct?

18 A. (Mr. Llarens) Yes.

19 Q. And you also modified the information provided by CNDC
20 to leave Karachipampa operational during that model; correct?

21 A. (Mr. Llarens) Yes.

22 Q. And you did not estimate future firm capacity;
23 correct?

24 A. (Mr. Llarens) Well, we published in our report future
25 firm capacity.

09:30 1 Q. Could you look at Item Number 3 of the document that
2 we just gave you. I'm going to ask you a question, but I hope
3 you are going to recognize this document. Do you recognize it?

4 A. (Mr. Llarens) Yes.

5 Q. And if you move on to Section 7, Page 9, and you look
6 all the way through Page 10 in Table 6. Do you see it? Do you
7 see Table 6?

8 A. (Mr. Llarens) Firm capacity.

9 Q. Yes.

10 Table 6 includes what you just called your estimation
11 of firm capacity; correct?

12 A. Yes.

13 Q. And that calculation was very complicated, that's my
14 understanding, because starting in 2010 it's always the same;
15 correct?

16 A. (Mr. Llarens) Well, you are saying it was complicated.
17 That's your idea.

18 Q. But your problem is from that 2012 on, it's all the
19 same?

20 A. (Mr. Llarens) That's what my problem is, everything
21 that was done.

22 Q. So, from 2012 on, it was all the same.

23 A. (Mr. Llarens) That's the result that we saw, yes.

24 Q. And that considers the operations are more efficient
25 than those of EGSA?

09:31 1 A. (Mr. Llarens) Yes.

2 Q. The fact is that starting in 2012, we have the same
3 firm capacity for EGSA units including all of the more
4 inefficient units in the system such as Aranjuez 1 to 3 that
5 considers the operations of the new units; right?

6 A. (Mr. Llarens) It considers the POES 2011-2021.

7 Q. The POES 2011-2021 includes Rositas 10-20-19; correct?

8 A. (Mr. Llarens) Yes, correct.

9 Q. You don't include that in the model; correct?

10 A. (Mr. Llarens) As I explained before, there are models
11 that have to do with a time limitation.

12 Let me explain because I have to also add something to
13 the answer given by my colleagues from the CNDC. The CNDC
14 estimation model has a time limitation. We're talking about
15 480 weeks or months of simulation. There is a time limit here,
16 so we have 480 weeks or months of simulation.

17 The CNDC databases, as we obtained them, are weekly.

18 PRESIDENT JÚDICE: Excuse me, I didn't really
19 understand. 480 weeks or months? 480 months is 40 years;
20 right?

21 THE WITNESS: (Mr. Llarens) Yes.

22 The databases give you the possibility of working with
23 weekly or monthly calculation periods. This is something that
24 you can choose. You can choose as to how to conduct the
25 simulations, weekly or monthly. The CNDC database that we used

09:33 1 as it was given to us has a weekly calculation basis.

2 So, 480 weeks, it's about nine years of simulation,
3 approximately.

4 If you would like to change to a monthly simulation
5 for 480 months, you have to fundamentally change a lot of
6 information on the databases. All of the demands that were
7 done weekly have to be done monthly, and all of the
8 hydrological data that were weekly we would have to do them
9 monthly, and you had to alter the SDDP model given to us by the
10 CNDC.

11 If the CNDC uses a calculation basis that is weekly in
12 nature, that means that it is more accurate in connection with
13 result of the simulation.

14 You have to understand that the more aggregated the
15 calculation is, the more time it includes, more mistakes are
16 made. When you do a calculation on a monthly basis, you
17 estimate that every single month the hydrological contribution
18 to the dams is the same. But if you use a weekly calculation
19 basis, all of the days of the week have the same kind of
20 contribution. The CNDC migrated to a weekly database in the
21 understanding that it better represents the system.

22 If I wanted to change that to include more time, I had
23 to change the CNDC database structurally. We thought that this
24 was technically incorrect. We wanted to work exactly with the
25 information that the CNDC provided to us in the database.

09:35 1 That is why we decided to keep the weekly scheduling
2 of the operation and to obtain nine years of detailed operation
3 on a weekly basis.

4 Q. When you talk about database of CNDC, are you talking
5 about the databases included in the PMP?

6 A. Yes, the ones that are published by the CNDC in its
7 page.

8 Q. Please go to Page 1.

9 MR. RUBINS: I'm not fundamentally opposed to
10 continuing; however, we did have an agreement proposed
11 initially by counsel for Bolivia last night that counsel would
12 stay within 15 minutes with their questions, and we are already
13 at 20 for counsel for Bolivia, so I wonder, given the thickness
14 of this bundle, how long counsel intends to continue. We did
15 prepare for 15 empties and held to 15 minutes with respect to
16 our questions.

17 PRESIDENT JÚDICE: Thank you, Mr. Rubins.

18 MR. GARCÍA REPRESA: Thank you, sir. If the witness
19 limits the answers, we are going to go faster. But also apart
20 from a time issue if I heard the Tribunal correctly, the
21 Tribunal said this morning that apart from asking questions in
22 connection with the answers given to the experts by the--given
23 to the Tribunal by the experts, perhaps the Tribunal would be
24 interested in listening to the answers of questions that could
25 explain things to the Tribunal.

09:37 1 I think we are going to the core of the issue, and I
2 think this is something that may help the Tribunal.

3 PRESIDENT JÚDICE: It is true that the Tribunal wants
4 the Parties to ask questions because we think it's important,
5 it's important for due process, but again we have to think that
6 this period of time questions by the Parties is included in the
7 total time accorded to each one of the Parties.

8 And as I understood that Claimants stick to the 15
9 minutes, Tribunal accepts, obviously, that you take more time,
10 if necessary, to answer some questions that you--to us for some
11 questions, sorry, that you did not include because you were
12 thinking of 15 minutes as the maximum amount of time.

13 It's not for us a problem, but as you know both
14 Parties wanted to close today with hearings to leave time to
15 prepare for the final pleadings tomorrow morning; and,
16 therefore, I ask the two Parties to be actually very strict on
17 their questions or we may have a problem in the future. The
18 Tribunal is prepared to work tomorrow morning, but the counsel
19 for both parties, I understand, need some time to prepare.

20 MR. GARCÍA REPRESA: Sir, I still have five minutes.
21 Perhaps that will facilitate this debate. I only have five
22 minutes left.

23 (Pause.)

24 MR. GARCÍA REPRESA: Thank you very much.

25 BY MR. GARCÍA REPRESA:

09:42 1 Q. A moment ago you were saying that the database that
2 you used is the PMP, and I asked you to look at Page 10 of your
3 report. I don't know what this is, really, but I'm going to
4 call it a report. But if you go to Page 9, Section 7, you say
5 that in order to determine the income of the generator units
6 from EGSA, the firm capacity value was used that was reported
7 in the PMP; is that correct?

8 A. Yes.

9 Q. I think you were given a sheet of paper, a few pages,
10 actually.

11 PRESIDENT JÚDICE: Where are they coming from?

12 MR. GARCÍA REPRESA: You're going to see,
13 Mr. President. This is an excerpt from the PMP current as at
14 the nationalization date, Annex 37 of Mr. Paz's statement.
15 It's a long document, and that is why we have only printed a
16 part of it.

17 And if you go to one of this binder, you're going to
18 see there are a number of annexes, and we have included this
19 annex.

20 If you go to 8(h), you're going to see the firm
21 capacity that was included in the PMP.

22 BY MR. GARCÍA REPRESA:

23 Q. Do you see that? It's 8(h).

24 And this Annex 8(h) has two pages because it goes from
25 1 May 2010 to 31 October 2014.

09:43 1 A. (Mr. Llarens) Yes.

2 Q. And it covers that period of time.

3 But let us look at the first page, and please look at
4 your own report, Table 6, and let us look at Guaracachi II. If
5 we look at the CNDC report for Guaracachi II, the second column
6 that relates to firm capacity up until May 2010, you see zero.
7 The fourth column that goes to July 2010 is zero. The third
8 column that goes to 31 October 2010 is zero. And the next
9 column that goes until 30 December 2011, is zero.

10 Do you see that?

11 A. (Mr. Llarens) Yes.

12 Q. And then in your 2010 chart, we have 4.6.

13 So, you did not use the information from the CNDC to
14 conduct your forecast?

15 A. (Mr. Llarens) I would have to verify this information
16 against my own files.

17 Q. You agree that zero and 4.6 is not the same?

18 A. (Mr. Llarens) Yes, of course.

19 Q. You also know that.

20 You confirmed the information that is included in this
21 PMP is not reflected in your capacity run?

22 A. (Mr. Llarens) No, it's not the same information. What
23 I'm not sure of is whether this is the same source.

24 Q. Thank you very much, sir.

25 I have a question for Mr. Parodi.

09:45 1 Just for you to answer a question and for you not to
2 have come here for naught, are you--I understand that what you
3 did with this study if you considered this assumption in
4 connection with MEC data and the result. Would that be a fair
5 summary of what you did?

6 A. (Mr. Parodi) Yes.

7 Q. And you conducted a sensitivity study for the Rositas
8 project, if I remember correctly.

9 A. (Mr. Parodi) Yes, that's correct.

10 Q. And if you can look at that booklet that we gave you,
11 Number 17. No, it's the other. It's the binder, actually.

12 So, in Number 17, you see the sensitivity study that
13 you conducted; right?

14 A. (Mr. Parodi) Yes.

15 Q. And Rositas--I don't know if you know this--is
16 connected, interconnected, with the City of Sucre. It's the
17 same ring that includes Aranjuez 1, 2, 3--1 to 3.

18 A. (Mr. Parodi) Yes.

19 Q. And if you look at the first page of this Tab, it says
20 here, dispatch level for EGSA plants. I understand that here
21 you're indicating what period of the year these units are going
22 to be operational according to the forecast conducted by MEC;
23 right?

24 A. (Mr. Parodi) Yes, right.

25 Q. Look at Aranjuez 1, 2, and 3, and please start at

09:47 1 2013, and you can go earlier if you want. You're going to see
2 the chart that says "dispatch level," that is how much energy
3 these unit are going to be selling. If you look at Aranjuez 1,
4 2, and 3 starting in 2015, we have the same level for these
5 three plants; correct?

6 A. (Mr. Parodi) Yes, correct.

7 Q. And this simulation, Rositas, becomes operational in
8 2018; correct?

9 A. (Mr. Parodi) Yes, that is correct, 2018.

10 Q. Rositas becomes operational in 2018 with a 400
11 megawatt hydroelectrical generation power, and it's connected
12 with Aranjuez, so how can you explain that Aranjuez units
13 produce exactly the same that they produced in years before?

14 A. (Mr. Parodi) That is what the program of MEC shows.

15 Q. That's what it shows?

16 A. (Mr. Parodi) yes.

17 MR. GARCÍA REPRESA: I have no further questions.

18 PRESIDENT JÚDICE: Do you have additional questions,
19 just for a few minutes?

20 MR. RUBINS: Just one question, Mr. Chairman, to
21 Mr. Llarens.

22 EXAMINATION BY COUNSEL FOR CLAIMANTS

23 BY MR. RUBINS:

24 Q. If you could please explain to the Tribunal a bit of
25 your background and experience with respect to the electricity

09:48 1 markets and the work that you do.

2 A. (Mr. Llarens) I am a capacity engineer. I have worked
3 doing these kinds of valuations or assessments for more than 30
4 years. I have worked in the Universidad de la Plata, where I
5 got my degree, and I worked for market administrator for a
6 wholesale entity in Argentina called CAMESA.

7 I was then a consultant. I have worked in that field
8 for 20 years. I worked for Government, for regulators, for
9 private companies, for investment banks, for market agents all
10 over the world.

11 In Bolivia, I have participated in the drafting of the
12 regulatory framework. I have conducted audits to the CNDC in
13 connection with its functions.

14 I also prepared the first POES for generation and
15 transmission in Bolivia, working for the Vice Minister.

16 I have also trained the CNDC professional staff in
17 connection with simulation models such as the PMP in short-term
18 models and other models.

19 I have also trained them in connection as to how
20 demand is projected for the electrical market, and I have
21 conducted private market valuations for the Electricity Sector
22 in Bolivia up until now.

23 MR. RUBINS: Thank you. I have no further questions.

24 PRESIDENT JÚDICE: Thank you very much for being here.
25 You don't need to stay here to be heard. You have discharged

09:50 1 your functions. Thank you very much, and thank you for your
2 cooperation. Thank you very much.

3 (Witnesses step down.)

4 PRESIDENT JÚDICE: Now we start with one of the expert
5 witnesses. I'm going to leave for two minutes to get my bag
6 that I left at the hotel, but I think it's here.

7 MR. SILVA ROMERO: Perhaps we need five minutes to
8 organize everything. We are going to have to show a PowerPoint
9 presentation, et cetera.

10 (Brief recess.)

11 MANUEL A. ABDALA, CLAIMANTS' WITNESS, CALLED

12 PRESIDENT JÚDICE: Good morning, Mr. Abdala. A
13 pleasure to meet you and a pleasure to have you with us. I
14 think that you already have experience in this type of
15 situation as an expert witness.

16 I'm going to ask you to say your name, and there is a
17 statement, I believe, for you to read.

18 THE WITNESS: Good morning, Mr. Chairman and Members
19 of the Tribunal.

20 My name is Manuel Abdala, and I have a Declaration
21 here in Spanish, which I will read.

22 I solemnly declare upon my honor and conscience that I
23 shall tell the truth, the whole truth, and nothing but the
24 truth, and my Statement will be in accordance with my
25 understanding - both with my knowledge and my understanding.

10:08 1 PRESIDENT JÚDICE: You made this statement in Spanish?
2 It's fine with you?

3 THE WITNESS: It's fine with me. I can understand
4 both languages.

5 PRESIDENT JÚDICE: Thank you very much.

6 Then now you know how it works, and we expect a
7 presentation from you in the beginning, and then you will be
8 able to answer questions inquiries from the Respondent, but also
9 some questions afterwards from the Claimants, and also from the
10 Tribunal.

11 THE WITNESS: Excellent.

12 PRESIDENT JÚDICE: Please proceed.

13 THE WITNESS: Thank you very much, Mr. President.

14 DIRECT PRESENTATION

15 THE WITNESS: I have prepared some visual aides that
16 you have with you. I have selected the topics that I think are
17 most important in trying to understand the differences of
18 opinion between Dr. Flores and my opinion on damages, and I'm
19 not going to be able to cover all the subjects on but please
20 feel free to ask me any questions, of course, in any of the
21 issues.

22 In Slide Number 2, I have summarized the topics that I
23 intend to cover, which mostly relates to the nationalization
24 claim. I will focus on the two on key differences--eventually that this
25 discount rate, which is the most important one--and also

10:10 1 the price projection and dispatch forecasts.

2 I also will talk about the reasonability of the
3 valuation tests and how I have benchmarked my Discounted Cash
4 Flow valuation results with market multiples, and then I will
5 summarize damages.

6 Now, in Slide Number 3--please feel free to interrupt
7 with questions at any time, of course.

8 In Slide Number 3 I have a representation of the
9 differences in the opinion between my valuation at
10 \$247.8 million, and that's a valuation for the firm, that's
11 Enterprise Value, and Dr. Flores at 91.3 million, and I believe
12 that this is the best way to compare differences on opinion
13 because it focuses on what is Enterprise Value as of the date
14 of the nationalization, May 1st, 2010.

15 In this chart, what you have is the discount
16 rate. If you just modify the discount rate in my valuation
17 model from 10.63 percent to Dr. Flores's 19 percent or so, then
18 you get a first-order effect of \$127.9 million. As you can
19 see, that's the main area where we have disagreement.

20 And the other four topics of disagreement, which we
21 agree with Dr. Flores that these are the four key issues, are
22 the price and dispatch projections which you see here. Once
23 you correct for a discount rate, it, will you represent around
24 \$20 million in differences of the value of the company,
25 \$8 million in Capacity Prices, and other differences which is

10:12 1 mostly related to working capital and administrative expenses,
2 which represent 0.4.

3 As I note in this slide, the order in which you apply
4 these four factors may have some slight impact.

5 Like, for instance, if we start--I think you have seen
6 a table by Dr. Flores. If you start with the price on dispatch
7 projections first, then those 20 millions may become
8 40 millions, and the discount rate, if you put it all at the
9 end, 127 may become up to 90 million or so. So, because there
10 is interactions, the order in which you put this will have an
11 impact.

12 But in any case, this gives you a good idea of the
13 representation of the relative impact of each of the topics in
14 which we disagree on opinion.

15 Now, let me focus on discount rate first. This is
16 Slide Number 4.

17 And let's go directly to Slide Number 5.

18 On discount rate, on the left side you have the
19 relative magnitude of the different components in which
20 I disagree with the opinion of Dr. Flores. The Size Premium and the
21 Country Risk Premium are the main ones. As you know, I don't
22 use any Size Premium; Dr. Flores uses 6.28 percent.

23 As you also know, the main difference in opinion on Country Risk
24 is 1.5x multiplier--that Dr. Flores applied to my 7 percent
25 Country Risk Premium, and you also know that there are differences

10:13 1 on the other components going from risk-free rate, Market Risk
2 Premium, optimal leveraged ratios, and raw data use, which are
3 not negligible; they represent \$35.9 million in valuation, but
4 for the purposes of this presentation, because I have time
5 constraints, I'm not going to dwell into those. I'm going to
6 focus exclusively on Size Premium and Country Risk Premium.

7 Now, in Slide Number 6, I show the issues related to
8 Size Premium. Well, do we need to use any Size Premium when
9 we're valuing a company that is a relatively small company
10 compared to the U.S. but we're valuing the company outside the
11 U.S.?

12 And here, what we have is that we know that in the
13 literature, researchers have assessed the fact that for
14 companies that are traded in the U.S., if they have relatively
15 small size, they have found that, on historical returns,
16 small-size firms have a higher return than large or medium-size
17 firms, and that reflects what then has been known as sort of a
18 higher risk related to being a small size because of different
19 fundamental aspects of affecting those small companies as
20 compared to large ones.

21 Now, even though this literature started in the
22 Seventies, there has been many authors also writing that the
23 empirical tests may be confounding other elements that are not
24 related to size. And I pointed out this to the Tribunal
25 because of two very important authors in corporate finance,

10:15 1 Fama and French, who once were basically supporting this idea
2 that there is a size premium, released in 2012 a very
3 comprehensive study using data from 1989 to 2011 on 23
4 Developed Countries in the North America, in Europe, in
5 Asia-Pacific, and Japan, and they concluded that there was no
6 Size Premium in any of these region during the sample period,
7 which is so obviously something that all practitioners and academic
community
8 took notice because it's a very important result.

9 Furthermore, you have seen in this record that
10 Professor Damodaran is cited extensively by Dr. Flores as well
11 as myself, and he condemns the use of a size premium without
12 really looking into the fundamentals of the company. And here
13 you have a nice quote from him saying that "Adding a small-cap
14 premium strikes me as not only a sloppy way of adjusting
15 expected returns, but an abdication of the mission in intrinsic
16 valuation."

17 And that's what I mostly criticize Dr. Flores on. I
18 mean, he basically says well, this is a relatively small
19 company if we plot it with a U.S. company, it's less than the
20 premium. But if you look at his First Report, he really
21 doesn't explain to you why--whether he has analyzed the
22 fundamentals of the company and whether he thinks that a size
23 premium is called for.

24 So, what I did in my Second Report--and this is the
25 summary that you have in Slide Number 7--is to really

10:17 1 ask--well, for this company, do we have any fundamentals that
2 justify the use of a size premium? Can we see Guaracachi as
3 a--as having the type of higher risk that some empirical
4 research has found in the past for small firms in the U.S.?

5 And my conclusion is that it doesn't, and let's see
6 why. Well, I have a list here of the most relevant aspects
7 of two authors that are relevant. Each are discussed as to the
8 conditions for higher returns in small firms.

9 The first one is whether the company's very sensitive
10 to business risk. So, whether it operates in the market that
11 is volatile or whether there is significant uncertainty as to
12 the revenues that they can expect.

13 On the contrary here, Guaracachi, what we see is it
14 mostly depends on regulated prices, Capacity revenues and Spot
15 Prices that come from a well-defined, regulated market. So, we
16 don't have that type of uncertainty on the revenue side that
17 may justify.

18 And, indeed, if you look at companies--generator
19 companies throughout Latin America, regulators would not use a
20 size premium because they understand that in regulated
21 industries, this is a concept that doesn't require any addition
22 to the cost of capital for this concept.

23 The second thing that this companies--when you believe the
24 company--a small company may have trouble with, is the issue of
25 a very poor history of dividends or a very poor history of

10:19 1 profitability in general, which is clearly not the case of
2 Guaracachi.

3 Similarly, small companies in the U.S. are related to
4 the fact that normally they--no one is monitoring or
5 supervising or providing externally generated information. In
6 Guaracachi, not only we have the key Shareholder being traded
7 in the U.K., but also we have credit-rating agencies carrying
8 since 2007, given that the company has issued corporate bonds
9 and, therefore, monitoring by external agents was present.

10 Lack of management expertise, well, the record is
11 clear that management was not an issue in Guaracachi. On the
12 contrary, it was praised for being managed by professional
13 experts.

14 And last is the issue of financing, whether the
15 company may have had--small firms may have difficulties in
16 financing or they--or they may be financing themselves at a
17 very high interest rate. And I don't see this issue here at
18 all because, even as late as 2009, Guaracachi was able to raise
19 24 million to finance a combined-cycle project, and the
20 interest rates that they pay on all this outstanding debt is an
21 interest rate that is very reasonable for Bolivia and for
22 market conditions prevailing at the different times where they
23 took those loans.

24 So, I don't really support the use of Size Premium in
25 this case, and I think it is not merited, especially after

10:21 1 consideration of all the fundamentals of the company.

2 The second most important issue, if we move to the
3 next slide, is the issue of Country Risk Premium. And here the
4 Tribunal have different measures that they can use or valid
5 references. I present here what I think are the most important
6 ones, apart from my opinion and Dr. Flores, who basically seems
7 to add only the 1.5 to my 7 percent.

8 As you understand, this 7 percent is--that I found is
9 an indirect measure of the sovereign spread of Bolivia because
10 in 2010, we didn't have any bond--sovereign bond issue by
11 Bolivia in U.S. dollars with which we could compare a spread.
12 So, what I had to do was I had to use the credit rating that
13 three agencies--Fitch, Standard and Poor's and Moody's--would
14 give to Bolivia--I believe it's a B rating--and then compare
15 that spread of sovereign bonds of other countries for the
16 12-month period prior to May 2010 in order to obtain a 7
17 percent figure.

18 And I notice that this measure might have been like
19 too high because by taking the 12-month average, I picked up
20 data from early 2009 when there was a run on emerging bonds in
21 general. So if you see that, if I had taken only the May 2010
22 month average, this 7 percent would be 5 percent. And that 5
23 percent is more in line with what Professor Damodaran has for
24 Bolivia, which is 5.5 percent.

25 And finally, the only other test that we have--the

10:23 1 only direct test that we have for Bolivia comes two years
2 later, which I don't use because it's 2012, but really, I think
3 you have seen my comment in my report, that the 3.1 percent
4 probably represent the only direct estimate of the spread that
5 we have for Bolivia, and it's difficult to think what
6 happened--what transpired, say, between 2010 to 2012 would be
7 so much different from one period to the other.

8 But I think with my 7 percent, I think it's high, but
9 it's a reasonable benchmark for what you use for Bolivia.

10 Now, let me comment on the 1.5x. I heard in the
11 opening that counsel to Respondent brought two examples cited
12 in Dr. Flores's Second Report from Mr. Damodaran applying in
13 two Indian companies a so-called "1.5" or a multiplier for a
14 period of five years and then 10 years." And I think counsel
15 made some interpretation related to whether this is what
16 Damodaran meant by "short term" versus "long term" because, as
17 you know, Professor Damodaran recommends eventually the use of
18 this multiplier only for a short-term valuations.

19 Now, upon examination of these two Indian examples,
20 the truth is Damodaran doesn't use it for definition of short
21 term versus long term, but if you go to the spreadsheets in
22 which he has published in his Web site on these two examples or
23 others, really the reason that he's using this or suggests that
24 others may be using it is the differentials in growth rate in
25 the very early years where he sees that the company may be more

10:25 1 stable or growing at a very, very high rate as compared to what
2 he called the steady state, more stable conditions in later
3 years.

4 So, I think this has been misinterpreted as--whether
5 it had been interpreted at the short term is a few months or
6 five years or 10 years.

7 The issue here at stake is whether the 1.5x or this
8 multiplier is being used or not in practice.

9 And the next slide shows you--Slide Number 9 shows you
10 that the multiplier doesn't seem to be used in the region for
11 any power generator or for all the information that we have in
12 the record so far. What you see in Slide Number 9 is basically
13 the different investment bank reports from which you can
14 extract the WACC that is being estimated in valuation made by
15 Santander Investment Bank on 15 different generators operating
16 in the groups of ENDESA, ENERSIS, and AES Gener for this
17 relevant period of time in 2009 and 2010 and--

18 PRESIDENT JÚDICE: Sorry, I remember that one comment
19 to being only Santander's. And you are speaking of different
20 investment banks' reports?

21 THE WITNESS: Yes. These are different investment
22 bank reports, all authored by Santander Investment Bank, but
23 they are made in different points in time and with respect to
24 different groups which, in turn, have different companies, 15
25 generators in total. And they are located in different

10:27 1 countries.

2 So, what we can see from this data is that these--for
3 each country, the investment bank reports will contain a
4 measure of the WACC which includes a breakdown with the Country
5 Risk Premium.

6 So, the first column you see the Country Risk Premium
7 that they have used for different countries, and the second
8 column or the last column, what I show there is the EMBI spread,
9 the sovereign spread corresponding to that country in that
10 particular month of valuation.

11 As you will see they are very, very similar. They
12 don't apply any multiplier that is explicit. There is nothing
13 explicit. There might be some gaps between maybe the data that
14 they have used, they may have one month or two months' average,
15 and that's why they don't coincide exactly, but they're very
16 much in line. And in practice, as I can tell you, this
17 multiplier is not applied by regulators either, anywhere, to my
18 knowledge, in Latin America. And it's not a--it's not a
19 practice that you do when you value long-term assets. Here we
20 have an asset that goes up to 2038. And in long-term valuations,
21 you don't have to multiply the already spread on the sovereign
22 bonds by any differential between equity and debt markets.

23 Now, the Tribunal may see the evidence from these same
24 from Latin American benchmarks--and this is in Slide 10--as to
25 what are the costs of capital or WACCs that I used for

10:28 1 generators elsewhere? And here again, we have the 15 companies
2 with the sample median of 9.19 percent. Which, as you can see
3 in the example, all of the comparables located in Colombia,
4 Peru, Chile, and Brazil, have a WACC that is lower than the one
5 I recommend for this case at 10.63 percent. Those that are
6 highest are basically involving Argentine companies with WACCs
7 between 13 to 15 percent.

8 The same comparison you can make for the cost of debt, and
9 that is shown in Slide Number 11. And here, this is an
10 interesting one because Dr. Flores and I shared the same
11 opinion, at least he--although he thinks that the cost of debt
12 could be a little bit higher, but he accepts and he uses in his
13 valuation the 7.88 percent as being the cost of debt, which is
14 very close to the median of this sample, again, with the
15 exception of the Argentine companies that seem to be borrowing
16 at very high rates, maybe, as I mention in my report, because
17 of the Argentine companies being subject to specific distress
18 from the Government regulations that do not allow them to earn
19 any margins at all, and in many cases they're in situations
20 very close to insolvency.

21 And you see here that what is striking is that in the
22 cost of debt, we have the same opinion with Dr. Flores, and
23 it's very close to the median of this sample.

24 Now, what happens when we look at cost of equity,
25 which is the main discrepancy of opinion with Dr. Flores? And

10:30 1 that's represented in Slide Number 12.

2 When we see the cost of equity, we see that here is
3 where the striking difference is. Here, we have Dr. Flores at
4 27.6, and mine at 14.45 percent, with the sample median of
5 11.6.

6 Well, one thing that is important to notice here is if
7 you think the risk of investing in Bolivia for a Shareholder is
8 as high as 27 or 28 percent, you would expect the lenders to
9 have the same perception either because of size or because of
10 the Country Risk Premium so that the cost effect would be that
11 Shareholders are asking for has to bear some proportion or has
12 to bear some relationship to what lenders are demanding.

13 And here we have lenders of very different types. We
14 have the commercial side of CAF, we have direct lending by bank
15 loans, and we have corporate bonds being issued--that are being
16 eventually bought by the pension funds in Bolivia. So,
17 different types of measures of lending tells you that the
18 lenders are seeing no Size Premium and very little Country Risk
19 as compared to what Dr. Flores is using for cost of equity.

20 And visually, you can observe that in Slide 13.
21 Slide 13 is, again, the same sample of comparables. And I
22 calculated the relationship between cost of equity and cost of
23 debt. So, what we are seeing here is the ratio difference
24 between cost of equity and cost of debt. For the sample, the
25 median you see is very stable, even for Argentina. In

10:32 1 Argentina, you see exactly clearly what's going on. The cost
2 of equity is very high, but also the cost debt is very high.

3 So, you see that this ratio relationship between cost
4 of equity and cost of debt is very stable in all companies.
5 And here is where Dr. Flores comes with this relationship of
6 3.5 times higher for Shareholders and debtholders, which is
7 something that, in my opinion, is unsustainable and cannot be
8 the case.

9 Summarizing on the issue of discount rate, I notice
10 the Tribunal has asked to what extent do we have any other
11 reference from Bolivia in the Electricity Sector as to what
12 type of discount rates Bolivia might be using? And I found two
13 references that I wanted to share with you, and this is shown
14 in Slide Number 14.

15 The first one that is shown, the 10.10 percent here,
16 is what Bolivia used for Electricity Distribution Companies for
17 the 2007-2011 period, which is the relevant period close to my
18 valuation date, at 10.10 percent.

19 And the second reference that I found was the one that
20 was already spotted by the Tribunal, which is the one that is
21 in the law. In the law, if you recall, Article 48 has a
22 10 percent discount rate in real terms that, to my
23 understanding, has been modified by Resolution or by the
24 Ministry in 2000, and that has been set at 12 percent in real
25 terms. And to my knowledge, that has not been changed so far.

10:34 1 That was set back in 2000.

2 And as you see in my graphical representation, so as
3 to make sure that we are comparing apples to apples, nominal
4 rate, so that 12 percent is in real terms, so you have to add
5 some inflation--which I don't know how Bolivia would use
6 it--but assuming it is around 2 percent or 2.5 percent, you
7 would have some--a nominal rate between 14.5 or so.

8 So, I thought that was useful information to share
9 with the Tribunal. And again, I compare that also with the
10 comparables of Latin American companies, the median being
11 9.19 percent.

12 Now, in his Second Report, I was a little bit
13 surprised by Dr. Flores introducing the concept of the IRR that
14 you didn't see in his First Report. In his First Report, he
15 seemed to agree that the WACC is only standard to determine
16 Fair Market Value as a cost of capital to use for this firm.
17 And then in his Second Report he says, well, let's test the
18 notion of what we see in some documents. And he shows--well,
19 you have seen them. He shows you some documents of what
20 Rurelec may be having as an IRR or IRR benchmark for investing
21 in South Africa, and you have seen some documents as well for
22 what an IRR could be like for--as per someone's opinion in
23 Bolivia, et cetera.

24 Now, let me clarify that these are two different
25 concepts. And if you look at Slide Number 15--and I'm not

10:36 1 going to spend too much time on this because it might be
2 complicated--but this is a very standard way of teaching the
3 differences of IRR and discount rates when you're looking at
4 corporate finance. And the blue line here, the
5 downward-sloping blue line represents basically the trade-off
6 between Net Present Value and discount rates. And this is very
7 intuitive. The higher the discount rate represented here in
8 the "X" axis, the lower your Net Present Value of expected cash
9 flows. And the lower the discount rate, the higher the Net
10 Present Value.

11 And the IRR--what is the IRR? Well, the IRR is just
12 the discount rate that makes the Net Present Value equal to
13 zero, by definition. And there is no disagreement, I think,
14 between Dr. Flores and I on the definition.

15 Now, what is the IRR used for? The IRR is used as a
16 benchmark to compare whether--given my discount rate, whether I
17 want to invest in a particular project or whether I don't want
18 to invest. And then I say, well, look, if my discount rate is
19 below the IRR, then I will invest because the project is
20 profitable. If it is above, I don't invest because then it
21 might become unprofitable.

22 And if it is equal, well, then I'm indifferent
23 because, it's like, well, why would I take that risk if it
24 is--if my discount rate is equal to the same and you're
25 indifferent.

10:38 1 And that's the only way you can interpret the IRR.
2 The IRR should never be used for a fair market valuation, and
3 that is a concept that is very well understood. You should
4 always use the rate discount rate that is applicable to the
5 industry, because the discount rate that represents the cost of
6 capital to the industry is that rate that, in the competitive
7 situation, the transaction value of that asset will sell for.
8 In Slide Number 16, it's the same thing I just said,
9 is you have it on the record and I just flag it for your
10 information, the quote on the definition by Damodaran as to
11 what is the IRR, and as well the quote of what the IRR should
12 be used for, which is a tool for decision-making, always in
13 comparison to your discount rate.
14 Let me turn to the issue of price and dispatch
15 projections. And I think here, although the differences in
16 Enterprise Value is much lower than the issue of the discount
17 rate, I think it's important that we clarify--or that I clarify
18 two aspects: Projections of prices and projections of
19 dispatch.
20 And let me start with prices in Slide Number 18.
21 Slide Number 18--
22 MR. GARCÍA REPRESA: Excuse me, sorry, I would just
23 put a marker on the record, we've reached 30 minutes, so we add
24 four minutes additional time just for your use, Dr. Abdala, for
25 you to keep track of time.

10:40 1 THE WITNESS: Thank you.

2 Slide Number 18 has the actual selling prices of the
3 company. Then you have two dots that represent the actual Spot
4 Prices observed in Bolivia as it happened, and then the blue
5 versus the orange, the projections.

6 Why is that we have such a discrepancy? Well, the
7 main reasons are that, in the projections used by Econ One and
8 eventually undertaken by Mr. Paz, we have a very optimistic
9 situation in which demand grows relatively little. The demand
10 that Mr. Paz is drawing is coming, at least according to his
11 First Report, from the medium-term plan from 2010 to 2014,
12 which only takes into consideration information that the
13 marketplace provides from existing distributors. It doesn't
14 take into consideration, for instance, the mining projects or
15 the cement projects that Bolivia would have as new, and those
16 you can pick up only from the POES.

17 The second issue is that there are some differences in
18 supply, as a--and the bottom line of this is whereas Mr. Paz's
19 projections will increase the effective reserves, which
20 Bolivia, as of 2010, were around 5 percent, very, very tight
21 market--only 5 percent, supply and demand very, very tight--in
22 the long run, these reserve margins goes up to 30 percent;
23 whereas, in my projections, I do also improve the reserve
24 margins but on average at 8 percent.

25 Why? Well, because I don't think any willing buyer in

10:41 1 Bolivia in 2010 would have seen a significant improvement over
2 time on these margins because--precisely because now Bolivia
3 would only have to rely on investment by the private sector and
4 would be deprived of a private sector investment for the
5 future.

6 So, in order to save some time, you see this Slide
7 Number 19 shows you the difference between MEC and Mr. Paz on
8 total available capacity, and I think most interesting is Slide
9 Number 20, which is the implications as to Guaracachi's
10 dispatch energy.

11 You see what you have here--and that's why I criticize
12 Dr. Flores for not being conscious of really studying what is
13 the underlying data provided by Mr. Paz's runs, because what we
14 have in the history of Mr. Paz is that Guaracachi, which
15 represents 40 percent of the total energy in Bolivia, with the
16 emergency situation that Bolivia has, will eventually be
17 dropping to half its production by 2018, losing market share
18 from 40 percent to 20 percent, and staying there for the rest
19 of the period up to 2038. That's not consistent with what you
20 would really need to analyze in the situation which, even if
21 new capacity comes into place that might displace you
22 temporarily, well, obviously Guaracachi would have reacted and
23 would never lose such an important market share.

24 But even so, the result that Mr. Paz implies here is
25 because of the very overoptimistic projections which your

10:43 1 reserve margins goes up to 30 percent.

2 I'm happy to expand on any issues on dispatch, but let
3 me finalize with a very important tool for you to benchmark my
4 DCF results, and this is the comparables of market multiples.
5 You have seen that evidence on Slide 22 already. It's in the
6 record. I have data from 30 companies from Emerging Countries
7 that shows a multiplier of 9.74 percent.

8 And I just want to briefly respond to Dr. Flores's
9 latest observations which are summarized in Slide 23 as to why
10 he doesn't like comparables, when this is a standard technique
11 used to benchmark DCF on Fair Market Value.

12 MR. GARCÍA REPRESA: Dr. Abdala, just so you know and
13 everyone knows, we have exceeded already by a minute the maximum
14 time. Obviously, if the Tribunal allows this to go on, we will
15 request the same treatment later.

16 PRESIDENT JÚDICE: We prefer that you close your
17 statement with some time, if possible, not much time. Thank
18 you.

19 MR. RUBINS: Mr. Chairman, if I may, it would seem to
20 me only fair, given that the questioning of CNDC and MEC went
21 over without limitation by at least five minutes, that that
22 time should be used now by Dr. Abdala.

23 PRESIDENT JÚDICE: My statement is based on fairness,
24 okay?

25 For the Tribunal, we would rather prefer to have a

10:45 1 little more information by witnesses; and, then, to be better
2 prepared to answer to your requests than to stick to a very
3 formalistic approach limiting the time and then not to have the
4 advantage of being learned as we expect.

5 And, therefore, please proceed, taking into
6 consideration that you are not with all the time of the world,
7 as you can imagine.

8 Thank you very much.

9 THE WITNESS: Thank you, Mr. Chairman.

10 And I think I have only these last two slides. I will
11 be quick.

12 Basically the new arguments that Dr. Flores raised
13 was, first of all, he says, well, look, the median of this
14 sample is 9.74 EGSA, which is equal to AES Gener in Chile, and
15 then he lists all the reasons why Guaracachi may be different
16 from AES Gener.

17 Well, I was surprised by this comparison because the
18 median is the median. It's not reflecting any spot in any
19 particular company of the sample. You have 30 companies.
20 The median just happened to be close to one because it's the
21 middle point of the sample. Obviously, the case. But that
22 doesn't mean that your company's comparable only to that
23 specific company.

24 The median represents the full range of the 30
25 observations, and the median has the beauty of taking out the

10:46 1 extremes, as you have seen in a previous slide, Slide 22, takes
2 out the extremes of those that are traded at very high 40, 50x,
3 and also takes out the extreme of those that relatively very
4 low, trading at 4 or less than 5x.

5 And so, this is an invalid criticism, and Dr. Flores
6 obviously knows this.

7 Now, the second criticism is that my sample has
8 Bolivia being the--among the top two Country Risk Premium, and
9 I disagree. Because if you go to Econ One--Econ One's second
10 report in Table 2, really, the opinion of either Dr. Flores or
11 mine that Bolivia is between 7 and 10.5 percent, and that would
12 put them in the middle of the pack of comparable Country Risk
13 Premiums.

14 The third new argument that Dr. Flores had brought on
15 the benchmarks is that eight out of the 30 benchmarks have
16 indefinite term licenses, and he separates out those with term
17 licenses that are indefinite with those that are finite. And I
18 would argue that it is proper to include both because when you
19 have a License that goes as far as 2038, market will see that
20 as eventually possibilities of renewal, so both are important.

21 And in any case, if you look closely at the 22
22 benchmarks that have a finite term, they have a very high
23 median at 8.2x and an average of 9.8x.

24 Finally, he basically says that Guaracachi cannot be
25 compared to this because other companies have future growth,

10:48 1 whereas Guaracachi's does not. Well, that's obviously not the
2 case. I mean, you have a License--you're sitting on a License
3 up to 2038. We know that the company already had some other
4 projects in mind, and certainly there will be growth. The fact
5 that I'm not including those potential new investments in my
6 DCF of new plants is because we want to value the assets as we
7 have today, not speculate about new assets.

8 And the last criticism that he make is on the issue of
9 EBITDA, which I already adjusted to match the forecast EBITDA
10 adjusted by 6 percent.

11 So, in sum, in Slide 24, you have the only other
12 method that is put forward as comparable to the DCF, which is
13 the market multiple you had it already.

14 PRESIDENT JÚDICE: This is clear. And the summary is
15 also clear.

16 THE WITNESS: Thank you very much, Mr. President.

17 PRESIDENT JÚDICE: Now you know what is happening.
18 You are going to be crossed. That is the name of the game.

19 Thank you very much for your presentation.

20 MR. SILVA ROMERO: Yes, Mr. President. Mr. García
21 Represa will conduct the cross-examination.

22 MR. GARCÍA REPRESA: Thank you very much,
23 Mr. President.

24 CROSS-EXAMINATION

25 BY MR. GARCÍA REPRESA:

10:49 1 Q. Good morning, Mr. Abdala.

2 A. Good morning.

3 Q. You know that you are accustomed to doing things in
4 English, but we're going to do everything in English as you see
5 fit.

6 A. Yes, it would be better.

7 Q. Could we start.

8 My name is Jose Manuel García. I will be representing
9 Bolivia, as you probably guessed already.

10 Now, I want to pick up on a point you just raised
11 about CAPEX. You said because you're valuing the assets that
12 exist now, you don't include CAPEX.

13 Now, just to be clear are you valuing the assets or
14 you are valuing company? Which one of the two?

15 A. I'm valuing the company. And what I said is I'm
16 valuing the company with the assets that I have right now. So
17 I'm not including new plants in valuing the companies.

18 The value that I'm doing is the value of company, but
19 not--what I'm saying is I'm not trying to see if there is any
20 additional value, say, for future investments and new plants.

21 So, as you see, the DCF only has a valuation
22 restricted to the existing plants.

23 Q. But additional plants will mean additional CAPEX,
24 i.e., additional costs that would reduce the value, wouldn't
25 it?

10:51 1 A. No, absolutely not.

2 I mean, additional plants would increase the value in
3 principle, because you would assume that the investor will
4 undertake the investment if it expects to add value, not if it
5 doesn't. So, only the investments that add value will be
6 added. So that's the--normally, otherwise, you will be
7 planning for something that may be a bad investment. So, you
8 have both costs on the CAPEX side and operating, but have you
9 more revenues because you're expecting more revenues. So, in
10 expected terms, you would expect those to add value, not to
11 decrease value.

12 Q. And just to be clear on how your model works, revenues
13 constantly increase after 2018; correct?

14 A. Costs increase during--

15 Q. Revenue, sir. I'm talking about revenues.

16 After 2018, revenues keep growing constantly, don't
17 they?

18 A. Revenues are kept constant in real terms. Revenues
19 increase with the rate of inflation after 2018.

20 Q. Right. But have you no CAPEX, no investment
21 whatsoever?

22 A. No, that's wrong. That's wrong. I mean, if you read
23 my First Report, I do talk about CAPEX, and I said, in CAPEX, I
24 do not put CAPEX explicitly--

25 PRESIDENT JÚDICE: Please make a small pause between

10:52 1 yourselves. It's always happening. It makes sense because
2 everyone is very energetic, but it's a good way to try to stop
3 to allow transcripts to be made more clear for our future work.

4 Thank you very much.

5 THE WITNESS: Thank you. I will follow that advice,
6 Mr. Chairman.

7 PRESIDENT JÚDICE: No, for both of you.

8 THE WITNESS: In my model, as I explained in the First
9 Report, the CAPEX is already in the OPEX. Why? Well, because
10 the company informed us what would be the costs that each of
11 the plants would have to be incurring in order to be able to be
12 maintained with major maintenance and overhaul so that they
13 could be operational until 2038. And so, we have a very
14 detailed spreadsheet with the cost which is a function of the
15 number of hours that the units are expected to be dispatched.
16 So, the more hours the units are expected to be dispatched, the
17 higher these costs would be. And those are reflected in the
18 OPEX in my model.

19 And what I stated about the CAPEX is that I do
20 not--because the maintenance of the existing units are
21 reflected in the OPEX, I do not project any CAPEX into the
22 future because the CAPEX would be only for new plants, and I
23 don't project any new plants in the future.

24 BY MR. GARCÍA REPRESA:

25 Q. Thank you.

10:54 1 So, just to confirm, the CAPEX line is zero after
2 2010, just given your explanation, and your assumption is that
3 EGSA would continue to operate the very same generators it has
4 installed in 2010 up until 2038; correct?

5 A. Well, yes--

6 Q. Thank you. For the moment--

7 A. Yes.

8 PRESIDENT JÚDICE: Wait a minute.

9 MR. GARCÍA REPRESA: It's a very simple question,
10 Mr. Chairman, and I would like to move on.

11 PRESIDENT JÚDICE: I'm just saying that you need to
12 allow for the answers to be clear for the transcripts. Thank
13 you.

14 THE WITNESS: Thank you, Mr. Chairman.

15 BY MR. GARCÍA REPRESA:

16 Q. Mr. Abdala, if I may rephrase the question.

17 Is it your testimony that in your model the only
18 plants you factor in are the existing ones you said, existing
19 ones as of 2010, which would continue operating until 2038?
20 Yes or no?

21 A. Yes, that's correct. The only plants that are being
22 modeled are the existing plants as of 2010; and, according to
23 dispatch projections, they are expected to be functional until
24 2038, yes.

25 Q. And you mentioned a moment ago that revenues increased

10:55 1 with inflation at 2.5 in your model after 2018.

2 Do you recall that?

3 A. I do.

4 Q. But that's not correct, isn't it? It's Capacity Price
5 revenues increase at a higher rate than inflation, don't they?

6 A. You're right. And I guess I misspoke thinking only on
7 the revenues on the energy sales. The energy sales on Spot
8 Prices, they are expected to increase by the inflation rate.

9 As it relates to Capacity Payments, the Capacity
10 Payments, as you have seen in my opinion, I noticed that the
11 Capacity Payments are regulated, and they have to be updated
12 every six months by the evolution of the turbines that the
13 Bolivian regulator uses in order for the reference of the
14 Capacity Payments.

15 And I analyzed the evolution--the historic evolution
16 of the U.S. turbine PPI index as proxy, because that's a proxy
17 that the Bolivian regulators also use in order to see the
18 use--they look at the plant and the cost of the plant and
19 equipment produced in the U.S., and that's what I have
20 concluded that it would be higher--would grow in a higher level
21 than the wholesale inflation in the U.S., and that's at
22 3.5 percent overall inflation on those.

23 Q. Okay. And we will get to that in a moment. We're on
24 revenues.

25 I'm not sure whether you were in the room, but counsel

10:57 1 for Claimants stated last Friday, from Day 4, Page 942, "I do
2 understand from Compass Lexecon that Mr. Paz's models to do run
3 from July and not from May 2010."

4 Did you tell this to counsel?

5 A. No, I don't recall that.

6 Q. What I just read to you, is that your understanding as
7 to how Mr. Paz's model works?

8 A. No. I understand that Mr. Paz's model will have
9 implications from May 2010 onwards.

10 Q. So, counsel for the Claimants was mischaracterizing
11 your views in their cross-examination of Mr. Paz, weren't they?

12 A. I don't know. I didn't pay attention to that, sorry.

13 Q. Now, we were talking, sir, about 2018 a moment ago.

14 Did you provide an instruction to MEC to run dispatch
15 only up to 2018? Yes or no?

16 A. No, I didn't. As I explained today by Mr. Llarens,
17 Mercados explained to us, and I knew this from my experience in
18 electricity markets elsewhere in Latin America, that when you
19 have to do simulations on a weekly basis, you have a limit up
20 to the number of weeks that you can use. Because otherwise,
21 then you start repeating yourself on the expected history of
22 hydroelectricity, which is randomly forecasted.

23 So, that came only through the technical limitation on
24 the weekly analysis.

25 Q. Okay. So, when we see in your First Report at

10:59 1 Paragraph 72 and then repeated in your Second Report at
2 Paragraph 106, quote--Page 34.

3 So, when we read towards the middle of that
4 paragraph--

5 A. Sorry, could you repeat the paragraph number?

6 Q. Yes. Seventy-two.

7 Are you with me, sir?

8 A. Yes.

9 Q. When we read there, "I asked MEC to run a dispatch
10 simulation for the upcoming nine years starting in May 2010 and
11 ended in December 2010," you want to correct that statement, I
12 understand? 2018, sorry.

13 A. Well, here--yeah, it reads as if it was my decision,
14 but this was really--we worked closely with MEC in
15 understanding the limitations of the technical model. So, I
16 agree with the--it came through their suggestion, and I agree
17 with that, and as part of the set of assumptions and--that MEC
18 would have to run, the time horizon would be something that I
19 would have told them that I would be okay for them to run up to
20 December 2018.

21 Q. In that same sentence that we find in your Second
22 Report at Paragraph 106, we should also correct it; correct?

23 A. Well, it's the same thing. I don't think a correction
24 is needed. It's just a clarification on how that decision came
25 through.

11:01 1 Q. Okay. Now, you understand that the MEC team used the
2 expected expansion of the system arising out of what's called
3 the POES 2011-2021. Do you understand that, sir?

4 A. I do. I understand that those are the main--that that
5 POES would have the main expected entry dates and project size
6 that forms the basis for MEC's input. It's not the only one,
7 but it's one of the main basis.

8 Q. And you understand that by using that POES, which was
9 dated December 2010 and not the POES that was in force as of
10 the nationalization date, the Rositas hydropower project comes
11 off MEC's runs, doesn't it?

12 A. No, that's not the--not the reason why Rositas is out.
13 As I said, that's one of the things I instructed Mercados to
14 look at. And I told him, I said, look, we need you to assess
15 what would be the expected capacity and what would be the
16 expected demand as known by the market in May 2010.

17 And thus, we review the information that has been
18 published by the Bolivia before, like the POES 2000--that was
19 released in November 2009. I reviewed with Mercados other
20 information, such as the medium-term plans that were available.

21 But I also review and analyze what type of market
22 information would be already known to the participants at that
23 time, because eventually that's the exercise that I wanted to
24 do.

25 And thus you have, say, information such as the delay

11:03 1 on entry of certain plants that was already known to the
2 market. We had already knowledge about mining plants that
3 would add new demand as of May 2010. And I concluded that the
4 best representation of what could be expected would be best
5 summarized by the plan of--that was released by the CNDC in
6 December 2010 because that's something that, although it was
7 released later, it was information that was already in the
8 marketplace.

9 So, I told them, well, look, because you need
10 consistency between the demand and supply forecast, use that as
11 a base with these qualifications. And I instructed them on the
12 modifications on Karachipampa, the modifications on the date of
13 entry of the combined cycle, and because of--Rositas was at the
14 very end in November 2009 plan, and was it off by one year, by
15 only one year, in their November--sorry, in the December 2010
16 release plan, I specifically discussed whether we would need to
17 include Rositas because it may--because of its size, it may
18 have some effect in the modeling.

19 And I concluded that Rositas really was not needed
20 because it was unrealistic. And it's been there for more than
21 40 years. And then as soon as I studied what would be required,
22 more than \$1 million in expenditure compared to the size of the
23 budget that Bolivia has annually for infrastructure projects,
24 which is over 300 million or so for the energy sector, I
25 thought that was not realistic.

11:05 1 And I was criticized for that, and I provided the
2 Tribunal with the sensitivity to my model. If I had included
3 Rositas by 2018, the impact would have been a decrease in
4 damages by \$900,000.

5 Q. Thank you.

6 MR. GARCÍA REPRESA: And I would need an instruction
7 from the Tribunal.

8 BY MR. GARCÍA REPRESA:

9 Q. My question was whether you understand by using the
10 powers--the POES after nationalization, Rositas came off of
11 MEC's runs. I thought I heard an answer that was yes, but it
12 took about five minutes to get that yes.

13 MR. GARCÍA REPRESA: So, I would please appreciate a
14 Tribunal instruction in that regard.

15 PRESIDENT JÚDICE: Thank you very much, Mr. García
16 Represa.

17 Mr. Abdala, when possible, as we have time constraints
18 and the Parties are living with that, don't go too deeply on the
19 time allocated to Respondent. As you will be, I would say,
20 redirected by the other side, by Claimants; and therefore, it
21 would be possible to detail a little more, if convenient.

22 Then, my suggestion, when you think you need to
23 clarify more in detail--and the Tribunal always appreciates
24 that--take some notes and attend to it afterwards.

25 This is something to be decided on a normal basis.

11:06 1 Please don't say only yes or no. If you need to clarify,
2 clarify. But if you think you need to clarify with much more
3 information, it's probably a good solution if you put it for a
4 second moment, okay?

5 THE WITNESS: Very good. I will try my best.

6 PRESIDENT JÚDICE: Thank you very much.

7 It's easier to suggest to apply, but anyway, that's my
8 little thing.

9 Go ahead.

10 MR. GARCÍA REPRESA: Thank you, Mr. Chairman.

11 BY MR. GARCÍA REPRESA:

12 Q. Dr. Abdala, just to confirm, Rositas never comes on
13 line in your model before 2038; correct?

14 A. It doesn't. It never comes on line.

15 Q. Now, you said that you explained in your report why
16 Rositas--

17 Now, to be clear, there is no mention whatsoever of
18 Rositas in your First Expert Report, is there?

19 A. There is none, yeah.

20 Q. Now, you just explained that the reason to exclude
21 Rositas is you found it to be unrealistic. And to be clear,
22 that is your judgment call, sitting here today; correct?

23 A. Correct. That's what I thought it would be. Also the
24 views of the market participants as of May 2010.

25 Q. Okay. And the views of the market participants,

11:08 1 according to you, as of May 2010, is was that Rositas would
2 be delayed until after 2038; correct?

3 A. No. I mean, basically what the opinion implies is
4 that not that it will be delayed after 2038. It will be--it's
5 just an unrealistic project that Bolivia, on its own, would not
6 be able to undertake. And because we are in May 2010, that
7 there is no expectations that private Parties would be funding
8 this because private investment, as of May 2010, will be
9 seen--for the generation industry, in the middle of full
10 nationalization--something not feasible either.

11 Q. Okay. I would like you to turn, please, to your
12 Second Expert Report, Footnote 125, which you will find on
13 Page 61. And if you could let me know whenever you are there,
14 Footnote 125 on Page 61.

15 A. I'm here.

16 Q. Now, sir, am I right in looking at this and noting
17 that the only two articles that you referred to for the state
18 of Rositas as of May 2010, are an article dated 19 January 2013
19 and Bolivia's 2012 investment budget?

20 A. Those two are the ones cited here, but not in
21 relationship to Rositas. This is a relationship to basically
22 the issue of whether Bolivia's own public investment in
23 utilities, how we would fare compared to private. This is not
24 on Rositas specific.

25 Q. Okay. Sorry. I thought Footnote 125 was called in

11:10 1 Paragraph 115-A, 115 starts by reading, "in the case of
2 Rositas," and 115-A says, "Rositas's economics are unsound."

3 I would assume--and please correct me if I'm
4 wrong--that the footnote you're referring there deals with
5 Rositas, doesn't it?

6 A. The footnote that is in there deals with Rositas.
7 Prior to that cite, there's lots of sentences that deal with
8 Rositas. I'm just saying that the quotes that you have here
9 referring to the issue of private versus public investment, not
10 to specifically to Rositas.

11 Q. Okay. So, these are not the articles that would
12 support your conclusion that the market knew, as of May 1,
13 2010, that Rositas would not come on line?

14 A. No. These articles have nothing to do with that.

15 Q. Excuse me. I was wrong.

16 Now, point me to what article discusses that as of
17 1 May 2010, sir.

18 A. Well, as I explained, it was my judgment call that
19 Rositas would be unfeasible for the reasons that I explained in
20 the Second Report and also for the reasons I gave in
21 Footnote 125.

22 The quotes that I have here relates to the more
23 broader question as to whether Bolivia would have the ability
24 to further invest and manage new--investment in new capacity in
25 general.

11:11 1 Q. Okay. So, your judgment call is not supported by
2 anything that's referred to in this document, is there?

3 A. In which document?

4 Q. In this Report, sir. We're talking about your Second
5 Expert Report and, for that matter, the first Expert is also
6 appropriate.

7 There is nothing in either of your Reports, no
8 document, no support for your own personal judgment that
9 Rositas would not come on line, is there?

10 A. No, that's not the case either. You also have all the
11 different CNDC reports. If you actually look at all the CNDC
12 reports, what you see through time is that Rositas has always
13 been like put one year after. So, every new plan or every new
14 report would have Rositas come in a year after. And also you
15 see the budget for Rositas never being allocated. So, that
16 information is already also in the record in CNDC. So, that's
17 also part of why I made that call. It's not coming out of the
18 blue. It's already--that information in--produced by CNDC
19 itself.

20 Q. So, are you suggesting, sir, that the CNDC, as of
21 1 May 2010, was telling the market that Rositas would not come
22 on line before 2038?

23 A. No. It's different. It's--what I'm suggesting is
24 that Rositas has always been on the plan, put like nine years,
25 10 years ahead of time as a wish that they would have in the

11:13 1 future, but, A, it's always being rolled over by one year; and,
2 B, has never been allocated any budget.

3 So, by looking at those facts, you see--and looking at
4 the size of the project and looking at the expected
5 profitability of the project and also by looking at the
6 constraints that Bolivia has on budgets for allocating, then we
7 are told that information, I don't think any market participant
8 would see that as a credible investment.

9 Q. Okay. And you were referring to the CNDC documents,
10 so if you could please turn to your Tab 5 in the bundle.

11 A. I don't think I have a bundle.

12 Q. It seems I'm the only one that has it.

13 PRESIDENT JÚDICE: But this is a problem with a good
14 solution.

15 (Pause.)

16 BY MR. GARCÍA REPRESA:

17 Q. Take your time. I was following Tab Number 5.

18 (Pause.)

19 BY MR. GARCÍA REPRESA:

20 Q. Take a look at Tab Number 5.

21 Do you recognize this document?

22 A. I do.

23 Q. Is this one of the CNDC reports you were referring to?

24 A. Correct. This is the one that was released in
25 November 2009.

11:15 1 Q. Right.

2 And if you can please turn to Page 17, you will see on
3 the top of Page 17 a reference to Rositas.

4 Do you see that, sir?

5 A. I do.

6 Q. Now, you obviously read Spanish, so I won't have to
7 translate. But in that paragraph it is said that (in Spanish)
8 it is recommended that in the final studies the possibility to
9 install smaller generation unit is analyzed and, if
10 possible, have an earlier date for the entry into operation.

11 Had you seen this when you prepared your Expert
12 Reports? Yes or no?

13 A. Yes, I did.

14 Q. But you did not consider it relevant to draw the
15 Tribunal's attention to this, did you?

16 A. Well, the issue here is that Rositas, as it shows on
17 this paragraph, doesn't even have a firm size or design, and
18 there has been projects with Rositas, as I mentioned, since the
19 Seventies. And the CNDC, in 2009 says, well, it may be at 400
20 megawatts; in 2010, says maybe at 500 megawatts. Now, it says,
21 well, why don't we discuss whether we do different pieces.

22 So, it's a project that's completely in the air, and
23 it's a project that, regardless of how you--it is a nice
24 project to make. Santa Cruz always wanted to have that
25 project. But what I'm saying is the market is not really

11:17 1 seeing the strong commitment by Bolivia because it's not yet
2 specified and it's not been allocated any budget and,
3 therefore, probably the market doesn't take it seriously.

4 Q. Okay. So, if you could please turn to Tab Number 2.
5 And here we're going back on time. We were in November 2009.
6 You're saying the market doesn't take Rositas seriously.

7 Now I would like to take you to January 2009. This is
8 a publication submitted by Claimants in this case.

9 And you if turn the page after the exhibit reference
10 is found, you will see in the middle column at the top
11 "Hidroeléctrica Rositas se Reactiva."

12 Do you see that, sir?

13 Hydroelectric Rositas is reactivated.

14 Do you see that sir?

15 A. Yes, I do.

16 Q. Turn the page after the C-294. If you turn that page,
17 you have the cover of the Reporte Energía, and in the middle
18 column on the top, you see Hydroelectric plant Rositas is
19 reactivated.

20 Have you seen this before submitted in your report,
21 sir?

22 A. This specifically, no, I didn't.

23 Q. Okay. If you would please turn to Page 12, which is
24 where that article is drawing our attention to.

25 So, as of January 2009--

11:19 1 A. I'm sorry, I'm not with you. You said Tab 12?

2 Q. Page 12 of this document. Sorry if I confused you.

3 It's Tab Number 2, and it's at Page 12.

4 Are you with me, sir?

5 A. Yes.

6 Q. Now, I will invite the Tribunal at some convenient
7 time to look at this article in more detail, but what I would
8 like to confirm with you is that what you have been referring
9 several times as the 1970s project was suddenly being
10 reactivated in 2009, wasn't it?

11 A. Well, I cannot confirm that. I mean, here, this is a
12 publication that basically says that ENDE is trying to think
13 about reactivating it. But Rositas has been, as I mentioned,
14 in the list of potential projects for much further than 2009.

15 Q. Okay. I understand that you haven't seen this
16 document before, and that's why you can't opine on it.

17 A. I haven't seen this magazine before, no.

18 Q. That's fine. We will just, for the record, strike out
19 Footnote 127 of your Second Report in which you cite this
20 document.

21 A. I'm sorry?

22 Q. Yes, Footnote 127, you can take a look at it. You
23 cite this document--

24 A. Okay.

25 Q. --but you've confirmed twice you had never seen it.

11:20 1 But that's fine.

2 MR. RUBINS: Could we ask Dr. Abdala to look at
3 Footnote 127 so that he can recall?

4 MR. GARCÍA REPRESA: I think it says what it says. I
5 would like to move on, if you don't mind.

6 MR. RUBINS: Mr. President--

7 MR. GARCÍA REPRESA: You can do it on redirect.

8 PRESIDENT JÚDICE: Dr. Abdala, if you may give a very
9 quick answer. Okay, if not, we can read afterwards. And
10 anyway, you can redirect. Not to waste our time, or I would
11 say Respondent's time with that. But if you wish to comment
12 very quickly on it, that's okay.

13 THE WITNESS: I see here a cite of the report, but I
14 don't recall. It's been cited for other reasons.

15 PRESIDENT JÚDICE: It's okay. It's enough for the
16 time being. Then you don't recall.

17 THE WITNESS: I don't recall, no.

18 PRESIDENT JÚDICE: That happens to everybody. Thank
19 you.

20 BY MR. GARCÍA REPRESA:

21 Q. Now, if we could go back to your Second Expert Report,
22 where you speak about Rositas. That is Paragraph 114 onwards.

23 A. Which paragraph?

24 Q. 114 onwards.

25 Now, I understood from your testimony now--and it's

11:22 1 further developed in your Report--that you considered Rositas
2 unfeasible because of the costs involved. And I understand
3 that the long-term project costs would be \$1.2 billion.

4 Is that your understanding, sir?

5 A. Well, the first statement that you made is not the
6 only reason. There's many reasons that I discuss here.

7 And 1.2 billion is one of the figures that you see
8 reported. There's other figures as well. And that's, again,
9 another reason why I don't think the market takes it seriously
10 because it has different estimates for costs that vary through
11 time, as well as its design and specification.

12 Q. Well, sir, do you agree or do you not agree with the
13 fact that Rositas was a 1.2 billion project?

14 A. Well, that's--the 1.2 billion is a quote from the
15 CNDC's POES. So, it is stated there as 1.2 billion project
16 expense.

17 Q. And I'm now back at Footnote 125, where you said there
18 were other explanations. There you compare that 1.2 billion to
19 the State budget, the total public investment budget for 2013;
20 correct?

21 A. Yes.

22 Q. Now, you're assuming that Rositas will be financed in
23 one year. Is that your assumption?

24 A. No, sir.

25 Q. Are assuming that Rositas would be financed solely

11:24 1 with the State's budget?

2 A. Yes. As of 2010, that was what market participants
3 would have expected.

4 Q. Okay. Now, if we could stick to this page where we
5 are, now we're looking to the left, and we're looking to
6 another reason why you suggest that the POES of 2010--that is,
7 the one in force as of the nationalization date--will not be
8 reliable.

9 And if you turn the page back please, sir, I would
10 like you to take you to Paragraph 112.

11 Towards the middle of that paragraph, you said that
12 you've analyzed CNDC's 2009 POES.

13 Do you see that?

14 A. I do.

15 Q. And I will--just for semantic purposes, and because it
16 can be a bit confusing, when in your Report you referred to
17 CNDC's 2009 POE, that is the POE published in November 2009
18 which was in force as of the nationalization date, wasn't it?

19 A. That's correct.

20 Q. And when in your Report we see CNDC's 2010 POE, that
21 was the POE published in December 2010 that would have figures
22 for 2011 onwards; correct?

23 A. That's correct.

24 Q. Okay. So, here you've analyzed one that was in force
25 as of the nationalization date, and you say that it's "quite

11:25 1 out of date as of the time of valuation."

2 Do you see that, sir?

3 A. Correct.

4 Q. And the reason you give for saying that it's out of
5 date is what we have on Table 6, in the coming page, which are
6 delays in the entry into operation of certain plants; correct?

7 A. Well, that's only one reason, but there's other things
8 that were out of date as well. But this is the reason--one of
9 the reasons that I show--that is the most relevant one, because
10 it has to do with plants that were supposed to enter before
11 May 2010 and they have not yet entered into the marketplace.

12 Q. Now, you said it's one of the reasons. Tell me, where
13 can I find in your report any other reason for saying that the
14 POES in force as of nationalization is out of date?

15 A. Well, I'm saying that if you look at my overall
16 opinion of why I thought the 2009 plan was already not being
17 used is because of the issue of what type of information the
18 marketplace would have had. And what I say--I make the broad
19 statement that it was quite out of date. But it wasn't just
20 quite out of date because of this entry; it was quite out of
21 date for other reasons.

22 For example, for Rositas, it had a budget of
23 \$32 million. As of May 2010, we knew that that wasn't the
24 case. And the same with all the--many of the hydro and
25 geothermal plants that the market knew, they already were not

11:27 1 being properly budgeted for.

2 So, this is one of the reasons. There's other reasons
3 why it is outdated as well.

4 Q. Now, what you just told us is nowhere in your reports,
5 is it?

6 A. What I just told you is just--I'm elaborating on all
7 the reasons why I thought that the market--the information that
8 contained in the 2009 POE was already out of date.

9 Q. Right. And you confirmed that the only reason that
10 you actually cite in your report is what we see on Table 6,
11 some delay in the entry of certain plants; correct?

12 A. Well, no, I don't know whether this is the only reason
13 that I cite. That's the one you referred to, and you said "the
14 only reason." I don't know. There might be other quotes in
15 the report that might be related to that. I don't remember.

16 Q. I put it to you--and I remain to be corrected on
17 redirect--that this is the only reason. And I will work on
18 that assumption.

19 Now, if we look at that Table 6, sir, you mentioned
20 projects in general.

21 Now, to be clear, in Table 6, there were only two
22 projects that were cited: The Entre Ríos plant and the
23 Guaricachi combined-cycle; correct?

24 A. I don't think I talk about projects.

25 Q. You did in your testimony a moment ago, sir.

11:28 1 A. Well, I may have referred to projects, but if you read
2 the report, I'm showing five new power plants. So, I'm
3 referring to power plants.

4 Q. And tell me, Entre Ríos is a generator unit. There
5 are four generator units in the Entre Ríos plant; isn't that
6 true, sir?

7 A. Right.

8 Q. So, Entre Ríos is one plant?

9 A. Entre Ríos is not--it has different units. It has
10 four units, and since obviously what matters is that the units
11 may come into place at different times, the market would look
12 at when the unit--the relevant unit will come, not when the
13 full plant eventually will come. So, each unit will add new
14 capacity. So that's a proper way to look at that time, by
15 units.

16 Q. Okay. And if you look at the Guaracachi combined
17 cycle, you are suggesting that the POES is out of date because
18 it projected combined cycle as of May 2010, and it actually
19 came into force as of April 2012.

20 Do you see that, sir?

21 A. I do, yes.

22 Q. And that's inconsistent with your model, isn't it?

23 A. No.

24 Q. Because you project--let me finish, please--because
25 you project that combined cycle will enter on 1 November 2012.

11:30 1 A. It's not inconsistent--

2 Q. 2010, excuse me. For the record.

3 A. It's not inconsistent with the model.

4 What I'm reporting in this table is the Effective Date
5 of entry as it actually happened--now, in my model, I have to
6 see what is the expected date of entry as of May 2010. And
7 what I use for Guaracachi combined cycle is the information
8 that the marketplace may have had available; which, as I
9 explain in my First Report, was that the combined cycles will
10 be finished by sometime mid-2010. I think it was by August of
11 2010. And then I explained that I used November 2010 because
12 of--that was a more reasonable date of entry.

13 And I think Mr. Paz and Dr. Flores also adopted the
14 same November 2010.

15 So, it's not inconsistent. This is just reflecting
16 effective entry date.

17 Now, for other reasons, then, after nationalization I
18 understand that the combined cycle had to be delayed, but that
19 was not something that any market participant would have been
20 able to anticipate as of May 2010.

21 Q. Okay. So, as of May 2010, sir, is it your testimony
22 that a willing buyer would have considered combined cycle
23 coming on line in 2012 or in 2010?

24 A. In 2010.

25 Q. Now, as of May 2010, sir, if we look at this Table 6,

11:31 1 Entre Ríos 2 was already on line; correct?

2 A. Yes.

3 Q. And Entre Ríos 3 was already on line; correct?

4 A. Correct.

5 Q. Now, Entre Ríos 1 and 4 were not yet on line; correct?

6 A. That's correct.

7 Q. And they came on line in January 2010; correct?

8 A. That's also correct.

9 ARBITRATOR CONTHE: June?

10 BY MR. GARCÍA REPRESA:

11 Q. June. Excuse me.

12 A. June.

13 Q. I see we're agreeing on mistakes.

14 (Pause.)

15 Q. So, a willing buyer as of May 2010, doing a due
16 diligence of Entre Ríos, would have very likely seen that it
17 was doing a final test, wouldn't it?

18 A. Well, no, it was slightly delayed. You would have
19 seen that two of the units had already entered, and the others
20 were pretty much coming on line. That's what it would have
21 seen, yes.

22 Q. So, Entre Ríos was not a big issue in terms of delay,
23 was it?

24 A. Well, it just reflects that the information on the POE
25 of November 2009 was out of date. And if you model those, then

11:32 1 you have distortions as to the type of supply and demand
2 balance that you have for the early months beginning in
3 May 2010.

4 Q. And, sir, in your model, when does Entre Ríos come on
5 line?

6 A. Exactly on the effective dates that they actually came
7 on line.

8 Q. So, you look at the POES December 2010, but then in
9 your model you factor in Entre Ríos from June 2010; correct?

10 A. Well, because we already basically know--the market
11 knows that these plants are about to enter at any minute.

12 So, for those--there are two of them that are already
13 entered, so the market knows that. And the other two are
14 coming on line very soon.

15 Q. Now, if we can go now--keep going back, and we look at
16 Paragraph 110. There you refer to an instruction given to MEC
17 to use CNDC's November 2009-October 2013 SDDP database.

18 Do you see that?

19 A. I do.

20 Q. Now, were you aware when you gave this instruction to
21 MEC that there was a more recent database published in March
22 2010, the one used by Mr. Paz?

23 A. Yes. And like the technical restrictions to run--not
24 being able to run more than 480 weeks, this is something that
25 we discussed with Mercados, and they explained to me why they

11:34 1 needed to use the November 2009, October SDDP database in order
2 to project the full calendar, which is something that they
3 would not be able to do if they use a more recent database.
4 And I agreed with that. And I also consent that that would be
5 the proper way to do it.

6 Q. So, let me get this clear. MEC explains to you that
7 if they use the May 2010 PMP, which includes the SDDP database,
8 they would be looking data from January through May 2010;
9 correct?

10 A. That is correct. And that has an impact on the
11 sequences of hydro conditions which they wanted to start with
12 the full calendar year by using the SDDP database as of
13 November 2009.

14 Q. Now, let me get this right. Since you're projecting
15 as of May 2010, why do you need to project January to April and
16 not just take historical figures that are available in the
17 public domain, sir?

18 A. Well, you can use historical data, but that historical
19 data eventually will not have much in terms of the continuity
20 of the hydroelectricity conditions. So, that's what Mercados
21 explained to us, that in order to be fully consistent, they
22 considered it better to have the full calendar year with
23 information contained on the November 2009 SDDP.

24 I understood the difference, and I agreed with that.
25 And in my Second Report, as you can see, then I--because I was

11:36 1 criticized for that, I asked EdI to run what would be the
2 results if we were to use the actual information in this regard
3 in November 2009. And I think it is reported somewhere that
4 the difference was, I think, around 200,000--yah, 0.2 million
5 as of May 2010. That's in Footnote 122.

6 Q. Now, if you were able to run that sensitivity for your
7 Second Report, doesn't that mean that you could have done that
8 same calculation before your First Expert Report, sir?

9 A. Well, as a matter of what can be done or cannot be
10 done, yes. But as a matter of what is technically proper--and
11 I understood the reasons why Mercados wanted to do it that way,
12 and I agreed with that because it also made sense to me. And I
13 had experience with this type of continuity in hydroelectricity
14 dispatch model, and my understanding of what they were
15 explaining was perfectly logical. So, I thought that option
16 was preferred to--to just applying the actual information in
17 this particular case.

18 Q. To be clear, you instructed MEC to use that old 2009
19 SDDP database, didn't you?

20 A. Well, as I just mentioned, it came about with the same
21 type of reasoning in which MEC provided their technical
22 reasons, and I agreed, and I consented that, yes, this is the
23 right way to do it.

24 Q. The answer to my question is yes? Did you instruct
25 MEC to do it? Yes or no?

11:37 1 A. Well, yes.

2 Q. Thank you.

3 A. If you want to play the word instruction with all the
4 background I just gave to you, yes.

5 Q. Sir, if we could move on to a different topic--

6 PRESIDENT JÚDICE: Good time for a break?

7 MR. GARCÍA REPRESA: Yes.

8 PRESIDENT JÚDICE: Fifteen minutes.

9 MR. GARCÍA REPRESA: I know Dr. Abdala knows it, but
10 if you could give the instruction.

11 PRESIDENT JÚDICE: As you know, you're not allowed to
12 speak with anybody related to this case, not only people that
13 are inside this room, but even that are outside this room. You
14 need to stay a little alone, but not obliged to stay here. You
15 can obviously leave the room for a walk or for a cigarette or
16 whatever you wish.

17 THE WITNESS: Thank you, Mr. President. I understand.

18 (Brief recess.)

19 PRESIDENT JÚDICE: Let's proceed.

20 MR. GARCÍA REPRESA: Thank you, Mr. Chairman.

21 BY MR. GARCÍA REPRESA:

22 Q. Dr. Abdala, I hope the news were not too bad today?

23 A. Not that bad.

24 Q. As I said before the break, I wanted to change topics,
25 and I would like to clean up a few things in the record.

11:57 1 If you can please turn in your Second Report to
2 Paragraph 82.

3 Now, this is in the section where you address the
4 risk-free rate, and what I would like you--and picking up here,
5 you would have gathered, on the President's earlier question.
6 At Paragraph 82 you state that you reviewed valuations
7 performed by investment banks. Do you agree with me that it's
8 only valuations performed by Bank Santander in Chile?

9 A. Yes, I do agree.

10 Q. So we'll correct. We will take out that S; right?

11 A. Yes. It is Santander on the power generators, yes.

12 Q. And we should make the same correction on Figure 2;
13 correct? Risk-free ratios on investment bank report; correct?

14 A. Yes.

15 Q. Even though there are various reports?

16 A. Yes, you're right.

17 Q. And if we turn--before I move on from there, the
18 various reports that you include in C-300, those are dated both
19 before and after the nationalization; correct?

20 A. That's correct.

21 Q. And you did not consider that it would be relevant for
22 this Tribunal to know that you were using hindsight in
23 preparing this Figure 2 that we have on Page 46, did you?

24 A. This is not using hindsight. This is just presenting
25 the Tribunal with the only areas that I was able to gather from

11:59 1 investment bank, which the only one that was having relevant
2 information that I was able to source, was in Santander for 15
3 corporations and different dates, and I think I explained that
4 on the date of these reports, and I think they are relevant
5 because both before and after is just to show basically
6 benchmark of WACCs and risk-free and other components of the
7 WACCs around the date of valuation.

8 So, I think those are clear. Some of them are before,
9 and some of them are after.

10 Q. And you intended this Tribunal rely on this Figure 2
11 as a sign of confirmation of your analysis; correct?

12 A. No, I presented it as a sign of whatever else is
13 relevant out there for my investment bank report as to what
14 type of risk-free rates and other parameters of the WACC they
15 have used, and then the Tribunal can compare to both my
16 analysis and to Dr. Flores's analysis.

17 Q. Okay, so you're submitting this raw data to the
18 Tribunal without suggesting that it confirms your analysis;
19 correct?

20 A. Well, no, no. It does confirm our analysis, but as I
21 showed today, I mean both the WACCs and the cost of equity, the
22 cost of debt, I'm showing that the analysis is similar, and the
23 results that they find for different companies in the different
24 five countries with the exception of Argentina, for the reasons
25 I mentioned, are very in line with the assets and the

12:00 1 parameters that I have used.

2 Q. Okay. Now, did you intend the Tribunal to rely on
3 this Figure 2 as supportive of your conclusions? Yes or no.

4 A. Look, that's for the Tribunal to decide. Well,
5 assuming that I think that it's relevant for the Tribunal to
6 know, and how the Tribunal will use it, it's up to them.

7 Q. Sir, I'm asking about your intentions when you wrote
8 this. I don't think that's for the Tribunal to determine, but
9 rather for you.

10 So, I will ask you again. Did you intend when you
11 provided these figures to this Tribunal for this Tribunal to
12 rely on them as supportive information for your conclusions,
13 sir?

14 A. And again, I don't have any intentions as to how the
15 Tribunal may or may not rely. My intentions was to present
16 evidence that I think is relevant for the Tribunal to know.

17 Q. Okay. So, in your first sentence when you read the
18 review valuations performed by investment banks, and we
19 corrected that, on traded power generators in the region
20 confirms my analysis, you had no intention of this Tribunal to
21 rely on this. Is that your testimony?

22 A. Well, look, the intentions as to whether the Tribunal
23 may or may not rely is that I disagree with that phrasing. The
24 intention is to present this evidence because I think it's
25 relevant, yeah, I think it does confirm my analysis, and I

12:02 1 think the Tribunal will see how they use it. I mean, this is
2 what the evidence is out there for, the purposes of comparison
3 with other companies in the region.

4 Q. Okay. If we can please turn, and keep these open, if
5 you will, and turn to Tab 30 in your bundle. It's Volume 2.

6 (Pause.)

7 Q. You should normally find in there the Second Expert
8 Report of Dr. Flores.

9 Do you have that, sir?

10 A. I do.

11 Q. Okay, so we will be comparing your risk-free rate
12 table, Figure 2 that we were looking at Page 46 of your report,
13 sir, with Page 64 of Econ One's Second Expert Report, grafico
14 uno, and let me know if you are there, sir. Page 64.

15 A. Correct.

16 Q. Now, so that everyone follows what Dr. Flores did, is
17 take your same figures, your same raw data and isolate the data
18 prior to the nationalization and the data post-nationalization.
19 Is that your understanding of what Dr. Flores did?

20 A. Well, what Dr. Flores did was first he reported in
21 Table 4 some separation of dates and showing the different
22 risk-free rates used by Santander Investment during the
23 different time framework here 2009, 2010, 2010, and 2010. And
24 here in graph Number 1, what basically Dr. Flores is reporting
25 not the 2010 average as it is reported in this graph, but

12:05 1 rather the 4.2 corresponds to all the 2009. That's what it
2 seems.

3 Well, hold on. Let's see.

4 Q. Have you reviewed this report before, sir?

5 A. I did, of course, yes.

6 Q. Now, I will put it to you--and take it as an
7 assumption--the Tribunal can accept it for itself--that Graph 1
8 is simply taking the Banco Santander reports dated after
9 nationalization to one side and showing the Banco Santander
10 reports that existed as of 1 May 2010, showing the average and
11 the medium, both the average and the medium, 4.2; Econ One's
12 risk-free rate is 436, and your risk-free rate is 358.

13 Do you see that, sir?

14 A. Yes, and what I'm saying is that I find consistency
15 with what is reported in Table 4.

16 Q. So, there's no inconsistency, but I know that you
17 could do numbers, so you can find inconsistency where you want.

18 Now, if you were intending for this Tribunal to rely
19 on what Banco Santander did to assess Fair Market Value of EGSA
20 as of 1 May 2010, will you not look at the expert reports that
21 were available--excuse me--the investment reports by Banco
22 Santander available before 1 May 2010?

23 A. No, no, because, first of all, I'm not using them for
24 the purposes of my own valuation, but, second, I'm providing
25 context of what I have available, and what I consider is

12:06 1 that the Tribunal should know what are the type of discount
2 rates that are being used by Santander Investment around the
3 date of valuation, so the Tribunal will see that some of them
4 are August 2009, but some of them are June and October 2010, so
5 I think those are the ones that I considered relevant for the
6 closest that I could get to the date of valuation.

7 Here, it's not a question of hindsight because I'm not
8 using them for my valuation. It's just a question of saying,
9 look, around the date of valuation. These are the opinions of
10 the investment bank report on the conditions of the WACC.

11 Q. And, sir, in your report, where we find this
12 contextual evidence, if you will--that is evidence after
13 nationalization date--for every line of your model? Yes or no?

14 A. For every line of my model, well, that's thousands of
15 lines.

16 Q. Let's simplify for every revenue, and there are three
17 revenue types, energy, capacity, and carbon credits.

18 A. For revenue lines, let's see, yes, there is
19 information out there on issues of revenues. There's
20 information that provides context for issues of revenues as to
21 Capacity Payments--indexation, for instance. There is context
22 for issues of how the Spot Price is being determined, which is
23 another component of revenue. We have context of information
24 that has been published before or after the date of valuation.

25 So, there's lots of information that are surrounding

12:08 1 the date of valuation that is useful for benchmark.

2 Q. Two points arising out of there. Is it first your
3 testimony that evidence after the nationalization date is
4 relevant to assess the reasonableness of your assumption? Yes
5 or no?

6 A. Some information, yes, it could be very well relevant
7 because it's relevant for the Tribunal, although I'm using--I'm
8 trying to use information as available as of that date to try
9 to lock in a value as of that date. There is information there
10 that the Tribunal should see as to actual performance, actual
11 Spot Prices, et cetera, that I think it is relevant for the
12 Tribunal to consider.

13 Q. Okay. And the second point that arose from your
14 answer, I mentioned three revenue lines. You gave me an answer
15 for two, and you conveniently avoided carbon credits.

16 Now, what is the price per ton of CO2 that you
17 included in your Expert Report, sir?

18 A. Well, there are several prices for carbon credits.
19 First, you have the pre-sale, so you have an agreement--

20 Q. Well, that's a set price. What price--let's simplify
21 here. What price did you project after 2013?

22 A. You asked me for prices.

23 Q. Well, what prices did you project after the pre-sale
24 contracts ended?

25 A. After the pre-sale Contracts, what I projected was

12:10 1 expected future prices on carbon credits as of the date of
2 nationalization.

3 Q. That was not my question. What was the price per ton
4 of CO2 that you project in your model, sir?

5 A. If I recall correctly, I think it might be around
6 \$17-\$18 per ton of carbon emission.

7 Q. Okay. And carbon emission rights the industry
8 considers are traded in euros; is that correct?

9 A. Right, I think these are converted into--I think I
10 gave you the right currency, I think in dollars were around \$17
11 to \$18.

12 Q. It's 14 euro, and we're not going to argue about that.

13 Now, if you think that contextual information is
14 relevant and you consider revenues for carbon credits at 14
15 euro per ton of CO2, don't you think it would have been
16 interesting for this Tribunal to know that carbon credits are
17 trading at less than 50 cents of euro per ton today?

18 A. Well, I could have provided that information, but I
19 would have to do it with a context of why that's the case
20 because you have a certain permits that are eventually expiring
21 or quotas that are expiring, so I would have to write many
22 pages about why today the price is at zero as opposed to
23 expected price that was at the time of nationalization. Why
24 eventually certain of these rights may have renewed or not
25 renewed, but I use information as to what is the price as of

12:11 1 that date, and I think--I don't think that has been contested,
2 and I don't think that is information useful that any willing
3 buyer or willing seller would have used at that time.

4 Q. I'm not trying to see what has been conducted or not,
5 but really trying to understand your way of doing things,
6 because for some things contextual post-nationalization
7 information is relevant; for others you consider it's not
8 relevant, and I just want to confirm with you that you did not
9 mention to this Tribunal that, from October 2008, where carbon
10 credits were trading already at half what you've considered to
11 April 2013 today, when they're trading at less than 0.5 euro at
12 the time, you did not consider that to be relevant information
13 for the Tribunal; correct?

14 A. I don't think so, because the valuation that was
15 conducted as of 2010 took into account what was expected of the
16 price as reflected by the future markets as of that date.

17 I mean, again, if I had to put ex post information for
18 every single assumption, then I would have to explain what
19 happened, whether the predictions have been right or wrong for
20 each of the items, and that's not the exercise. I mean, it
21 would take a while for that exercise to be done. I don't think
22 that information is relevant for my valuation. That's why it's
23 not included.

24 Q. Okay. I heard you, and we diverted away from where we
25 were, which was in the risk-free rate where you do refer to

12:13 1 post-nationalization information because for that it's
2 relevant, according to your testimony. You can go back,
3 please, to your Second Expert Report, Paragraph 82, and we were
4 looking at Page 64 of Daniel Flores's table.

5 Now, if you turn the page in Tab 30 of Daniel Flores's
6 report, you will see a graph Number 2.

7 You see that, sir?

8 A. I do see it, yes.

9 Q. And this is, if you go back to your report, a
10 correction at Figure 3 at Page 51.

11 Do you see that, sir?

12 A. Well, that is the title of the graph. I would
13 disagree with that correction.

14 Q. Now, let's take it step by step. Paragraph 91 of your
15 report, second report, you state, "From my review of valuations
16 performed by investment banks on traded power simulated in the
17 region." I understand that we should correct "banks." It
18 should be one bank; correct?

19 A. No, I have no problem with that, yes.

20 Q. No, no correction, or, yes, you acknowledge--

21 A. No, I have no problem with your suggested correction.

22 Q. Figure 3, we should also do the same correction on the
23 title, shouldn't we?

24 A. Yes, you can strike the S on banks.

25 Q. Okay. And when we look at the blue columns in your

12:15 1 Figure 3, those are based on pre-nationalization and
2 post-nationalization Banco Santander reports; correct?

3 A. Those are based on all the reports both pre- and
4 post-, yes, that's right.

5 Q. And Graph 2 of Dr. Flores does the same thing it did
6 in relation to your prior graph, which is isolate the reports
7 dated after the nationalization. Is that your understanding,
8 sir?

9 A. Let me check.

10 Yes, that's--it is explained in Paragraph 165. It
11 says that using the data prior to the date of valuation, so
12 that is taken in August 2009, and that's why--first of all, the
13 labels are wrong in Dr. Flores's graphs. They say 2010, 2010.
14 They should be--I think he's referring only to the August 2009,
15 and as I see--

16 PRESIDENT JÚDICE: I'm sorry, I don't understand.
17 What is the mistake?

18 THE WITNESS: Graph 2 has the 6.5 percent and
19 6.5 percent that you see in blue represented as average--as
20 median, that refers to the August 2009 in Santander Investment
21 Bank report, but it has a title, the label that says 2010, and
22 these are not 2010. These are August 2009, and the reasons why
23 I disagree with this being a valid correction is that this is
24 completely the opposite, misleading because it uses something
25 that Professor Damodaran explains how his opinion on Market

12:17 1 Risk Premium has changed from 2009 where he thought it was
2 between 5 to 6 percent to 2010, where he thought it would be
3 from 4.5 to 5 percent.

4 So, by excluding any information in 2010, you're
5 missing what's the transition between the end of the financial
6 crisis by mid-2009 to what was going on already by the middle
7 or May of 2010. So, that's relevant information that you don't
8 want to exclude.

9 So, unfortunately, I wish we had Santander investment
10 reports dated, say, March or April 2010, but we didn't. So, I
11 think it's relevant for the Tribunal to see what the June 2010
12 or October 2010, which are more representative of what the
13 dynamics, as Professor Damodaran explains, of what the Market
14 Risk Premium perception was after coming out of the financial
15 crisis.

16 BY MR. GARCÍA REPRESA:

17 Q. Sir, you submitted the Banco Santander investment
18 reports; correct?

19 A. Correct.

20 Q. You did not submit any other report before the
21 nationalization date other than the November 2009 report, did
22 you?

23 A. No, for the reasons I explained, because I was looking
24 for the closest to the valuation date. And the closest I had
25 prior and after were the ones that I found. I didn't find

12:18 1 anything closer to that date than the reports that I used.

2 Q. But yet you did not alert this Tribunal to the fact
3 that in those figures that we just looked at where we saw
4 investment banks' reports it was neither banks, and it was
5 neither as of the nationalization date; correct?

6 A. Well, I disagree. I apologize for the mistake of
7 having a plural for investment banks when it is Santander, but
8 I did submit the full exhibit with all the reports, and those
9 are in Exhibit C-300, and I don't think I misrepresented
10 anything from that--from there. I had all the valuations of
11 reports, they are stated in that exhibit, and I think I discuss
12 somewhere in my report--exactly where I mention that this comes
13 from dates around the valuation date.

14 PRESIDENT JÚDICE: Anyway, the Tribunal is aware of
15 this issue, and respectively, if you're right, to remember as
16 what we know, it's better if you proceed. We are prepared
17 enough to take our own conclusions.

18 MR. GARCÍA REPRESA: I will move on to a different
19 topic, but a similar exercise.

20 PRESIDENT JÚDICE: Fine.

21 BY MR. GARCÍA REPRESA:

22 Q. Which is looking at your figures, because your figures
23 I think are very telling.

24 If you go back in your Second Expert Report--we will
25 now go to Page 44, and that's where we will find Figure 1, and

12:20 1 please let me know if you are--whenever you're there.

2 A. I am here already.

3 Q. And in that table, sir, you present four columns, the
4 one to the left, Bolivia's 2012 sovereign debt--debt. Sorry.
5 Do we agree that using that would be hindsight? Yes or no.

6 A. That's correct, and that's the reason why I don't use
7 it for my valuation purposes.

8 Q. Okay. Next, you refer to Professor Damodaran's 2010
9 indication. You just spoke about it a second ago, and you
10 referred to that again today in your Slide Number 8, if the
11 Tribunal wants to look at today's presentation. Professor
12 Damodaran, 2010, at 5.5.

13 Now, tell me, shall I understand that 5.5 is Bolivia's
14 Country Risk Premium according to Damodaran in 2010? Yes or
15 no.

16 A. Yes. Damodaran has an indirect way of computing a
17 Country Risk Premium by looking at a credit rating of the
18 different sovereigns, and then he would have a table assigning
19 basis points according to those ratings.

20 And for 2010, the 550 basis points that I reported
21 here is that what he considers for Bolivia.

22 Q. So, if we look at Damodaran's table, we will see under
23 country risk 5.5; is that your testimony?

24 A. Well, if you look at Damodaran's tables, I mean, you
25 will find both the 5.5, and you will also find another column

12:22 1 where he says--well, if you agree with a multiplier, then you
2 will find the 1.5x over the 5.5. So, Damodaran will present
3 both results.

4 Q. Right. And which one of those two is Damodaran's 2010
5 Country Risk Premium for Bolivia?

6 A. Well, the first one because that's--it's based on the
7 criteria, the first one meaning the 550 basis points because
8 that's his direct criteria for the rating--ranking that he has,
9 and the spread that he associates for the ranking, and then
10 whether evaluated the size or not, use of multiplier is a
11 different thing.

12 Q. Okay. So, let's go to the source that we are both
13 referring to, which is C-308 for the record, and that's in Tab
14 Number 7.

15 Are you with me, sir?

16 A. Trying.

17 Q. Now, the title of this slide, this table, is
18 "Estimating Country Risk Premium," and this is Professor
19 Damodaran's table, the one you are referring to; correct?

20 A. That's correct, yes.

21 Q. And I know you will want to talk about the top part,
22 but let's look at the figures.

23 What Damodaran is doing here for several countries
24 listed on the left column is look or estimate, rather, the risk
25 by looking at the rating of that country, and then

12:24 1 doing--calculating what's called an adjusted default spread,
2 which basically is the spread of the country sovereign debt
3 versus the U.S. sovereign debt; correct?

4 A. Well, what Damodaran is doing here is basically
5 listing all countries and assigning them the long-term rating
6 and then showing in the next column; the first numerical column
7 is the spread that he assigns for that particular rating, and
8 it's a spread that should be interpreted, yes, as a measure of
9 the spread over the U.S. sovereign or, in this case it's not
10 just the U.S. Sorry. It's the spread over the best rating.
11 You see Australia. Also they have AAA ratings. So, according
12 to Damodaran, those should not carry any Country Risk Premium
13 because, in his scale of rating, they have a better
14 qualification. So, it's not just of the U.S.

15 Q. And the U.S. AAA, also, isn't it?

16 A. In 2010, yes.

17 Q. So, whether you take the U.S., whether you take any
18 other AAA, what we have in the adjusted default spread is the
19 difference between in the case of Bolivia, Bolivian sovereign
20 debt and U.S. sovereign debt; correct?

21 A. No. It's the difference between the spread that
22 Damodaran assigns to B2 rating that he has for Bolivia as
23 compared to a AAA rating.

24 Q. And that's the 5.5; correct?

25 A. Correct.

12:26 1 Q. And if you move two columns to the right, you will
2 find a column that says "Country Risk Premium."

3 Do you see that?

4 A. I see that column, yes.

5 Q. And according to Professor Damodaran, the Country Risk
6 Premium for Bolivia in 2010 is 8.25; correct?

7 A. No, that's an incorrect conclusion because you have to
8 read--look at what it says here. You have it in yellow.

9 Q. At the top?

10 A. At the top. You have a column that says, do you want
11 to adjust the Country Risk Premium for the additional
12 volatility of the equity market. Damodaran is asking to
13 devalue, yes or no. So, depending on the judgment whether
14 this is something that is appropriate or not, then you apply
15 it, but his opinion as to what is the direct Country Risk
16 Premium without the application of the multiplier is the column
17 that you see right next to the long-term rating justification.

18 Q. You see, where I have an issue, sir, is that in your
19 Figure 1 and in your Slide 8 today, you placed Professor
20 Damodaran's Country Risk Premium for Bolivia at 5.5. You're
21 not telling this Tribunal everything that you're telling us
22 now, which is that Damodaran multiplies that 5.5 by 1.5 in
23 order to reach 8.25 which is his Country Risk Premium for
24 Bolivia; is that a fair statement, sir?

25 A. No, that's a wrong statement because I did explain in

12:27 1 my Second Report why the 1.5x should not be used for long-term
2 valuation, and I quoted Damodaran's exactly references as to
3 his also, his recommendation that it be used only for
4 short-term valuation purposes. So, I don't think this has
5 anything to do with your statement. I explained that in my
6 Second Report.

7 Q. Sir, can we find 8.25 percent as Bolivian Country Risk
8 Premium in your expert reports? Yes or no.

9 A. You wouldn't find because that would be a
10 mischaracterization of what the Professor Damodaran would
11 recommend for long-term valuations.

12 Q. Okay. So, your view, which you've just confirmed
13 here, is that Professor Damodaran's table here is only for
14 long-term valuations; correct?

15 MR. RUBINS: Mischaracterization.

16 PRESIDENT JÚDICE: Please, if you don't mind, rephrase
17 your question.

18 BY MR. GARCÍA REPRESA:

19 Q. Your view, sir, is that Damodaran's table here, where
20 we have his application of a 1.5 multiplier should only be used
21 for long-term valuation; correct?

22 A. That is mainly the recommendation that you can read
23 from Damodaran's hints that he has in his printouts or
24 spreadsheets when he talks about the 1.5 multiplier.

25 Q. Right.

12:29 1 Now, I would like to take to you the top part of this
2 document in which you were basing yourself.

3 Now, the first line reads, "To estimate the long-term
4 Country Risk Premium, I start with the country rating,
5 referring to Moody's, estimate the default spread for that
6 rating, U.S. corporate, the country rate bonds over the
7 Treasury Bond rate. This becomes a measure of the added
8 Country Risk Premium for that country. I add the default
9 spread to the historical risk premium for mature equity market
10 based on U.S. historical data to estimate the total risk
11 premium.

12 "In the short term especially, the Equity Country Risk
13 Premium is likely to be greater than the country default
14 spread."

15 Sir, is that the sentence on which you base your
16 conclusion that it is only for short-term--excuse me, only for
17 long-term valuations that you apply the multiplier?

18 A. No, this is just one of them. There is also quotes
19 where Damodaran discusses where you have to do long-term
20 valuations, these relative volatility factor tends to disappear
21 because you would expect that in the long term the volatility
22 of the U.S. bonds compared to the equity markets will converge
23 or will not be present any longer, so this is just one of the
24 quotes, but there's others as well., and I think I quoted those
25 in my report.

12:31 1 Q. Sir, you're referring to the long-term volatility.

2 That's stocks over debt; correct?

3 A. That's true, yes.

4 Q. And you're saying that the long-term volatility of
5 stocks over debt will be the same in the long term; is that a
6 fair statement?

7 A. I was trying to summarize what Professor Damodaran has
8 also put forward in his opinion, yes.

9 Q. Now, there has been a study of that relative
10 volatility in the U.S. market, and are you aware that the
11 volatility is still 2.6; the volatility of stocks is still 2.6
12 higher than volatility of bonds in the U.S. market, sir?

13 A. That is true, and that is something that you have when
14 you look at the volatility, depending on how you measure with
15 historical time framework you would use, and you would find
16 more noise in equity than in debt, but there are plenty of
17 reasons explaining that, but what I'm saying is that the
18 concept of what Damodaran uses if you look, we're doing a
19 theoretical valuation of the long-term asset. Well, in that
20 case, he doesn't recommend the use of adding an extra spread
21 because in the long term one should expect certain convergence
22 on that, and that's a practice that I've seen elsewhere. I
23 mean, most practitioners would not add any multiplier
24 because when you're valuing long term assets. When you're valuing
25 short-term assets you may be a little bit more aware and

12:33 1 eventually adjust but not when you're valuing long-term assets.

2 Q. Sir, is it your view that there is no more volatility
3 in stocks than in debt? Yes or no.

4 A. I don't think I have said so. Depending on how you
5 measure, you normally find that there's a bit more volatility,
6 yes, on equity rather than on bonds. There's many reasons for
7 that.

8 Q. And in your Country Risk Premium, you do not account
9 anywhere for the high volatility of stock over debt, do you?

10 A. No, it doesn't need to. You don't need to apply that.
11 Absolutely not.

12 I mean, you already have in the WACC components that
13 reflects a higher premium that equity demands over the
14 risk-free. That's a properly way to capture on the market a
15 risk-free premium, so you don't really need for a long-term
16 valuation to add any multiplier to the Country Risk Premium.

17 Q. So, we were talking about the relative volatility of
18 stock over debt, and when I was telling you the studies that
19 were done in the States, you said it depends on the period that
20 you consider.

21 Now, I'm not sure whether you have seen this, but I
22 think Econ One has calculated the volatility--

23 MR. RUBINS: Excuse me, sorry. I have to, for the
24 record, the characterization of what was said was also
25 inaccurate. Counsel said--you said it depends on the period

12:34 1 that you consider. That's an extreme simplification of what
2 Dr. Abdala said.

3 MR. GARCÍA REPRESA: I have no doubt that Dr. Abdala
4 is well prepared to correct any mischaracterization, if he
5 finds so, in my questions.

6 PRESIDENT JÚDICE: And out of that, the Tribunal will
7 look much more, as is usual, to what is the witness statements
8 than the resume that every lawyer in any court of law or any
9 Tribunal always do. It is one of my characteristics, I would
10 say, as a lawyer, and then I'm prepared to understand it. But
11 tell me why, Dr. García, it's probably better not to try to
12 make a résumé of what Mr. Abdala stated unless really necessary
13 because it may confuse and for sure not help him, and you
14 wasting your time.

15 Thank you very much.

16 MR. GARCÍA REPRESA: Thank you, Mr. Chairman.

17 BY MR. GARCÍA REPRESA:

18 Q. Dr. Abdala, when you said in response to my question
19 about relative volatility, it is true, and that is something
20 you have when you look at the volatility, depending on how you
21 measure with historical time framework. You recall that
22 answer, sir?

23 A. I do.

24 Q. Were you in that answer suggesting that the
25 calculation of relative volatility will depend on the time

12:36 1 period that you consider? Yes or no.

2 A. It does. It does change a lot, depending on the time
3 period that you consider.

4 Q. Thank you.

5 And are you aware that from 1928 to 2009 the
6 volatility of stock in the U.S. over debt has been 2.6 times
7 greater?

8 A. I have not been able to check that calculation, but it
9 might well be. I wouldn't be surprised.

10 Q. And you still maintain that in the long term, there is
11 no reason to apply a multiplier to a Country Risk Premium to
12 account for the difference between the debt which is what
13 you're measuring with Country Risk Premium and the stock of a
14 company of that particular country? Is that your testimony?

15 A. Correct. I mean, for long-term valuations, you don't
16 need to do any adjustments. All the risks that you see from
17 equity is already captured on the Market Risk Premium, and here
18 we're trying to do an adder to the Capital Asset Pricing Model
19 which is to account for what would be the expected risk that an
20 investor would add to its equity premium for investing in a
21 country that is less stable than the U.S. or than a AAA
22 country.

23 And the sovereign debt per se already shows that
24 spread, and normally for any long-term investments I would
25 never ever use a multiplier, and I have very rarely seen other

12:37 1 valuation experts or other regulators apply any multiplier to
2 the already measure of the spread of the bonds that is already
3 captured by the bond itself or by the rating system, as
4 Damodaran does here in the column called "Adjusted before
5 spread" in your exhibit.

6 Q. Now, if you can please go to Paragraph 60, and we keep
7 going from the back to the front--your Second Expert
8 Report--that's Page 36, and now we're going to be talking about
9 the concept of Size Premium.

10 Now, would it be fair, sir, to say that Size Premium
11 takes into the effect of term size on returns?

12 A. Size Premium attempts to capture what you might expect
13 as an additional risk of investing in a small corporation that
14 in the U.S. in particular the evidence shows that, on average,
15 small firms may earn--would earn a return that is higher than
16 larger corporations; therefore, are seen as riskier.

17 So, that's the main understanding of the concept of
18 Size Premium.

19 Now, the discussion is, okay, when we're measuring
20 that, are we really capturing size or are we capturing other
21 things such as the fact that smaller firms are not able to
22 access to credit markets as larger firms, et cetera. So,
23 that's why there is so much discussion in the literature
24 whether this is a good representation.

25 PRESIDENT JÚDICE: Mr. Abdala, your initial

12:39 1 presentation was really very clear as to that, and we are fully
2 understanding your point.

3 Thank you very much. You can proceed.

4 MR. GARCÍA REPRESA: Thank you, Mr. Chairman.

5 BY MR. GARCÍA REPRESA:

6 Q. Now, put simply, Dr. Abdala, would you say that the
7 size premium mostly accounts for illiquidity issues of smaller
8 stocks?

9 A. I would say that illiquidity is an important factor on
10 why you observe a premium on small companies, yes.

11 Q. Thank you. And I was hoping I would get a shorter
12 answer because I was reading from your report but it seems I'm
13 going to get a comment for every one.

14 Now, when we refer to liquidity in this context, I
15 will simply, and I'm sure you will correct me, we are referring
16 to the fact that potential buyers, of let's say Google stock
17 are many more than the potential buyers of small boutique firm
18 and that illiquidity will mean that an investor in a small
19 company will demand a higher return. Is that a fair
20 simplification?

21 A. No, no, no, not a good one. Now, the liquidity has to
22 do basically with the ability that an investor has to either
23 enter or exit from the particular equity investment in a
24 company, so the fact that you eventually will invest in Google,
25 it's a great asset to have because you can trade it at any

12:41 1 time, enter and exit without much cost at any time because it's
2 so illiquid. But there are also many companies that are traded
3 that are not as illiquid or may have restrictions and,
4 therefore, the premium that you want to have on a stock that is
5 illiquid, it relates to your ability of exiting quickly on the
6 ability to sell in a very short period of time. That's what
7 illiquidity means, basically.

8 So, what liquidity means is your ability to sell in
9 the short run. Illiquidity is the opposite, that you have to
10 wait.

11 Q. Thank you.

12 And I would like you to please turn to Tab 38, and
13 this time it's the second bundle, I can confirm that. 38.

14 (Pause.)

15 Q. Now, this is a document, sir, to which you refer to in
16 your report by Tarbell, and it's titled, "The Small Company
17 Risk Premium: Does It Really Exist?"

18 Do you see that?

19 A. I do.

20 Q. Do you recognize this document, sir?

21 A. Yes, I do.

22 Q. Could you please turn to Page 9.

23 Now, this is, I put it to you, that this is an
24 explanation that you've agreed to as what a size premium is; is
25 that correct?

12:43 1 A. Well, no. It's only a partial explanation. I don't
2 see the issue of liquidity being raised here. This is
3 basically a partial characterization, I believe the issue of
4 small versus large, and small expecting higher returns,
5 et cetera, but it doesn't really discuss the fundamentals of
6 why.

7 Q. Is there anything on this slide with which you
8 disagree, sir? First tell me yes or no.

9 A. Let me read it.

10 Q. You submitted this document, sir.

11 A. There are five bullet points. Let me see.

12 (Witness reviews document.)

13 A. Well, I would disagree with bullet Number 3, for
14 instance, because this is quite a generalization. You see many
15 valuation professionals have never, ever applied a higher cost
16 of capital to value smaller companies as opposed to larger
17 companies, so this is an implication that I would not agree
18 with. In fact, in line with the most recent research, there's
19 reasons to believe that there is no small Size Premium at all,
20 so that I disagree with Number 3.

21 Q. Other than Number 3, is there anything else with which
22 you disagree? Yes or no?

23 A. Let me read the rest.

24 I would also disagree with Number 4 because Number 4
25 talks about a discount rate based on the expected return, and

12:45 1 that's incorrect. I mean, normally you would--the discount
2 rate would be related to the cost of capital of the industry,
3 and your expected return may be much higher than that, but
4 that's not the discount rate that you would value the Net
5 Present Value of future cash flows, so I would disagree with
6 Number 4 as well.

7 Q. Okay. I hesitate to ask you the question again. Is
8 there anything else with which you disagree except for bullets
9 three and four of this document which you submitted, sir?

10 A. In this slide, no, I don't think so.

11 Q. Let's now go to the conclusions, if you will, Page 30.

12 And again I will ask you the question. Is there
13 anything on these conclusions with which you disagree, sir?

14 A. Oh, yes, many things. For instance, smaller companies
15 are riskier than larger companies. Well, it's a very general
16 statement that many people will eventually agree, but also we
17 have seen some empirical literature, mostly recent, not only
18 French and Fama, but I've read other papers as well, where this
19 has been put in doubt. And so that's why I say the evidence
20 from the literature on this is at the moment a little bit
21 inconclusive, and that's why it's not a good practice to assume
22 that smaller companies always carry higher returns or higher
23 risk. So, that's for Bullet 2.

24 I haven't read the others yet.

25 Q. Now, after that, I'm just a bit hesitant as to your

12:47 1 Slide Number 7 in your direct presentation which cites this
2 document as a source for your point about Size Premium, and
3 that is Slide 7, source Number 1, Tarbell 1999.

4 MR. GARCÍA REPRESA: This is what we were just looking
5 at, Members of the Tribunal.

6 BY MR. GARCÍA REPRESA:

7 Q. And we'll get more to that.

8 Now, you referred to more recent research, and if we
9 look at the more recent research that you cite in this Slide
10 Number 7, we have Exhibit C-257, do you see that, sir? You can
11 go directly to Tab 7. That's where you will find the document.
12 It may be easier.

13 ARBITRATOR CONTHE: Tab number?

14 MR. GARCÍA REPRESA: Thirty-seven.

15 THE WITNESS: C-257 by Hitchner?

16 BY MR. GARCÍA REPRESA:

17 Q. That's correct, the Hitchner article that you cite
18 also.

19 Now, I would like to look, please, at Page 141.

20 And if you look at the title "Does size matter?"

21 A. Yes.

22 Q. Third line from the top after recalling the debate
23 that you mentioned, it says, "but most analysts agree that some
24 adjustment should be made to account for the fact that over
25 time smaller entities in the public markets have demanded

12:49 1 higher rates of returns, generally speaking, than their larger
2 counterparts.

3 Do you agree or disagree with this statement here?

4 A. I'm sorry, I'm lost where you started reading.

5 Q. Yes. You can read the entire paragraph from the
6 front. We can read it together, if you want.

7 A. Okay.

8 Q. Fine.

9 So, I'll repeat my question. Do you agree, at
10 Page 141, the third paragraph from the top, do you agree or
11 disagree with what he said there?

12 A. Well, I would not agree with this because, I mean,
13 according to future--some analysts do not use it and most
14 analysts will use it, that is not my experience, and I rarely
15 see Size Premium being used, so I would disagree with this line
16 of balance as most analysts would have used it.

17 Q. Okay. And we can go now to Slide 7. We have just
18 gone through the first two sources that you cited there, and
19 now the third source is your own Expert Report, and in
20 particular your Second Report at Paragraph 63 to 64.

21 Just out of curiosity, you referred a few times in
22 your direct to these studies or the Size Premium studies being
23 done in companies in the U.S. Now, had EGSA in this case been
24 a U.S. company, would you applied a size premium? Yes or no.

25 A. Oh, no. Absolutely not. We were looking at

12:51 1 fundamentals, and that's why I cited these two reports by
2 Tarbell and Hitchner. I mean, what I cited these two for is
3 because they say, okay, look. These are the conditions that
4 you normally see on small companies that justify the use of the
5 size premium, and so we have a long list of issues. And I put
6 the most relevant ones and put them in my report as applicable
7 to Guaracachi.

8 So, I would not conduct any Size Premium or add any
9 Size Premium without first looking at the fundamentals,
10 regardless of the size of the company and whether the company
11 is located in the U.S. or Bolivia.

12 And in my more than 150 valuations that I have done, I
13 mean, I probably have used Size Premium in one or two cases,
14 and they were related to very severe illiquidity issues for
15 companies that really demanded such things, but otherwise I
16 rarely use it. Never use it.

17 Q. Keeping this slide open, and we can go to your
18 Paragraph 63 of your Second Expert Report.

19 Now, 63, you begin by stating, "In a more recent work,
20 Tarbell 2012 presented a list of company characteristics."

21 Do you want to correct that, sir?

22 A. I do. There is only one Tarbell document that we
23 referred to. This should read 1999, and this is the Tarbell
24 document that I was referring to, so this is a mistake here,
25 and I think it's also a mistake on the citing--

12:53 1 Q. In the footnote?

2 A. In the footnote. The Tarbell 2012 should say Tarbell
3 1999.

4 MR. GARCÍA REPRESA: Okay. And this is, for the
5 record, Exhibit C-247, the one we were looking at a moment ago
6 in your bundles. Tab 37.

7 PRESIDENT JÚDICE: There is not a more recent work?

8 THE WITNESS: No. This is a wrong quote. Tarbell is
9 only the 1999 report.

10 PRESIDENT JÚDICE: Thank you.

11 THE WITNESS: Which is then stated the similar things
12 on the Hitchner article that we see here as well as Exhibit
13 C-237.

14 BY MR. GARCÍA REPRESA:

15 Q. If you turn the page, sir, Page 38, your Paragraph 64
16 continues and again we see a reference to the characteristics
17 explained by Tarbell 2012, I understand we need to correct
18 that, too, and you point to five characteristics. And just so
19 that we are all on the same page, are these characteristics
20 that, if met, would require the application of a size premium?
21 Yes or no.

22 A. No, there is not a simple answer. These are the
23 characteristics among some others that are listed but that are
24 considered the most relevant for this case that you should be
25 looking at to decide whether you want to apply any adjustments

12:54 1 to the cash flows or you want to apply some adjustment to the
2 discount rate because you were unable to do any adjustment to
3 the cash flow, so it becomes a matter of judgment. Then if you
4 think some of the characteristics are met, then it might be
5 that you need to do some adjustment because your cash flows may
6 not be capturing fully the features of these characteristics.
7 But it's not an automatic thing. I mean, you have to evaluate
8 the company in context and fully.

9 Q. But your view is that if none of these is met, you
10 don't apply the Size Premium. Is that your view?

11 A. Well, the view is that you should ask yourself the
12 questions are these characteristics are present. For if none
13 of these are present, then there is absolutely no reason to
14 apply the Size Premium. And maybe the one is more or less
15 present, the others are not. Well, it becomes a matter of
16 judgment.

17 Again, the judgment is, do you have anything in the
18 cash flows that are really accounting for what you see, say, as
19 a company, let's say a company's small and it's completely
20 exposed to market volatilities, and you would think is this
21 already captured in my cash flows by having volatility on the
22 revenues or do I need to do an adjustment on the discount rate.

23 Q. Okay. Let's take these conditions one by one.

24 Letter A, you state that Guaracachi EGSA, as we follow
25 it here, there were few limitations or constraints on

12:56 1 fundraising.

2 Do you stand by that, sir?

3 A. Yes, I do. I think in general--

4 Q. A yes will be fine, if you don't mind. We are pressed
5 by time.

6 A. Yes.

7 Q. Is this statement as of 1 May 2010?

8 A. Well, this statement is as of May 2010, and taking
9 into consideration the situation of the company at as that
10 time, which is being in the process of finalizing the
11 construction of the combined cycle, so when you look at what is
12 expected in the future, yes, I think this company would have
13 had no problem in raising finance as soon as the combined cycle
14 would have been operating. I understand that obviously any
15 willing buyer would have seen that as of May 2010, the revenues
16 of the combined cycle were to come in the next few months, but
17 they were still not there, so they would have understood any
18 particular restrictions that the company would have had in the
19 very short term on financing, but they would also have seen the
20 broader picture as well.

21 Q. Were you in this room when Mr. Blanco testified?

22 A. No, I wasn't.

23 Q. Have you seen the documents in the record authored by
24 Mr. Blanco?

25 A. I am not aware which documents you're talking about

12:57 1 here. I mean, I have seen some, but I don't know which ones
2 you have in mind.

3 Q. Now, are you aware that EGSA had no access to
4 international financing other than development banks?

5 A. When?

6 Q. Pick your date.

7 A. Well, if you give me any date, I would say--

8 Q. How about 1 May 2010?

9 A. Well, then you have to say when because it's important
10 because what you have is that as of May 2010, what you have is
11 a company that was approaching some of limitations on your debt
12 covenants, you had the CAF debt covenant restriction, so you
13 wouldn't be able to eventually raise more debt as of May 2010;
14 but again, that's why I say you have to look at the long-term
15 perspective.

16 So, you have to ask yourself, is this going to be
17 solved as soon as this combined-cycle revenues are coming in,
18 or is this permanent, is it a long-term situation or a
19 short-term liquidity constraint on cash. So, that's how we
20 need to see this.

21 Q. Okay. Now, my question was not exactly that. My
22 question was about international financing.

23 Isn't that true that EGSA did not have any
24 international financing other than through a development bank
25 called CAF?

12:59 1 A. Well, CAF was one source, and then the others was
2 currently domestic lending as far as I can recall.

3 Q. Primarily or all?

4 A. Other than CAF? I don't recall, but probably you're
5 right. It's mostly being sourced in Bolivia through both an
6 issue of corporate bonds. I don't know exactly who the buyers
7 are, pension funds, but whether there has been any foreign
8 capital source in the issue of the 24 million bonds in 2009, I
9 cannot tell.

10 Q. Thank you. Apologies for my discussion with my
11 colleagues.

12 Second point that you raise in Paragraph 63 is
13 companies subject to price regulation.

14 Isn't it true, however, sir, that Guaracachi's units
15 could be displaced from the market, even though the price is
16 regulated because they're less efficient?

17 A. Well, it is true as a general concept, but it's also
18 true that Guaracachi's smallest units were the ones that were
19 subject to that risk, and these smaller units also could have
20 been obviously upgraded as Guaracachi itself did in the past
21 with some. And as any generator would do, the bottom line here
22 as to what is expected volatility of the market is, is this a
23 market in which prices can fluctuate a lot? Is this a market
24 where I do have significant uncertainty as to whether I'm going
25 to be able to source revenues or not?

13:01 1 Well, given the situation of Bolivia as of May 2010,
2 whereas Bolivia is operating with the reserve margins of
3 5 percent and not being able in the future to source private
4 investment or at least would be very, very tough, any willing
5 buyer would have understood that the units for Guaracachi would
6 be very much in demand for a very long period of time, and thus
7 revenue's uncertainty would not be of any concern.

8 Q. Okay. We will get back to the reserve issue later.

9 Now, third point in your Paragraph 3, you said
10 Guaracachi had a healthy history of dividend payments from 2005
11 to 2008, which was only suspended in 2009 to finance the
12 combined-cycle project.

13 Now, tell me, sir, we just have the relevant period to
14 look at dividend payments is after 1 May 2010?

15 A. The relevant period would be in this case, yes, up to
16 May 2010, yes.

17 Q. Isn't it a fact that in the two years prior to the
18 nationalization EGSA distributed no--I'm getting to the
19 confusion of Mr. Earl here--EGSA distributed but did not pay
20 any dividends?

21 A. Well, it is true, as I say here, that they were
22 suspended in 2009 to finance the combined-cycle project. What
23 I was stating here is basically look at the broad picture. Is
24 this a company that is losing money, that was never able to pay
25 dividends because it was so in trouble with the possibility of

13:02 1 ever distributing dividends because it was eventually in the
2 red or anything?

3 So, here, basically what you have is you look at the
4 history, whether history shows something different. So, that's
5 what I was referring to.

6 Q. Right. And you said they stopped paying dividends in
7 2009. Those were dividends of the 2008 Financial Year, weren't
8 they?

9 A. My understanding was that, yes, they were two years
10 that dividends were declared or at least one year-and-a-half--I
11 don't recall exactly, but there was some period of time which
12 dividends were being postponed, not being paid out to the
13 Shareholders.

14 Q. Okay. And I think the confusion may arise from your
15 Table 2, Page 13, sir, of your Second Report. I'm sure you
16 will correct me if I'm wrong. Page 13 of your Second Expert
17 Report, Table 2.

18 There you refer to Guaracachi's financial performance
19 prior to nationalization.

20 Do you see that?

21 A. I do.

22 Q. And the second line from the bottom says "Dividends
23 Paid."

24 Do you see that, sir?

25 A. Yes.

13:04 1 Q. And when we see, for example, in 2008, dividends of
2 \$8.4 million paid, those are 2007 dividends, aren't they?

3 A. Yes, most likely those would be exactly 2007, declared
4 dividends, and that normally they're being paid out the next
5 following year, yes.

6 Q. Well, in these tables, sir, you mix cash and non-cash
7 items, don't you?

8 A. No, I don't. These are the dividends paid out of the
9 dividends that are paid out on that particular year.

10 Q. Fixed assets is not a cash element, is it?

11 A. Well, look, this table has proper title. It says
12 balance sheets, profitability ratios, and dividend
13 distribution, so each of the elements are--balance sheets are
14 balance sheet elements, assets and equity, then you--

15 Q. Excuse me, Dr. Abdala, please complete your answer.

16 A. I'm saying that each of these items are properly
17 labeled. We have balance sheets on the one hand, profitability
18 ratios and even distributions, so I'm not trying to compare
19 everything. Everything has a meaning.

20 Q. So, you agree with me this table mixes cash and
21 non-cash items?

22 A. No, I don't because I don't like the word mixing,
23 implying that there is something that is improper for
24 comparison. Cash information balance sheets, it has
25 profitability ratios, and it has dividend distribution as

13:06 1 reported by the Financial Statements.

2 Q. Do you agree, do you not, that this Table includes
3 cash and non-cash items, sir? Yes or no.

4 A. Well, balance sheets, by definition, you can see them
5 as part of the assets. I mean, if you want to go technical,
6 part of the assets could see--

7 Q. You didn't answer my question. I don't want to go
8 there.

9 A. Part of the current assets are cash, so what you mean.
10 If you want to do flows versus stocks, I don't know.

11 Q. And, sir, tell me why did you not look before 2005?
12 Don't you think that was relevant for this Tribunal?

13 A. Before 2005?

14 Q. Yes.

15 A. Well, I think the most recent year shows basically
16 that performance after the Rurelec investment, certainly a year
17 prior, and then the rest.

18 Q. You received all of the EGSA Financial Statements,
19 didn't you?

20 A. Yes, I think I did, yes.

21 Q. You did not include here, for example, Year 2002 in
22 which EGSA reported a loss, did you?

23 A. No, it's not reported here, that's right.

24 Q. But you recognized in 2002 EGSA reported a loss?

25 A. I don't remember.

13:07 1 Q. And while we are on this page, these dividends paid,
2 those include the inflation adjustment called UFV in Bolivia;
3 correct?

4 A. No. The dividends do not include inflation
5 adjustment. The inflation adjustment that has been discussed
6 in the records refers to an adjustment on the assets. And I
7 had the, say, corresponding adjustment on the income side, and
8 then you can say well, because the income now allows you to
9 legally distribute more dividends, you may say, well, the
10 dividends may have reflected that ability, legal ability, to
11 distribute more, but the dividends per se obviously are not
12 adjusted by inflation accounting.

13 Q. So, would EGSA not have applied--and this is a
14 hypothetical--would it not have applied an inflation
15 adjustment? Would it have been able to distribute or pay
16 whichever, the dividends that we see on this Table 2? Yes or
17 no.

18 A. I understand that there are legal restrictions on how
19 much dividends you can apply as a relationship to the net
20 income of the previous year, so that might have changed
21 the--your ability to declare and pay out the amount of
22 dividends that you actually see, yes.

23 Q. Sir, did I gather at the very end of your answer that
24 you said a very shy yes?

25 A. I answered what I answered.

13:08 1 Q. Now, going back to where we were, which is your list
2 at Paragraph 63 of your Second Report, in relation to the Size
3 Premium, we've gone to Number 4 where you say that
4 Guaracachi--sorry letter D where you said that Guaracachi was
5 featured in externally generated information, indeed, it was
6 covered by at least two credit-rating agencies, PCR and Fitch
7 Ratings.

8 Do you see that, sir?

9 A. Yes, I do.

10 Q. Are you aware of any other credit rating agency that
11 covered EGSA?

12 A. No, I'm not.

13 Q. And so, when you said at least, you have no indication
14 that there is no any other but the two that you mentioned?

15 A. I'm not aware.

16 Q. So, should we strike out the "at least"?

17 A. It's a matter of taste. There might be others, but
18 the research I had done, I think these two were the ones
19 that I was able to find.

20 Q. Now, were you in this room when Mr. Earl and
21 Mr. Blanco explained the change from Fitch to specific credit
22 ratings?

23 A. I was not in the room, no.

24 Q. So, you're not aware that these two agencies were not
25 to continue covering EGSA but only one of them?

13:10 1 A. I am aware because I think I have reported it that
2 there was there was a change in grade rating agencies. I think
3 the company started to--when they started to have PCR coverage,
4 I understand Fitch ratings were no longer providing coverage.

5 I don't remember--in fact whether there was any
6 overlap in time, but my understanding was basically, yes, one
7 was replacing the other.

8 Q. And the last point, Guaracachi's management was tabled
9 in comparison to the provisional Experts in the electricity
10 generation industry. Would you say that EGSA's professionals
11 were well acquainted with the combined-cycle project?

12 A. Well, I would say--I would say what I just say here.
13 I'm quoting the coverage that the credit-rating agencies also
14 talk about the management, and that's what I just quoted.

15 Q. Now, I'm going to move to another line, which could be
16 the last or the second to last. I anticipate that line going
17 to take at least half an hour.

18 PRESIDENT JÚDICE: I will explain in a very graphical
19 way.

20 Then we will make recess now. I'm sure you are aware
21 of all the time constraints and, therefore, I expect we may
22 return within 45 minutes, okay?

23 MR. GARCÍA REPRESA: We break for 45 minutes?

24 PRESIDENT JÚDICE: It's lunchtime.

25 Then we will begin exactly at 2:00, not later on.

13:12 1 Mr. Abdala, now I won't forget the message.

2 THE WITNESS: Yes.

3 PRESIDENT JÚDICE: Stay alone. It's not always happy
4 to have lunch alone, but--

5 THE WITNESS: I will eat outside.

6 MR. GARCÍA REPRESA: I will use this time to
7 streamline to get shorter in the afternoon, but not intending
8 to do this, it's taken a bit longer than I anticipated.

9 PRESIDENT JÚDICE: The Tribunal today has no time
10 constraints. And if you need more time afterwards, we want to
11 finish later, then half past 6:00, we can live with that. But
12 I understand those gentlemen and the lady, they will be
13 probably be very tired, and then, if you can, do it, both of
14 you, during the time constraints, it would be very appreciated.
15 Thank you very much.

16 MR. RUBINS: Mr. Chairman, I wonder if we might
17 nevertheless have from Mr. Doe a tally of the amount of time
18 remaining as agreed by the Parties.

19 PRESIDENT JÚDICE: I thought you passed it yesterday.

20 SECRETARY DOE: Yes, indeed, we communicated that
21 yesterday. What I can let the Parties know right now is that
22 the total that I have on the Claimants' side that has been used
23 up until now is nine hours and 35 minutes, and on the
24 Respondent's side is 10 hours and 57 minutes.

25 PRESIDENT JÚDICE: You have one hour for everything.

13:14 1 The Tribunal is so wonderful, patient, and is so happy with
2 your work of both counsel that we'll give you more time, as
3 necessary.

4 (Whereupon, at 1:15 p.m., the hearing was adjourned
5 until 2:00 p.m., the same day.)

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AFTERNOON SESSION

PRESIDENT JÚDICE: Let's proceed. If you would.

MR. GARCÍA REPRESA: Thank you, Mr. Chairman.

CONTINUED CROSS-EXAMINATION

BY MR. GARCÍA REPRESA:

Q. Dr. Abdala, good afternoon.

A. Good afternoon.

Q. Now, I understand that one of your judgment calls in this case was to take a subindex of the general PPI, Producer Price Index, to forecast increases in future Capacity Prices, what we have been calling here "precio básico por potencia," PBP. Have I summarized what you have done properly?

A. Yes, I think so, yes.

Q. Thank you.

And one of the issues you had with that subindex is that no one projected that subindex into the future; correct?

A. That is correct.

Q. And, therefore, you had to come up with your own forecast of what that subindex of the general PPI would be for the future so that you would apply that rate of increase that you project to access the "precio básico por potencia" revenues; correct?

A. Correct.

Q. Now maybe just to put things into context, you do apply the general PPI, I hesitate to say official, but the

14:04 1 projections that exist in the market for the general PPI as a
2 general inflationary rate in your model; right?

3 A. Yes, I do.

4 Q. And that general PPI rate that you use is 2.5 percent
5 annually; right?

6 A. Approximately. A little bit lower, but approximately
7 2.5, yes.

8 Q. Maybe it's just my--I have seen it rounded. That's
9 why maybe I'm saying 2.5. Is that correct?

10 A. That's correct, yes.

11 Q. And instead of taking that general PPI, you take the
12 subindex of PPI turbines, and you make your own projection of
13 what that would be, and you come up with a 3.5 percent
14 inflation rate; correct?

15 A. That's right.

16 Q. And you do that by looking at historical values of
17 that subindex from 2000 to 2010; correct?

18 A. That's right.

19 Q. Now, were you in the room when counsel for Claimants
20 said that it was "pretty obvious" that a hypothetical buyer of
21 EGSA as of the nationalization date would look at the growth of
22 the PPI turbine from 2000 to 2010 as you did?

23 A. I was in the room, yes.

24 Q. Do you agree with that statement by counsel?

25 A. Well, whether it's pretty obvious or not, I don't

14:06 1 know. That's the judgment call that I made because I thought
2 that by looking at the most receipt history of how much the
3 Turbine Index had been increasing, that would provide a willing
4 buyer information as to what to expect in the future.

5 Now, it is true that you can look at even further into
6 the past to make that same inference. The choice of 10 years,
7 it's because in this particular case, I thought this was most
8 relevant because it indicates that more closely the
9 relationship between an industry that has been growing in
10 participation because of electricity being at a much higher
11 pace of growth than the GDP, for instance, and, therefore, the
12 10 last years would be more representative than, say, by
13 looking 20 or 30 years. And that's basically the rationale for
14 that assumption.

15 Whether it's pretty obvious to everybody, that's at
16 least the judgment that I made on that index.

17 Q. Okay. And would you say that it's pretty obvious?
18 Yes or no.

19 A. I said I probably wouldn't characterize it that way.
20 I mean, there would be different assessments, and I mean, it
21 was a natural choice for me to do, whether everybody would
22 agree with that--obviously Dr. Flores disagrees, so that's
23 where we are.

24 Q. I appreciate that. Thank you.

25 Now, why not 11 years, but 10?

14:08 1 A. Well, 10 years is a convention, as same thing looking
2 at 15 years, 20 years, 30 years, so you can--10 years, I mean,
3 as I said, the rationale is what happened in the last decade,
4 reflecting a higher demand for electricity as compared to other
5 growth in the rest of the economy.

6 Q. So, 10 years is an arbitrary and--strike that.

7 It's your judgment call, but it would also be
8 reasonable for someone to take 15 or 20 years? Yes or no.

9 A. Well, the reason I chose 10 and not a longer period,
10 as I said, is because what you see in general is the use of
11 electricity as compared to other goods had increase in the last
12 10 years or maybe 12 years have been constantly increase and
13 probably will continue to increase. The recent history by
14 using 10 years is what provided me the frame for the analysis.

15 Q. But you see that is precisely my issue, which is that
16 you take 10 years because in the past 10 years that's when you
17 have seen a particular significant growth, for example, the raw
18 materials that are necessary to produce turbines. So, by
19 looking precisely at those 10 years, you come up with a higher
20 rate than you would otherwise have calculated had you
21 considered a longer period.

22 Now, did you see Econ One's demonstration of that,
23 sir?

24 A. Well, first of all, you made a statement that the raw
25 materials is--the raw materials is not the main or key issue

14:09 1 related to why they are seeing something increasing at a higher
2 rate. It's about demand and supply economics. So, if you have
3 a higher demand for electricity, you have a higher demand for
4 turbines as well, and that's why the prices convey a higher
5 increase on average than the rest of the wholesale economy is
6 because of the higher demand that you see. And this higher
7 demand is more obvious in the last 10 years than in the last 30
8 years. And if you take the last 30 years, then you can use
9 that, but it's not going to be as informative as what we expect
10 in the future as taking a recent history.

11 Q. So, do you agree that most of the increase in prices
12 that factors into the IPP turbines witnessed in the years prior
13 to 2010 correlated to the increasing commodity prices? Yes or
14 no.

15 A. To commodity prices? I don't think--

16 Q. By commodities, I mean raw materials such as nickel,
17 lead...

18 A. No, no. There might be some correlation, I mean,
19 statistically we see between those series, but I'm saying that
20 doesn't necessarily explain the issue that I'm saying, why I
21 expect that the dynamics of the industry of having electricity
22 being more consumed, more demanded as compared to other goods
23 and services.

24 Q. Were you in the room, sir, when Mr. Lanza explained
25 the impact of increases in raw materials in the price of

14:11 1 turbines? Were you not?

2 A. I wasn't in the room, no.

3 Q. Did you discuss this with Mr. Lanza before submitting
4 your two expert reports, sir?

5 A. No, I didn't.

6 PRESIDENT JÚDICE: May I put a couple of questions.

7 Is it possible to know whether you were aware of any
8 studies assuming the trend for the future of elasticity demand?
9 As you're speaking about that criteria as the most important
10 basis, did you see or do you know studies as to the trend for
11 electricity demand in the last decade?

12 THE WITNESS: Probably you are right that I should
13 have cited and explained it better in my report.

14 Yes, you do have information about, for instance,
15 energy in EIA, for example, will get you prospects of
16 electricity consumption or electricity use in the future.

17 What we're seeing in general, not just in the U.S. but
18 in many countries is that the pace of growth of Electricity
19 Sector is always outpacing--being in excess of the growth of
20 GDP. For instance, if GDP grows by 3 percent, probably
21 electricity demand will be growing by 5 percent or by
22 4.5 percent.

23 In the past, this relationship also happened, but what
24 we are seeing in the most recent years is that because of the
25 more demand for electronic goods, et cetera.

14:13 1 PRESIDENT JÚDICE: Thank you. It's okay with me. I
2 don't need any more.

3 Sorry for interrupting.

4 MR. GARCÍA REPRESA: No, please, sir.

5 BY MR. GARCÍA REPRESA:

6 Q. Would you please turn to your Tab 27. It's in
7 Volume 1. And if my numbering is right, you should find in
8 there a copy of Dr. Flores's First Expert Report. It's Page 11 of
9 Tab 27.

10 Now, looking at graph Number 1, which reflects the IPP
11 turbines from 1999 onwards up to May 2011, looking at this
12 graph, sir, do you accept that the increase in the IPP turbines
13 in 2008 and 2009 was exceptionally high? Yes or no?

14 A. In 2009.

15 Q. 2008 and 2009, sir.

16 A. Well, it's partly picking up what I'm saying about the
17 supply and demand economics.

18 You see, it is high with respect to the history, of
19 course, but you see it's because 10 percent, 11 percent, and it
20 is high, and I don't expect that gap with the U.S. PPI to be
21 maintained forever. But it is obviously indicating something.
22 It's not just 2008 and 2009. 2006 and 2007 also are--are high
23 growth years, and then we have some adjustment, say, in 2010,
24 which is when it is not as high, may be reflecting the fact
25 that 2009 was relatively too high.

14:15 1 But what you see is the dynamics of this sector is
2 changing in the direction where turbines are getting more
3 expensive compared to the average goods and services of the
4 wholesale industry.

5 Q. An average PPI was 2.5 percent; correct? So, if we
6 draw a line in here--

7 A. No, no, no.

8 Q. 2.5.

9 A. No, that's not correct. Sorry. 2.5 is the forecast
10 for the PPI.

11 Q. Okay. Now, you said earlier today that when you
12 thought information post-nationalization was of interest to
13 this Tribunal, you considered it and presented it to this
14 Tribunal.

15 A. Um-hmm.

16 Q. Now, you never submitted to this Tribunal that the
17 2010 PPI turbine was 0.2 percent, did you?

18 A. No. That's incorrect. Indeed, I used the 2010 for
19 the purposes of the average, compound average growth rate for
20 my forecast, so the 3.5 that I use includes fully the 2010
21 period that you see here at 0.2 percent.

22 Q. And are you aware that in 2012, the IPP turbines was
23 negative 0.5, sir?

24 A. Yes, I'm aware, but that I became aware, yes, only
25 with the latest information not at the time I wrote my First

14:17 1 Report, and not necessarily that I would have changed my view,
2 but yes, I am aware of that number, yes.

3 Q. You were aware of that when you submitted your Second
4 Expert Report, weren't you?

5 A. Yes, I was.

6 Q. But you did not mention that in your report, did you?

7 A. Well, it was mentioned already in Dr. Flores's report.

8 Q. Dr. Flores's First Report?

9 A. Second--sorry, it was mentioned in Dr. Flores's Second
10 Report, but no, but in my Second Report I didn't mention it.
11 No, I didn't.

12 Q. And to be clear, I don't want to confuse you.

13 A. Okay.

14 Q. Dr. Flores's Second Report is after your--

15 A. It's after my First Report, yes.

16 Q. So, your Second Report that you knew you did not tell
17 this Tribunal that the IPP turbines of 2012 was negative, did
18 you?

19 A. No, I didn't, no.

20 Q. Now, had you taken the longer time period to assess
21 your inflationary index for capacity revenues, it would have
22 given you a lower figure than what you did for, in your model,
23 wouldn't it?

24 A. That's true, but that would be inconsistent with the
25 dynamics of the industry that I just explained. That's why I

14:18 1 have looked at the most recent past.

2 Q. Okay. And if we look at your Paragraph 125, speaking
3 of dynamics of your Second Report, on Page 66, there you
4 indicate, "The turbine U.S. PPI has been systematically higher
5 than the U.S. PPI."

6 Do you see that?

7 A. Yes.

8 Q. This is the trend that you were talking about a second
9 ago?

10 A. Well, no, this is comparing the average on a year by
11 year basis for the 30 years period; right?

12 Q. Um-hmm.

13 A. Since its creation in 1984.

14 Q. Conceptually, if the turbine U.S. PPI had been
15 systematically higher than the U.S. PPI, one would expect both
16 indices to distance themselves over time. They wouldn't come
17 back to the same place where they were, would they?

18 A. They don't need to distance, but, yeah, well, yeah,
19 they would be distance, yes, you're right, yes. It will be
20 increasing the difference between themselves, yes.

21 Q. In one increases at 3.5 and the other at 2.5, they
22 would separate each other out in time; correct?

23 A. Yes.

24 Q. If we look at Page 67, Figure 4, that is the figure
25 that you include to support your conclusion that the turbine,

14:20 1 U.S. PPI Turbine Index which we see in blue, as you said, had
2 been systematically higher than the U.S. PPI. Do you want to
3 correct that statement, sir?

4 A. No, this is showing the history. I think you just
5 mentioned the future, but this is the history; right?

6 Q. So, from 1984 starting point or 1983 to 2007, both
7 indices started and ended up at the same place, didn't they?

8 A. From which dates to which dates?

9 Q. From the beginning of your modeling in 2007?

10 A. Right.

11 Q. We end up with about the same index; correct?

12 A. Until 2007?

13 Q. Yes.

14 A. Yes, you do.

15 Q. So, would it--

16 A. Okay, go ahead.

17 Q. Would you say a willing buyer in 2007 would have been
18 right in looking at the general PPI to consider inflation of
19 Capacity Prices?

20 A. Well, not necessarily because you see you do have also
21 a history of many years, significant number of years where the
22 U.S. PPI for turbines had outpaced the growth of the average
23 U.S. PPI inflation.

24 Q. So let's look at this chart properly, if we may.

25 What this chart shows is percentage increases, doesn't

14:21 1 it?

2 A. No. It's an index.

3 Q. Right. So--

4 A. It's not percentage increases.

5 Q. So, you take an index in your model of a hundred and
6 applying the increase, the annual increase in the index, you
7 estimate the next year's index; correct?

8 A. Sorry, ask that again?

9 Q. Yes. In your table you take a hundred as the
10 beginning of your modeling, and if it increases by 2 percent,
11 the next year you have 102. And if next year inflation is
12 zero, you remain at 102; correct?

13 A. Correct, yes.

14 Q. So, when we see a steady line, it means zero
15 inflation; correct?

16 A. Yes.

17 Q. So, when we see the blue line, which is a turbine PPI
18 being almost steady from, let's say, the Nineties to the end of
19 2004 with a very small increase, that is actually growing at
20 the lesser pace than the IPP turbines; correct? Which is the
21 red line which has a more--a higher angle, and I'm looking in
22 particular, for example, in the years from mid-nineties through
23 the mid-2000s?

24 A. You said many things.

25 First of all, some periods that you may see this graph

14:23 1 as steady, it may be because of the scale that you cannot see,
2 but this is a very long period of time, so you do have
3 inflation in most years for both the red and the blue line.

4 Q. And I misspoke, sorry, I may have confused it. Red is
5 the general PPI.

6 A. Red is the general PPI. I was about to correct that
7 as well.

8 Q. Thank you, sir.

9 Now, in this chart you're showing the correlation
10 between the general PPI and the turbine PPI; correct?

11 A. No, I'm showing since the evolution.

12 Q. Okay. So, when I see correlation 0.9482, I should
13 delete that program?

14 A. No, it's a sign-out. It's also--it's true
15 statistically they're correlated, so you don't need to strike
16 anything. But the main purpose is that the title says to show
17 the evolution.

18 Q. Right. And when you want to show the evolution, you
19 look at 1983 onwards, when you want to calculate the index, you
20 just look at 10 years, that makes a significant difference in
21 your result, doesn't it?

22 A. Well, it doesn't make a significant--well, it may make
23 some difference, but you look at what I'm concluding in 125,
24 it's true that when you look at a longer period of time, then
25 you would have rather than a 1 percent gap between the U.S. PPI

14:24 1 turbine and the general U.S. PPI, you would have a low smaller, you
2 would have a 0.7 percent gap, and I concluded that that was not
3 something that I would change my opinion because of that gap
4 because I think the last 10 years best represents the dynamics
5 which I would expect for the future rather than the last 30
6 years.

7 Q. Sir, did you perform that same calculation extracting
8 2008 and 2009 being the significantly high years?

9 A. Why would I do so? I mean, precisely because the
10 dynamics that I'm explaining allows me to say, well, look, what
11 we see, something that may be important here because it's not
12 the last three years, it's the two years of relatively high
13 growth. You don't to want exclude that information.

14 Q. And you don't think it would have been interesting for
15 this Tribunal to know that, say, for those two years, everyone
16 admits there was an exceptionally high increase, the historical
17 average difference between the general PPI and the turbine PPI
18 was 0.1 percentage points?

19 A. Well, I don't agree with your characterization of
20 these two being exceptionally, and I think the Tribunal had all
21 the information that casting these drafts, I mean, as it
22 relates to the increase on these indices.

23 Q. And I would like for the Tribunal to really have a
24 complete view on the basis of the graphs to look at Tab 42
25 where I will be asking you a question, sir. It's the last tab

14:26 1 in your bundle. This is your Figure 4, Dr. Abdala, and in
2 dotted lines is the result of applying the 3.5 percent
3 inflationary rate that you use, and that's in blue that
4 corresponds to the--your estimate of the turbine projected, and
5 in red you have the historical U.S. PPI in the full line, and
6 in the dotted line you have your projections of 2.5 percent
7 general price increase, which is the same that Econ One has
8 used.

9 Now, would you agree with me, would you not, sir, that
10 in this slide, as opposed to what we saw in your graph at
11 Figure 4, we can see that, as I will explain, with your
12 numbers, there is a systematically higher difference, and the
13 two lines deviate each other significantly over time by using
14 3.5 which you do to estimate the inflate revenues while using 2.5
15 to increase costs. Is that correct?

16 And I can cut up the question if that's a problem for
17 you.

18 A. Well, it's that you mix up other elements. You now
19 brought costs into a table that has nothing to do with what
20 we're seeing here in our table.

21 Q. That's why I offered. I take your point, and I
22 apologize if I was confusing.

23 You inflate costs in your model by 2.5; correct?

24 A. Not all of them, no. I have different costs. There's
25 certain cost categories that are projected with inflation.

14:28 1 There are cost categories that are projected with utilization
2 of the plant. There are costs categories that are linked to the dispatch.
3 There are other cost categories that are a percentage of
4 revenues.

5 Q. When you increase cost with inflation, you increase
6 them at 2.5; correct?

7 A. For those set, of course, that I use inflation, I
8 would use the--let me try to remember--probably I would use
9 either the U.S. PPI or U.S. CPI. I think U.S. PPI most likely,
10 yes.

11 Q. But when you project and inflate revenues, you use the
12 higher inflationary rate, which is 3.5 in this case; correct?

13 A. Well, no, you have to differentiate--

14 Q. Capacity revenues I'm talking about. Capacity.

15 A. Okay. Well, you mentioned revenues. Revenues in
16 general, no, there are different components in revenues.

17 For capacity revenues, the capacity revenues, yes,
18 they do increase by 3.5 percent per year.

19 Q. And do you take any issue with the graph I was showing
20 at Paragraph 42 in terms of that being an accurate portrayal of
21 what you're proposing this Tribunal to apply? I'm referring to
22 the blue line here.

23 A. I didn't have--make calculations supporting this, but
24 I don't disagree with the type of tendency that you would
25 observe if you had that cap between--I don't know if this is an

14:30 1 accurate representation because I haven't been able to verify
2 this graph in particular, but it is true, yes, as I mentioned
3 before, that you would have a tendency towards the blue line to
4 outpace the red line over time.

5 Q. Mindful of the time, I would like you to please take
6 your opening slides, please.

7 Now, Slide 9 is the one I'm interested in for the
8 moment.

9 Now, there you indicate--that you describe the samples
10 that companies that you then use in the slides that follow to
11 build up on the graphs that can see on slides 10, 11, 12, and
12 13; correct?

13 A. I'm sorry, would you repeat that.

14 Q. On Slide 9, you list the companies that make up the
15 graphs and actually the bars that we see on pages 10, 11, 12,
16 and 13; correct?

17 A. Well, the list here is the groups, not the companies.
18 There are 15 companies. These are just the three groups that
19 have these 15 companies.

20 Yes, the underlying data comes from the same dataset
21 from Santander Investment Bank reports.

22 Q. So in Pages Slides 10, 11, 12, and 13, what we have is
23 data coming from companies that belong to three groups;
24 correct?

25 A. Yes. ENDESA, ENERSIS, and AES Gener.

14:32 1 Q. And, sir, by my count, I have 11 companies, not 15.
2 You want to check that?
3 A. Where is your count coming from?
4 Q. Well, your Slide 9.
5 A. My Slide 9?
6 Q. Yes. ENDESA has four companies. ENERSIS has five.
7 ESA Gener has two. By my count, that is 11.
8 A. We'd have to verify. We can check on this. Exhibit
9 C-300. I remember ENERSIS, too. We can check. I would need
10 to see the Exhibit C-300, just to be clear.
11 Q. Just to be clear, every time we see ENDESA here in
12 this slide, we see three times we have four companies. Every
13 time we see ENERSIS in this slide we see three times after we
14 have five companies. Every time--
15 A. No, no, no. I see where you're coming from. What you
16 see is, every time you see ENERSIS here, what you have is you
17 have five countries, but you have more companies, you have more
18 companies in a particular country, so what you have is five
19 countries, not companies. So, companies are 15, but countries
20 are five.
21 Q. And all these are from three groups, ENDESA, ENERSIS,
22 and ESA Gener; correct?
23 A. That's true.
24 Q. If you want to go to Tab 34, sir, those are the
25 reports on which you based these slides that we have here.

14:34 1 Tab 34.

2 And again, what we see in the slide is only the
3 opinion of an analyst of Banco Santander; is that correct?

4 A. These reports involve Banco Santander, investment
5 bank, various reports, different dates, different companies.
6 That's what we have.

7 Q. Right. And it's just one analyst; correct?

8 A. Sorry, no. It's not just one analyst. You're meaning
9 it has one investment bank report.

10 Q. Tab 34. My apologies if my pronunciation isn't
11 proper.

12 I think it's already established, but it's one
13 investment bank, would that be something that you would agree
14 with?

15 A. It's the same investment bank, but it's not the same
16 analyst as you mentioned, the same investment bank.

17 Q. And do you agree with me, do you not, that ENERSIS is
18 the controlling company of ENDESA Chile, which is the one that
19 you have here on your slide?

20 A. Where are you reading?

21 Q. I'm just asking from your knowledge.

22 Is it not your understanding that ENERSIS is the
23 controlling Shareholder of ENDESA Chile?

24 A. As of what time? As of--

25 Q. As of the time of these investment reports.

14:35 1 A. I don't recall exactly whether--

2 Q. I take it that you reviewed these reports carefully
3 before--

4 A. Yes, yes, but I don't require review of the reports
5 carefully. I don't recall exactly whether that's the case of
6 the controlling--whether it has a majority control stake or
7 not.

8 Q. You may want to look at Page 263.

9 Now, I will have to inform the Tribunal that these
10 pages were not consecutive. There were cuts in the page
11 numbers, but I'm sure there is an explanation for it. It's
12 just that sometimes it jumps, and it's 263 at the bottom right.
13 And to be clear, this is the way we received the exhibit from
14 Claimants.

15 Are you at Page 263?

16 A. I am right now, yes.

17 Q. You may want to find that information that we may want
18 to read together the top paragraph. "ENERSIS is an integrated
19 electricity group," and pausing there, I understand that by
20 "integrated," it means a group that is both in generation,
21 distribution, transmission. Is that your understanding?

22 A. That's correct.

23 Q. ENERSIS has operations into Argentina, Brazil, Chile,
24 Colombia, and Peru; correct?

25 A. Yes.

14:37 1 Q. And it controls 13,748-megawatt of generating capacity
2 through ENDESA Chile and ENDESA Brazil; correct?

3 A. Yes.

4 Q. It is the largest publicly traded electricity group in
5 the region; correct?

6 A. Yes. As of this date, as of speaking about 2008.

7 Q. Excuse me?

8 A. This is speaking about 2008.

9 Q. Now, this is a report dated October 2010; no?

10 A. Right.

11 Q. Okay.

12 A. But the data above assets seems to be related to other data,
capacity

13 seems to be related to 2008.

14 Q. So, in your view, this document is not reliable?

15 A. Did I say so?

16 Q. Okay. Now, you would agree with me, would you not,
17 that ENERSIS has nothing to do with EGSA, does it?

18 A. ENERSIS a larger group. The point of these investment
19 bank reports is that they are showing basically the
20 fundamentals valuation of each of the companies of the group.
21 The group is the one that eventually is subject to analysis as
22 well because the group encompasses different companies, but
23 there are companies within the group that are larger than EGSA,
24 and there are companies that have similar size than EGSA, so
25 these are the companies--these are the only companies basically

14:38 1 that trade in Latin America and that are generation companies,
2 so this is the closest comparable set that we can get.

3 Q. And EGSA is not publicly traded, is it?

4 A. It's not.

5 Q. Changing topics--and this is my last line of
6 questions. I appreciate the Tribunal's patience.

7 PRESIDENT JÚDICE: I appreciate the interest.

8 BY MR. GARCÍA REPRESA:

9 Q. Do you agree as a matter of principle, sir, that there
10 are cases in which the application of accounting standards or
11 policies may lead to a change in the recorded profits not
12 reflecting an economic gain?

13 A. Potentially, yes. It depends obviously in the
14 circumstances because obviously for both accounting and tax
15 considerations, countries are not too keen on imposing policies
16 that may distort the economic significance or meaning of
17 Financial Statements.

18 So, potentially, yes, it could happen, but neither
19 countries nor the tax authorities want that to happen.

20 Q. And the DCF will look at cash flows and not at
21 accounting profits, would it?

22 A. DCF will always look at cash flows. Yes.

23 Q. And not accounting profits?

24 A. Well, not for calculation of value. Accounting
25 profits will be an important component of the DCF because

14:40 1 that's the way you derive certain parameters such as Income
2 Taxes that you have to pay, some other taxes that may be
3 related to accounting profits. There might be also components
4 of depreciation that are related to accounting profits.

5 There's also the dividend pay-out ratio may be related
6 to the accounting profits.

7 So, the accounting profits enter as an input into your
8 DCF analysis.

9 Q. You received the Rurelec Financial Statements from
10 Claimants; correct?

11 A. Yes, I did.

12 Q. You received detailed information of financial models
13 from Claimants; correct?

14 A. Yes, I did as well.

15 Q. Did you receive the Financial Statements of Guaracachi
16 America?

17 A. I don't recall. I don't remember.

18 Q. You did not think that was relevant?

19 A. Let's see. I don't recall if we have seen this or
20 maybe. I think I discuss this in my first report when I show
21 the ownership change, and I think we have a hundred percent
22 relationship, so we go straight directly to Rurelec from the
23 intermediate companies, so I don't think for valuation purposes
24 it was needed to look at Guaracachi America. But I don't
25 remember because there might be in the record as well. I don't

14:42 1 recall.

2 Q. Well, you were valuing the bottom company through an
3 intermediary. So, if you look at the top accounts, this means
4 the intermediary is just a shell company to hold the bottom
5 company?

6 A. Um-hmm.

7 Q. I didn't hear you.

8 A. I'm sorry, was that a question? I was not following
9 your--

10 Q. Yes, that was a question.

11 A. Okay. Could you restate it or repeat it.

12 Q. You valued the bottom company through an intermediary?

13 A. Yes.

14 Q. So, if you look at the top company accounts, it means
15 that the intermediate company is just a shell company?

16 MR. RUBINS: Objection. Counsel is asking--

17 PRESIDENT JÚDICE: I understand your point.

18 I think you are trying to take some legal analysis out
19 of this witness, unless you explain a little better.

20 MR. GARCÍA REPRESA: Absolutely. I will explain that
21 in a moment.

22 BY MR. GARCÍA REPRESA:

23 Q. Dr. Abdala, if you look at the value of the Shares of
24 EGSA into Rurelec, knowing that Guaracachi America holds those
25 shares and Rurelec holds the Guaracachi America shares, isn't

14:43 1 that because there is no difference in value between the
2 shares--apologize. Is it not because the only asset of
3 Guaracachi America are the shares of EGSA?

4 A. No, not necessarily. I mean, what I did value was the
5 value of EGSA, and then from the value of EGSA I asked, what is
6 the value to Rurelec out of this, and the value to Rurelec, I
7 look at the ownership change. I conclude that since it has a
8 hundred percent on all the change, then it would be directly
9 the 50.01 percent stake that Rurelec ultimately had indirectly
10 on EGSA, but that's the way I've done it, yes.

11 Q. Now, in addition to Rurelec accounts, you received the
12 EGSA accounts, didn't you?

13 A. Yes, I did receive EGSA accounts. Yes.

14 Q. And did you seek the assistance of a Bolivian
15 accountant to interpret those accounts?

16 A. Not directly. If we had some information that we may
17 see that we would need something of the sort, we will probably
18 have consulted Claimants'--those who might have been acquainted
19 to or related to that. But no, I didn't need to seek
20 specifically any information from a Bolivian accountant.

21 Q. Now, were you aware that the Bolivian accounts include
22 what we were discussing before, an inflation adjustment called
23 UFV?

24 A. Yes.

25 Q. And were you aware that Rurelec consolidated EGSA

14:45 1 without the inflation adjustment for UFV?

2 A. I don't recall that. The records may be--I don't
3 know. I haven't seen that.

4 Q. You did not look at Rurelec's accounts when you were
5 looking at the Book Value of EGSA?

6 A. No, when you look at the Book Value of EGSA, you don't
7 look at the Rurelec account.

8 Q. You do not look at the value of EGSA recorded in
9 Rurelec's books? Is that what you said?

10 A. No, when I was looking at the Book Value of EGSA, I
11 don't need to look at the Rurelec's accounts.

12 Q. So, it would not be relevant for you to know that the
13 Book Value of EGSA that you presented in your reports is not the
14 Book Value of EGSA in the books of Rurelec?

15 A. Well, listen, you have a discrepancy, and you know
16 that, for instance, from the moment that Rurelec bought this
17 asset, they have a valuation that had follow the U.K. standards
18 and they had goodwill, for instance, because they valued the
19 assets I think at 20 percent over the Book Value of what was
20 registered in Bolivia. So, I naturally see that there are
21 accounting differences on how Rurelec has to keep their account
22 in the U.K. as opposed to EGSA, but I didn't have to look at
23 Rurelec's accounts for the purposes of this valuation, in
24 particular for the purposes of looking at the Book Value of
25 EGSA.

14:46 1 Q. So, you disregarded the Book Value of EGSA in your
2 First Expert Report, didn't you?

3 A. Well, I wouldn't say disregard it. It plays a certain
4 role in the DCF, but I did say that in the method of looking at
5 Book Value would not represent typically a Fair Market Value,
6 because it doesn't capture the full potential of the asset.

7 And I say that in particular that would be the case in
8 Guaracachi because the combined cycle still wasn't performing,
9 so that generation capability of the new asset may not be reflected in the
10 books, so I didn't use it.

11 What I use it for is in the Second Report, where I
12 say, well, in commenting on Dr. Flores's opinion what I say is,
13 well, look, you cannot value something at zero when it has a
14 significant value in the books. I mean, there must be
15 something that the books are telling you, that obviously if the
16 company was worth zero, either the books are completely wrong,
17 which I don't believe is the case in this case, or you're
18 missing something because there is a significant mismatch, that
19 it's quite difficult to understand.

20 Q. Are you suggesting that it's Bolivia's position that
21 EGSA's Book Value was zero?

22 A. No, I was criticizing Dr. Flores's lack of benchmarks
23 not only with Book Value, but also with other methods.

24 Q. Now, you disregarded and I will cite you--you
25 discarded the Book Value approach at Paragraph 55 of your First

14:48 1 Expert Report, sir. Page 28. You discarded the book value
2 approach to damages. And that's because the Book Value is a
3 number that's largely determined by accounting conventions;
4 correct?

5 A. That's correct. That's just exactly what I just said.

6 Q. And you would agree with me, would you not, that in
7 looking at Book Values, one must be particularly careful with
8 different accounting standards across country, wouldn't you?

9 A. Well, it depends on what you're trying to value, and
10 for what purposes and whether you're trying to get an opinion
11 of value of an asset located in a particular country or whether
12 you're trying to assess a value to a particular Party on a
13 different kind of jurisdiction.

14 Q. So, do you think it would have been relevant for this
15 Tribunal to see a reference in your reports to the inflation
16 adjustment of EGSA's accounts?

17 A. No, I don't think so, because the way I used the Book
18 Value is just for the reference of what it is, and I think
19 whether there is a discussion as to what's the meaning of those
20 inflation accountings, I was reporting the Book Value as it is,
21 so that's what it is. So, you look at the books of the
22 companies, you see the amount of equity in Bolivian pesos, you
23 take the Exchange rate of the date of where you're looking for
24 your valuation or your assessment, and you convert that into
25 dollars. That exactly reflects what the Book Value is.

14:50 1 Q. Thank you, sir. And I think I have one last question,
2 and then we can go.

3 You began your presentation indicating that the Size
4 Premium was the single largest component of the Parties'
5 difference on the discount rate. Do you recall that?

6 A. No, I don't recall. I think I mentioned the discount
7 rate was the biggest component of the differences. I don't
8 recall--

9 Q. Excuse me. Within the discount rate debate, that the
10 largest difference is in the size premium that both Parties
11 apply; correct?

12 A. Okay, yes, this is in Slide Number 5 that you
13 mentioned.

14 Q. Right, so I should have drawn you to that.

15 And we were discussing before that the Size Premium
16 factor in liquidity or rather illiquidity of smaller
17 companies with some larger companies. Do you recall that?

18 A. No, but not the way you're describing. I referred to
19 the fact that illiquidity is probably a component to take into
20 account, and that sometimes it could be picked up by the larger
21 returns that you see on smaller firms as compared to larger
22 firms. I think the way you phrased it was strange to me.

23 Q. Okay. And let me see if we can agree on a phrasing
24 that will not get an issue from you.

25 Size Premium is there to account for the illiquid

14:52 1 nature or illiquid--relative illiquidity of smaller stocks
2 versus larger stocks?

3 A. It could.

4 Q. It could.

5 A. I say normally it could account for that, yes.

6 Q. Now, you could turn the slide, please, just to

7 Slide 6. You referred to Damodaran article in 2011 condemning,
8 you say, the use of Size Premiums.

9 Do you see that?

10 A. I see--I see it, yes.

11 Q. Now, you've cut Damodaran's text, haven't you?

12 A. Damodaran has--I just represented, yes, this part.

13 And there's many others.

14 Q. But you cut his conclusions in that article, didn't
15 you?

16 A. Let's see.

17 Q. Tab 36.

18 We should have it there for you. Tab 36. It's Volume
19 2--excuse me, it may not be 36.

20 Yes, it is 36. Apologies.

21 What you have in the slide is part of the very last
22 paragraph. And I will invite you to read the very last
23 paragraph of that article.

24 A. Right.

25 Q. Now, after stating what you have on your slide,

14:54 1 Professor Damodaran then says, "I do think that it makes sense
2 to adjust your expected returns for liquidity, and I think our
3 capacity to do so is improving as we get access to more data on
4 liquidity and better models for incorporating that data."

5 Do you see that text, sir?

6 A. I see that. But you see that--

7 Q. Do you see that text, sir?

8 A. Of course I do see it.

9 Q. And may I ask you questions?

10 A. Please do.

11 Q. You did not alert the Tribunal to the fact--now you're
12 at Slide 6.

13 PRESIDENT JÚDICE: We're in the wrong one. What is
14 the paragraph or the page?

15 MR. GARCÍA REPRESA: It's on Tab 36, Page 2 of 3 at
16 the bottom right corner, and it's the very last paragraph that
17 you have before you have the comments. This is part of
18 Damodaran's blog, so you have the article followed by people
19 commenting on it.

20 So, it's the very last sentence of the very last
21 paragraph, which starts--and it picks up where Dr. Abdala's
22 presentation cut off--"I do think that it makes sense to adjust
23 your expected returns for liquidity."

24 BY MR. GARCÍA REPRESA:

25 Q. Did you not think it was relevant to alert this

14:55 1 Tribunal to the fact that you were cutting off the last
2 sentence of Professor Damodaran's conclusion?

3 A. No. Because if you will see that there, he's talking
4 about two different things. He's talking about Size Premium
5 and he's talking about liquidity. He's saying, look, I don't
6 agree with those practitioners that will just put a Size
7 Premium per se without doing an analysis of the fundamentals.

8 That is what he is discussing, size premium.

9 Then he says as it relates to liquidity, there might
10 be some room for adjustment.

11 But the two are different concepts. The illiquidity, as
12 I mentioned, could be captured eventually through the small
13 size issue, and that has been debated in the literature,
14 whether you're capturing the small Size Premium, another thing
15 that could be referred to, illiquidity. But the two are
16 concepts that theoretically could be measured also separately.

17 So, Damodaran here is not talking about the two as
18 being the same thing. He's saying okay, as it relates to small
19 Size Premium, I do not use it, and I don't like it when
20 analysts use it blindly without an analysis of the
21 fundamentals.

22 Now, if we have evidences of an issue of liquidity, he says, yes, I
23 could adjust the discount rate. But those are, you see, two
24 different concepts that may or may not be related. Some companies
25 that are small may have a liquidity issue; some companies that

14:56 1 are small may not have liquidity issues.

2 Q. And I will find no reference to EGSA's liquidity in your
3 Reports, will I?

4 A. There are references to liquidity in my Report. I
5 mentioned--when I discuss the Size Premium issue, I do mention
6 the liquidity issue.

7 Q. My colleagues may have further questions. I
8 appreciate your patience, Dr. Abdala.

9 Thank you, Mr. Chairman.

10 PRESIDENT JÚDICE: Thank you very much. Now I will
11 pass to the other side, but just a small question probably
12 without any interest whatsoever.

13 Quite often, I heard about control premium when you
14 evaluate companies. Both Parties disregard this concept. Then
15 it's more for my learning process out of this case. Of course,
16 I'm not sure--I'm sure it is not relevant, but it's possible
17 within one minute to say why this concept has been disregarded
18 by both Parties.

19 THE WITNESS: Well, first of all, under DCF analysis,
20 you normally do not account or have anything for Size Premium
21 because you're already trying to represent the cash flows that
22 are expected for the Majority Shareholder.

23 The way control premium normally comes into is when
24 you're looking at evidence that has to do with traded
25 companies, because it is the understanding that traded

14:58 1 companies represent the value to the Minority Shareholders.

2 And I thought about the issue for this particular
3 case, but I did not adjust the control--for control premium in
4 the market comparables. But I could have, and normally--

5 PRESIDENT JÚDICE: It's more for my learning process
6 because it's out of this case. Thank you very much.

7 Mr. Rubins, as soon as you wish.

8 MR. RUBINS: I would need 30 seconds to clarify one
9 issue, and then we could start.

10 (Pause.)

11 REDIRECT EXAMINATION

12 BY MR. RUBINS:

13 Q. Just a few questions, Dr. Abdala.

14 Mr. García Represa referred to a MEC projection
15 period of 2010 to 2018, and Paragraph 72 of your First
16 Report--you don't have to turn there--that's the place where
17 you discuss the period. And the discussion between you and
18 counsel for Bolivia was related to the way in which that period
19 was defined as a technical obstacle.

20 Do you remember that?

21 A. I do.

22 Q. Okay. Now, if you could turn to Tab 27 in the binder
23 in front of you--it's in the big binder.

24 A. Yes. I'm here.

25 Q. Okay. And if you could turn to Paragraph 19 of the

15:00 1 Econ One First Report, where Dr. Flores talks about the period
2 of time that he used in his report through Mr. Paz, how does
3 the period that Dr. Flores uses relate to the one that you had
4 MEC use?

5 A. It's the same period, 2010-2018.

6 Q. Do you understand that there are any disputes between
7 you and Dr. Flores about the appropriate timeframe of 2010 to
8 2018?

9 A. I don't think so.

10 Q. There was a lot of discussion about the Rositas plant,
11 and you were referred to Tab 2, which is C-249.

12 First, if you look on the first page there, and
13 actually it's on the cover page, too, do you see what the date
14 of this document is? This article?

15 A. Let me see.

16 Q. If you turn back to the title page, it will tell you
17 that.

18 A. It says January 2009.

19 Q. Now, if you turn to Page 13.

20 A. Yes.

21 Q. Okay. Do you see the first full paragraph on the
22 page, you can see where it says "un plazo ambicioso"? It says
23 un plazo ambicioso si se considera que para construir la represa
24 y la puesta en funcionamiento," et cetera.

25 Do you see?

15:03 1 A. No, I'm not seeing. It starts with "un plazo
2 ambicioso"?

3 Q. Sorry. The paragraph on Page 13 begins "Basta ya."
4 A. "Basta ya." That's the one I was looking at.
5 Q. Bottom of the paragraph.
6 A. Oh, okay. Bottom. Yes, I see that.
7 Q. Read that sentence to yourself.
8 A. Okay.
9 Q. And then the second column, the first full paragraph,
10 which begins "La Prefectura."
11 A. Right.
12 Q. And towards the end of the first sentence there is the
13 phrase "una vez que se determine su factibilidad."
14 Do you see that?
15 A. That's right.
16 Q. And then the last thing I will turn you to is the next
17 page, Page 14, first column, last full paragraph, which begins
18 "entre 1972 y 1973."
19 Do you see that?
20 A. Hold on. Last full paragraph, first column?
21 Q. Last full paragraph which begins "entre."
22 A. Okay. I've got it. Yes.
23 Q. Now, the suggestion was that in Footnote 127 of your
24 Second Report, where you cite this document, that you had not
25 actually read the document, and I would like you to comment, if

15:05 1 you can, on whether those passages relate to the reasons for
2 your including the reference in your Second Report.

3 A. Okay. Well, I had completely forgotten about this
4 document. I think the main reference that we make to this
5 document is just to point out the fact that this has been a
6 project that has in the making or in the plans of Bolivia for
7 a very, very long period of time. And I think the quote that I
8 have on this document is precisely to support that since 1972
9 or '73 is at least the evidence that I was able to find that
10 this project has been around.

11 And, of course, there is information here that tells
12 you more about the history of the project itself and as well of
13 an interest of Bolivia to pursue it. But the main purpose of
14 this citation is to go to the 1972 and 1973 reference.

15 Q. You also refer to the fact that it was known to the
16 market as of 1st of May 2010 that Rositas would require an
17 expenditure of \$32 million in 2010.

18 Do you remember that?

19 A. Correct.

20 Q. Turn to Tab 5, please. And this is the 2010 or 2009,
21 depending on how you defined it, POES. If you could turn to
22 Page 9, please.

23 This is the--looking at the "cronograma de inversiones
24 requeridas" for various projects, you will find Rositas about
25 seven lines from the bottom.

15:07 1 Do you see that?

2 A. I do, yes.

3 Q. And for the 2010 column, there is budgeted
4 \$32 million. Is that what you're referring to?

5 A. Yes. I was referring to the fact that the
6 November 2009 plan had this prospect of starting to spend money
7 in 2010, but as of May 2010, it was obvious that this was not
8 being allocated or budgeted for, and Bolivia has not been
9 spending on that project in 2010.

10 Q. There has been a lot of discussion today about
11 judgment calls based on your experience, and I think the
12 Tribunal may be more familiar with your valuation experience
13 than with your electricity market experience.

14 Can you just explain the basis on which you make
15 judgment calls related to the electricity market.

16 MR. GARCÍA REPRESA: Objection. Beyond the scope.

17 PRESIDENT JÚDICE: What?

18 MR. GARCÍA REPRESA: That sort of question on redirect
19 is rather beyond the scope. They had an opportunity to do the
20 classic rehearsed speech about how the great the Expert is on
21 direct.

22 PRESIDENT JÚDICE: I was not able to understand the
23 experience of Mr. Abdala in the specific field of practice, and
24 I was not aware before this case--or at least so aware, but
25 when I came to this hearing, I was--and I think my

15:09 1 co-Arbitrators also--was really aware of that. I understand
2 your point, I appreciate your effort, but we're running out of
3 time, and we are clearly identified with the expertise of Dr. Abdala.

4 MR. RUBINS: Thank you, Mr. Chairman.

5 BY MR. RUBINS:

6 Q. Dr. Abdala, what--with respect to the fair market
7 valuation of Guaracachi in this case, what was the relevant
8 criteria for you in deciding what information to incorporate
9 into your model and what information not to incorporate into
10 your model?

11 A. Well, the critical part is to try to assess what would
12 have been the--what willing buyers and sellers would have made of
13 all of the information that is available in the marketplace,
14 and that includes not only the information published or not
15 published by CNDC, but also the perception as to what is
16 reasonable to expect or not to expect in terms of both supply
17 and demand for electricity as well as other parameters that
18 were known to willing buyers and sellers at that time.

19 Q. With respect to the 1.5 multiplier, there was some
20 mention of the relationship between the volatility of stocks
21 versus bonds and the Market Risk Premium, and, frankly, I think
22 that that discussion didn't quite go to its logical conclusion.
23 And I would like you just to explain as concisely as you can
24 what is the relevance of the Market Risk Premium to the
25 difference in volatility between stocks and bonds.

15:11 1 A. Well, what I say is that the Market Risk Premium is
2 trying to--it's worse; it's the premium over the risk-free
3 rates on the bonds. So, you're already assessing in the
4 industry what is the risk for an equity investor by the capture
5 in that Market Risk Premium.

6 So, to some extent you're already incorporating that,
7 and by eventually using the multiplier on top of a separate
8 component, which is the Country Risk Premium, you also have the
9 risk of eventually exaggerating the premium that attached to
10 equity as opposed to bonds. And that's why, in practice, I
11 rarely see these--by practitioners being used a multiplier
12 prior on top of a sovereign spread or whatever other measure
13 you may use to capture Country Risk Premium for an investor.

14 Q. Thank you.

15 On the issue of Professor Damodaran's calculations of
16 the Country Risk Premium that we were looking at in the
17 printout of the spreadsheet at C-308, Mr. García Represa
18 suggested that you do not refer in your reports to the 8.25
19 percent figure that would result from adding a 1.5 times
20 multiplier to the 550 basis points.

21 Do you remember that exchange?

22 A. I do remember that, yes.

23 Q. Okay. I would like you to take your Second Report and
24 open to Page 42--and I realize that these reports are on both
25 sides are quite voluminous, and so sometimes one doesn't recall

15:13 1 precisely what one has written; I can't imagine how I would
2 keep half of this stuff in my head--on page 42, if you would
3 look at Footnote 78, if you could read that to yourself.

4 (Witness reviews document.)

5 BY MR. RUBINS:

6 Q. You speak precisely about the 825 basis points there,
7 don't you?

8 A. Yes, I have mentioned it, yes.

9 Q. Okay. And you looked at two documents with Mr. García
10 Represa that related to the Size Premium. You looked at more,
11 but I want to talk about two of them. One was the Tarbell
12 slide show, and one was the Hitchner report.

13 Do you remember those two documents?

14 A. I do.

15 Q. So, there was actually discussion with regard to
16 Tarbell about the date on that. Do you remember the year on
17 that?

18 A. Yes, it's 1999.

19 Q. And do you remember the year of Hitchner? If not, we
20 will go and look at it.

21 A. If you remind me, that would be helpful.

22 Q. So, it's Tab 37. And again, the cover page will tell
23 you.

24 A. 2003.

25 Q. The Fama/French study that you referred to in which

15:14 1 Fama and French conclude that there is no size premium, C-272,
2 what date is that?

3 A. That's the 2012 report.

4 Q. You talked about the liquidity of stocks which has
5 played, as I understand your view, a role--or plays a role in
6 explaining some of the studies that suggest a Size Premium.

7 What I would like to understand is this issue of
8 liquidity of stocks, how relevant is that to long-term
9 valuations?

10 A. How relevant is that to long-term valuations?

11 Q. What I mean to say is, where--what you're looking at
12 in this case is not buying and selling stocks on the stock
13 market but, rather, buying into an enterprise with an eye to
14 getting cash flows.

15 A. Right.

16 Well, typically, I mean, you don't do any adjustments
17 for a DCF or for an analysis, for instance, on a long-term asset
18 valuation. The only relevance in general that one can see is
19 that if there is a literature out there that would say if you
20 can exit and enter more easily than other companies, then some
21 investors may place a premium on that, and that's a premium
22 that--not a premium on risk, a premium on value because it is
23 more valuable to eventually hold an equity stake of the company
24 that is traded as opposed to a non-traded company. And that's
25 a one way to look at this.

15:16 1 Q. You were taken to graphs in the second Econ One
2 Report, and if you have it there, it's Graph 1 and Table 4.
3 A. Which page number?
4 Q. I'm going to sell you in just a moment.
5 Yes, it's on Page 63 of the Second Report.
6 A. Sixty-three of my report?
7 Q. No, I'm sorry. This is Econ One's report. Second
8 Report.
9 A. And that's Tab 32?
10 Q. It's Tab 30, if you've found it.
11 A. Thirty, okay.
12 All right.
13 Q. You looked at the table, Table 4, and the graph,
14 Graph 1.
15 A. That's right.
16 Q. And were asked questions about it.
17 A. Uh-huh.
18 Q. And it seemed to me that you wanted to comment on
19 something in relation to the 4.2 percent shown in the graph and
20 the results on the table prior.
21 Would you like to comment on that now?
22 A. Well, yes. I wanted to comment, first of all, that
23 there is a problem with the labels. These 4.2 and 4.2 that you
24 see in Graph 1, those refer to 2009, not 2010. And that refers
25 to the August 2009 report that you see in Table 4.

15:18 1 And the same comment that I made for the graph showing
2 Equity-Risk Premium, I mean, there is no reason to disregard
3 this information on 2010, which, by the way, it's closer to the
4 date of valuation than the August 2009.

5 All of these documents are relevant, in my opinion, so
6 as to see what the benchmarks were on these comparable Latin
7 American generation companies.

8 Q. Just a couple more questions.

9 Carbon credits. There was a suggestion from counsel
10 for Bolivia that you should have somehow taken account of a
11 decrease in the value of carbon credits after the
12 nationalization.

13 You've reviewed, obviously, the Econ One reports. Did
14 Dr. Flores make comments in that regard?

15 A. No, I don't think so Dr. Flores has made any comments
16 on the price for carbon credits.

17 Q. Slide 9 in your presentation, there were a number of
18 questions that you were asked about this slide that were
19 suggesting that the number of companies observed is somehow not
20 representative or something to that effect.

21 Can you explain just in 30 seconds or less what was
22 the point of the slide for you?

23 A. Sure. The point of the slide is to look at
24 information of the only 15 traded companies that we could get
25 comparables for in Latin America, and see how Santander

15:20 1 Investment Bank report has, at different moments in time close
2 to the valuation date, made an assessment of the Country Risk
3 Premium. And the Country Risk Premium, which is in the first
4 column of the numbers, is very, very similar to the EMBI spread
5 of each of these five countries as represented by the sovereign
6 spread without any adjustment or multiplier included on the
7 calculation of the cost of capital.

8 Q. Thank you, Dr. Abdala.

9 MR. RUBINS: I have no further questions.

10 PRESIDENT JÚDICE: Thank you, Mr. Rubins.

11 Dr. Conthe?

12 MR. GARCÍA REPRESA: Mr. President, I have to.

13 PRESIDENT JÚDICE: I'm so worried with your time.

14 MR. GARCÍA REPRESA: I understand, and I promise to be
15 quick this time.

16 RE-CROSS-EXAMINATION

17 BY MR. GARCÍA REPRESA:

18 Q. If you could take Tab 2, that is the famous Rositas
19 article that I referred you to, and my colleague referred you
20 to also. We went through some reading exercise with my
21 colleague, and I would like for you to complete that reading
22 exercise.

23 A. And I need my glasses.

24 Q. Feel free, and it's a particularly small article.

25 Now, if you could please turn to Page 14 in that

15:22 1 document.

2 Do you have it, sir?

3 A. I do.

4 Q. Now, can you look at the very last paragraph--once again,
5 I like looking at the last paragraphs of things.

6 And if you have any doubts, I will read it out loud in
7 Spanish: (Translation of Spanish) "Rositas is more available than 30 years
ago because

8 it was twice as what it was during the demand period and now
9 this is going to be a third of it."

10 Did you consider this in your report?

11 A. Well, there's no doubt that Rositas project will be a
12 great project for Bolivia and the region of Santa Cruz to have,
13 and the issue is how do we get there, how do you finance it,
14 how do you make sure that it happens when it has been in the
15 charts for so long, and whether a private investor would have
16 taken into account as a credible entry in 2018 or 2019.

17 Q. And so, do I understand your testimony to be that
18 documents that are closer to the valuation date, even though
19 after the valuation date, are relevant? Yes or no?

20 A. Sorry. Say that again? Documents are closer?

21 Q. We were talking about the investment bank reports, and
22 you took issue with Econ One using the only investment bank
23 report pre-nationalization, which is the August 2009 report
24 which is submitted.

25 Your criticism was there are reports from 2010, even

15:23 1 though they're after the nationalization date, which could be
2 relevant.

3 So, am I understanding you correctly that you consider
4 relevant for valuation purposes documents created after the
5 date of valuation? Yes or no?

6 A. Yes. Some documents that might be--that are after,
7 might be relevant, as I mentioned before, not just for the
8 purpose of valuation, but for the purposes of benchmarking. In
9 the case of the investment reports, those are benchmarks that
10 are important.

11 Q. Thank you, Dr. Abdala.

12 MR. GARCÍA REPRESA: I have no further questions.

13 PRESIDENT JÚDICE: Mr. Conthe.

14 QUESTIONS FROM THE TRIBUNAL

15 ARBITRATOR CONTHE: Let me start with a theoretical
16 methodological question which nonetheless has a bearing on this
17 case. And just to make it clear that this is a purely
18 hypothetical case and to the extent that North Korea is on the
19 front page of many papers these days.

20 Let's consider a hypothetical case in which North
21 Korea were to overrun South Korea and were to nationalize a number of
22 companies and you were asked as an expert to do a valuation of companies
23 which were owned by private investors in South Korea and you
24 need to look forward into the future and try to calculate the
25 Net Present Value of that company.

15:25 1 My question--you need, then, a counterfactual in which
2 you compare how the future would look like.

3 My question is: As an Expert, would your consider
4 South Korea, in that future scenario, to be independent or to
5 be now controlled by sort of a very, very interventionist
6 Government?

7 Because I will explain us, when you respond, why this
8 is relevant to what we have in the discussion this morning.

9 THE WITNESS: Well, certainly in your hypothetical I would
10 take into account how North Korea would eventually play a role
11 in letting private companies get revenues and eventually
12 profits. So, obviously you're talking about kind of a
13 completely new market situation for that investor going into a
14 country in which now there is expectations of a much higher
15 degree of intervention.

16 ARBITRATOR CONTHE: From a methodological point of
17 view, for me that would raise a question because then it would
18 be a self-fulfilling prophecy. So, if you overrun South Korea
19 and all of a sudden your Market Premium goes through the roof
20 to 1,000 automatically, all investments will have no value
21 whatsoever. That's why I would think that, in theory, you
22 should consider a counterfactual in which something very close
23 to continuity of prevailing conditions remain.

24 THE WITNESS: Well, let me clarify. Because obviously
25 it depends on which variable you're controlling for and the

15:26 1 measure that you're complaining about.

2 You could measure, in that particular example of
3 yours, well, give me the give me the value, Dr. Abdala, for
4 what this investment would be like in the absence of
5 nationalization. Then the answer would be completely different
6 because, then, as you would said, there would be a but-for
7 scenario with continuity of what we had before.

8 In our case of EGSA, my understanding of the but-for
9 scenario is eventually in the scenario in which Guaracachi is
10 not expropriated, but not controlling for the fact that Bolivia
11 has expropriated others and that, therefore, most of--or all of
12 the generation sector now is owned by the State Government.

13 ARBITRATOR CONTHE: But your approach seems consistent
14 to my view that you don't need to take into account the changes
15 in circumstances, to the extent that you consider the Market
16 Risk Premium for investment in Bolivia irrespective of the political regime,
17 so to speak, on the basis of a composite index of emerging
18 economies, and even though you, of course, taking into the
19 account the famous Damodaran paper. But anyway, now, this
20 morning, when you make the presentation on--your initial
21 presentation on capacity and most recently when you talk about
22 the Rositas project, you were already saying that well, to the
23 extent that now the climate is going to be less friendly to
24 foreign investors, in all likelihood, capacity will grow less
25 and the full prices will remain higher than otherwise, and then

15:28 1 Rositas is very difficult to be funded.

2 So, when you come to that part, you're considering
3 already that there has been a change in the--from the very
4 friendly market approach of the Nineties in Bolivia to the new
5 approach taken by the Morales administration since the
6 Year 2000. And I think that, to that extent, to me, that
7 approach is not fully consistent. In some cases you're
8 continuing as the country was before, but when it comes to
9 capacity and prices you're taking into consideration a
10 less-friendly atmosphere for private investors.

11 THE WITNESS: Well, I'm not making any differentiation
12 about how friendly or unfriendly it would be or whether there
13 is any component within the Country Risk Premium that relates
14 to nationalization. I'm not controlling for that.

15 What I'm saying is that as it relates to new
16 investment in capacity, where I do take into account that now,
17 in principle, the only one financing--or at least is expected
18 in 2010--might be the state of Bolivia, but without making any
19 judgment as to whether that would be more friendly or less
20 friendly, but it's just that one source of financing, which is
21 private investment, seems to be, at least for some time,
22 curtailed.

23 ARBITRATOR CONTHE: Okay. Then another question on
24 returns--expected returns on equity, because one of the
25 measures--one of the ways of measuring expected returns is by

15:29 1 surveys to investors and the like. And actually, Bolivia and
2 his Expert, Mr. Flores, is on record in his Second Report, he
3 quotes extensively both Mr. Earl's statements as head of
4 Rurelec, as well as Tenasca, even there they see the company,
5 and they clearly say that in an emerging economy like Bolivia,
6 they would expect an expected return of equity of at least
7 20 percent.

8 How would you compare that with your own assessment,
9 which is 14.45? Because don't you see too wide a gap between
10 what you, yourself, are using as expected Rate of Return and
11 what the Chief Executive of Rurelec himself was saying publicly
12 with respect to South Africa?

13 THE WITNESS: Right. An excellent question.

14 Now, the difference is in the concept of why is it 20
15 and why is it 14. The 20 percent is an aspiration of what an
16 investor--or the threshold that an investor may pose before
17 deciding to invest. They may say well, look, I'm not going to
18 invest in Bolivia if I don't earn in an expected sense a
19 20 percent.

20 ARBITRATOR CONTHE: On equity?

21 THE WITNESS: On equity.

22 Now, the 14 percent is different. The 14 percent is
23 the cost of equity of the industry; that is, the competitive
24 rate at which all investors under full information and under a
25 scenario of competition would eventually value assets because

15:31 1 at the cost of the equity, they can source funds at 14 percent.
2 So, in a competitive environment, they will accept that
3 14 percent as the normal Rate of Return in that industry, and
4 that's why, if we were to organize an auction, that is the
5 discount rate that you would need to use, because that's the
6 outcome of competition.

7 Now, as you know, the threshold Rate of Return that a
8 particular, a single investor may have may be higher than
9 14 percent. They can simply say, well, I want to really get a
10 return on 20 percent, and so I'm not going to value--he's not
11 going to value the asset with a discount rate at 14 percent.
12 He may say, well, no, I'm not going to get that return;
13 therefore, I don't invest. That's okay in that particular
14 decision-making.

15 But as long as you assume for the purposes of fair
16 market valuation the concept that there would be more than one
17 willing buyer, but there would be another willing buyer which
18 is willing to pay as much as whatever amount of dollars is with
19 the cost of equity of 14 percent. And that is why it is so
20 important that when you do Fair Market Value assessment, you
21 differentiate between what is the cost of equity of the
22 industry as opposed to any particular threshold that a
23 particular investor, individual, may have.

24 And Damodaran, for instance, shows nice evidence as to
25 the differences between the aspiration of thresholds that

15:32 1 investor had ex ante compare to the average returns ex post.

2 And you would normally find that, yes, when we enter, we expect
3 to earn 20, but then, on average if markets are competitive,
4 then you end up earning 14 or so. Or maybe 15 or maybe 12,
5 depending on how market conditions unravel.

6 But it's typical, that obviously in competitive
7 markets, you end up earning the normal Rate of Return.
8 Otherwise, everybody would be making tons of money. I mean,
9 everybody would be making lots of money.

10 Of course, in some particular projects, it might be
11 that you're lucky, you pay very cheap, and then you end up
12 earning 20 or 25 percent or 30 percent. That can happen as
13 well.

14 PRESIDENT JÚDICE: Mr. Abdala, if you may be a little
15 shorter.

16 THE WITNESS: Sorry about that.

17 PRESIDENT JÚDICE: It's very interesting what you are
18 saying, but we are with some time restraints.

19 ARBITRATOR CONTHE: If you allow me--for me, that's
20 key.

21 I was talking about ex ante rates of return, no ex
22 post, so we are here talking only about ex ante.

23 So, if I understood you correctly, you meant that the
24 14 percent of your calculation and your 20 percent of
25 Mr. Earl's statement are comparable, but what you're

15:34 1 essentially saying is that Mr. Earl would be too conservative,
2 and in the end, in the market, there would be another investor
3 who would be willing to go lower than Mr. Earl. So, Mr. Earl,
4 the second time, wouldn't get the company because he would be
5 cut off from the competition, and there would be someone else
6 bidding for lower expected Rate of Return.

7 THE WITNESS: Absolutely. You got it exactly right.

8 ARBITRATOR CONTHE: I find it a bit weird, but I will
9 reflect on that.

10 Then, on the question of discount rate, which is a
11 totally different issue, let's go to your Slide Number 14 this
12 morning. Because that was interesting. Until you spoke this
13 morning, I had wrongly understood that the implicit discount
14 rate used by the Bolivian authorities when transforming into an
15 annuity, the price of a turbine was a real--a nominal 12
16 percent, but you here clearly say that it's a real 12 percent
17 plus inflation, which works out to something like 14 percent.
18 So--14.5, say.

19 So the Bolivian authorities, in the past, when trying
20 to use the discount rate for multi-year projects like buying a
21 turbine and putting it in place for many years to come, you say
22 discount rate, which normally, by and large, is some
23 14.5 percent, which, funnily enough, is midway between
24 your--your own assessment and Econ One's assessment.

25 But what I didn't pick up is what's this other

15:35 1 discount rate of Bolivian distributors? Did the Bolivian
2 authorities apply a similar discount rate for calculating the
3 remuneration of distributors?

4 THE WITNESS: Yes. For the purposes of tariff reviews
5 in the distribution electricity sector, they use a
6 10--10 percent, at least for this period of time 2007-2011.
7 They change it every four years.

8 And my understanding is it normally has been between
9 10 to 11 percent during the whole history for electricity
10 distribution. But this is mostly a discount rate that is used
11 in distribution for Tariff Review purposes.

12 ARBITRATOR CONTHE: Let's move on to another major
13 difference between you and him, which is optimum capital
14 structure. Because you consider an optimum capital structure
15 to be something like .8 between debt and capital, whereas Econ
16 One considers just .5 or something of the sort--and actually,
17 as we were discussing the other day, Guaracachi was subject to
18 a .7 Covenant ratio by CAF.

19 So, on what basis do you think that there is such a
20 wide difference? I was surprised by the reference in Econ
21 One's report to .5 as being the optimum capital structure in
22 the U.S., and--but could you explain what's the reason for this
23 wide gap between your own optimum capital structure and Econ
24 One's?

25 THE WITNESS: Well, the main difference is the sample

15:37 1 from where we're drawing. Whereas I'm using the information
2 from Ibbotson on the beta and the optimum debt-equity ratio,
3 which includes, I believe, 40 companies or so, and the
4 traditional SEC code for electricity generation, Dr. Flores is,
5 rather, looking at five companies, which is a much smaller
6 sample of--a custom-made sample that he pulled out from other
7 sources.

8 And I mentioned that in my Report--my Second Report,
9 that I think that's a very narrow choice. It's also the fact that
10 one out of the four happens not to be a very good comparable.
11 But in any case, it's a very small sample that not only had the
12 effect of having a very low debt-equity ratio, but also a very
13 high beta.

14 So, that's basically what explains the differences.

15 ARBITRATOR CONTHE: My following and almost last
16 question is on turbines. And there was an extensive
17 discussion, but are there significant entry barriers into the
18 market for manufacturing turbines? Because you, over time,
19 consider that turbines are going to become more expensive and
20 more expensive in real terms.

21 So, following your logic, if you apply it to the
22 electricity sector, in the market economy, then new entrants
23 will make the price go down. What's the logic for expecting
24 such a continuous trend of turbines becoming all the time more
25 expensive vis-à-vis the rest of the goods in the economy?

15:39 1 THE WITNESS: Right, right. And I understand the
2 promise of such a long-term valuation in this case.

3 The only rationale that I apply is the issue of having
4 much more demand in general; when you have a more demand than
5 in the rest of the goods and services, then you would expect
6 that particular product to become more expensive.

7 That doesn't mean that the sector is not competitive.
8 So, I don't see any barriers to entry in the turbine
9 business. So, it is a competitive sector. It is as of the
10 fact that it seems if there is more and more demand, then the
11 increase in prices could be slightly higher than the rest of
12 the economy.

13 ARBITRATOR CONTHE: But good supply would not react to
14 this increase in demand? So, in a market economy, if demand
15 grows, supplies grows, and so you don't need to see necessarily
16 prices going up in real terms because of an increases in
17 demand?

18 THE WITNESS: Well, probably it depends on how long
19 that dynamics adjusts. It may take some time for suppliers to
20 react to that. But probably you're right that over the long
21 term, there shouldn't be that much of a difference.

22 ARBITRATOR CONTHE: Not to tax the patience of my
23 colleagues anymore, but there is one paragraph in your Report
24 which I didn't quite understand, and my guess is that many
25 other people might have not, which is Paragraph 90 of your

15:40 1 Second Report. It's on the survivorship bias and to what
2 extent by using an arithmetic mean you correct for that bias,
3 which would be aggravated if you were to use a geometric mean
4 as Mr. Flores does in his report.

5 Could you allow--this is purely, I confess,
6 educational because I didn't quite grasp your reasoning on
7 Paragraph 90 of your Second Report.

8 THE WITNESS: Let me re-read it and try to remember
9 exactly.

10 Right. And this is quoting a paper from Koller and
11 mostly talking about this issue that there are arithmetic
12 means--arithmetic may have one to two percentage points,
13 including a survivorship bias here. Right?

14 ARBITRATOR CONTHE: Well, don't worry, because I'm
15 going to ask the same question to Mr. Flores.

16 THE WITNESS: Basically this is saying that the
17 arithmetic mean, unlike the geometric, may be capturing the
18 fact that you're only looking at those companies that have
19 survived as opposed to looking at the full spectrum of
20 companies.

21 When you're looking from one point to the other, then
22 whatever happened to the returns in between, you don't have the
23 same bias by looking at the arithmetic because the arithmetic
24 is capturing only the returns of those companies that are
25 operating and eventually were survivors. They are still--you

15:43 1 have like the--arithmetic means takes one year after the other
2 from 1928 to, say, 2010. And so, by computing the arithmetic
3 mean of every year, then the returns that you're capturing are
4 the returns of the observables. The observables are only those
5 who are surviving in the market; whereas, if you're taking the
6 geometric mean, you're starting in 1928 and ending up in 2010,
7 and you're essentially taking these two observations and you
8 don't have that bias in the middle.

9 ARBITRATOR CONTHE: What you mean is, then, by--a
10 geometric mean would compound the bias implicit in survivorship
11 to the extent that only the returns of those companies which
12 have remained alive are not considered in the sample?

13 THE WITNESS: It's not a compounding effect. It's
14 just that by using year-to-year data--and by looking at that
15 obviously comes from the firms that have survived only--then
16 for the same dataset that starts in Year 1 to Year 20, then for
17 arithmetic mean will have that issue, but whereas the geometric
18 may not.

19 ARBITRATOR CONTHE: Okay. Thank you.

20 PRESIDENT JÚDICE: Just one question. I think that
21 for experts like you, and even for lawyers and Arbitrators,
22 consistency is an important point.

23 In getting there, I noticed that some examples have
24 been provided of apparent inconsistencies between some
25 valuations or some comments or some points of view or of Compass

15:44 1 Lexecon as compared with other cases.

2 I don't want you to speak a lot about your track
3 record or about the Compass Lexecon track record. Just in one
4 minute, give me some reasons to justify these inconsistencies
5 or to just say nothing more than that, that it's not the case.

6 THE WITNESS: Okay, good.

7 Well, first of all, it's not an inconsistency what you
8 have seen in the records.

9 Second, Compass Lexecon is a large entity, so you
10 don't expect by any means consistency because we have lots of
11 Experts, and so we may have different opinions on certain
12 issues.

13 But, third, the case that was related here was a
14 Professor Spiller's reference of inclusion of the Size Premium
15 in the Guatemalan Railroad Case. And there is significant
16 differences between one case to the other.

17 The first one, and the most important--I'll be very
18 short, because I think it's important--the first one is that
19 that company was seven years showing a track record of negative
20 profits with prospects of operating only real estate assets and
21 services that were in competition, prospects of not even being able
22 to overturn. So, there are case-specific differences. I could
23 go on and on.

24 PRESIDENT JÚDICE: Thank you very much.

25 No further questions.

15:46 1 Mr. Abdala, we thank you very much for your
2 cooperation, and you may stay, as you know better than me, and
3 now we are going for a small recess, 15 minutes, as usual, and
4 then we have Mr. Flores, and you will be, I think the last but
5 not the least.

6 (Brief recess.)

7 DANIEL FLORES, RESPONDENT'S WITNESS, CALLED

8 PRESIDENT JÚDICE: Is it possible to start now?

9 MR. SILVA ROMERO: Thank you, Mr. President.

10 PRESIDENT JÚDICE: Is it possible to start,
11 Dr. Rubins?

12 MR. RUBINS: Yes, thank you, Mr. Chairman.

13 PRESIDENT JÚDICE: Good afternoon, Mr. Flores.

14 THE WITNESS: Good afternoon.

15 PRESIDENT JÚDICE: It's a pleasure to have you here
16 with us to help the Tribunal.

17 Would you please identify yourself and then read the
18 piece of paper that you have in front of you.

19 THE WITNESS: My name is Daniel Flores. I work with
20 Econ One, and I solemnly declare upon my know and conscience
21 that I will tell truth, the whole truth and nothing but the
22 truth, and my statement will be based on my honest belief and
23 knowledge.

24 PRESIDENT JÚDICE: So, I think that you have a
25 PowerPoint there. I understand that it cannot be longer than

16:06 1 15 minutes, but it may take a little bit longer as we have seen
2 before.

3 MR. GARCÍA REPRESA: The agreement is that we actually
4 have 30 minutes.

5 PRESIDENT JÚDICE: Even better.

6 THE WITNESS: I have a timer here, so I know when to
7 stop.

8 DIRECT PRESENTATION

9 THE WITNESS: In my presentation today I will be
10 addressing four issues that we have already seen during this
11 hearing. I am going to move to Page Number 3. I wanted to
12 call your attention to the breakdown between the difference in
13 the valuations done by Compass Lexecon and Econ One. You're
14 going to see a graph there that was introduced during the
15 Opening Arguments by the Claimants. At the bottom you're going
16 to see a table from my Second Report. As you can see, we agree
17 in our disagreement, but the quantification of the
18 disagreements leads to disagreement.

19 What does it mean?

20 If you look, Compass Lexecon is saying that the
21 discount rate is 64 million. In my report, I say that its
22 importance is 45 million. Both are significant amounts of
23 money, but compass Lexecon is much higher than the value I
24 present.

25 What is the reason for this? You can see that the

16:08 1 correct methodology for the discounted cash flow method is,
2 first we need to estimate discount cash flows for each of the
3 years of the project, 2010 to 2038. Second, we take those
4 yearly cash flows and discount them to the valuation date.
5 Therefore, it is important to have certainty first about the
6 quantification of the cash flows and once we quantify the cash
7 flows, second, we discount those flows.

8 That's the reason why Table 1 shows on Page 4 changes
9 that are introduced to the aspects that have an impact on
10 yearly cash flows, and only after that we can look at the
11 importance of the discount rate, and that is the reason why I
12 will be devoting some minutes to what is important in
13 connection with the cash flows.

14 We see price and dispatch projections, and today and
15 Friday we talked to representatives of MEC, CNDC, and Mr. Paz,
16 and I only had four comments.

17 First of all, it is not true that I have adopted the
18 projections made by Mr. Paz without any judgment or
19 uncritically. I had several meetings with Mr. Paz in Santa
20 Cruz and also several discussions over the phone. And only
21 when I was familiar enough with his estimations and I made sure
22 that they were correct, I included them into my model,
23 financial model.

24 Second, I would like to clearly state that the
25 Claimants have not found any estimation mistake in Mr. Paz's

16:09 1 exercises. He has a long experience doing this, but they're
2 discussing the inputs to the model, whether POES--what type of
3 POES to use, and that is the difficulty. But in connection
4 with the estimation, no one has questioned what he did.

5 Item Number 3 says also that it is not true that
6 Mr. Paz started to calculate numbers in July 2010, and I think
7 that Mr. Abdala made it clear that he never said that, and that
8 is something that is no longer relevant.

9 And, fourth, and something that might be even more
10 important, as an economist, I clearly disagree with the
11 assertion by Mr. Abdala that the hydroelectric project process
12 is not economically viable. Today we have heard that Mr.
13 Abdala is not saying that this would be delayed one or two more
14 years, but he is saying that this will never be built, but a
15 buyer in May 2010 would assume that this would never be built,
16 and this is very strange to me.

17 And I think it is a good idea to use Mr. Abdala's
18 presentation. And if you have it handy, and if you look at
19 Slide 33, I think it is interesting no notice the effect. This
20 is a POES slide, 2010 POES, and I wanted to indicate to you
21 that there is an impact for not introducing Rositas here.

22 So, there is a consequence for not introducing Rositas
23 into the interconnected system in Bolivia.

24 In blue you see the addition of new capacity, and
25 towards the end between July 2017 and December 2018 there is a

16:12 1 step that includes the addition of Rositas. If Rositas is not
2 added, the line remains at 1850 megawatts. It was at 2016 and
3 2017. That is in 2016 and 2017. Now, if you look forward in
4 early April 2020, the blue line will cross the red line. What
5 does it mean? Outages, blackouts. It means that the capacity
6 will not be enough for generation in Bolivia.

7 Clearly, from an economic point of view, to say that
8 that plant will never be built, in my opinion, is incorrect.

9 And there are some other considerations. Mr. Abdala,
10 who in his first report never said anything about Rositas, in
11 the Second Report he's trying to justify why he did not include
12 Rositas. And something that is striking is that he says that
13 it is too big. It's true that this plant had had some
14 preliminary studies in 1973, and that electricity demand in
15 1973 was 200 megawatts.

16 So, upon building a hydroelectric plant of 400
17 watts--the construction of a hydroelectric plant for
18 400 megawatts was exceptional, was not necessary, but there has
19 been a big change in Bolivia or the last years, and Rositas has
20 to be built; otherwise, there won't be enough electricity for
21 the country.

22 Mr. Abdala also referred to costs, and he said it's
23 just too expensive, Bolivia cannot afford it, but he never said
24 anything about what I said in my Second Report. There is a
25 problem with thermal electrical generation in Bolivia, and that

16:14 1 is the following. The country has gas. Gas is sold cheaply
2 within Bolivia based on regulation \$1.3 per million cubic
3 meters. This allows for rate production of thermoelectrical
4 energy and for consumers to have electricity. But there is
5 also a difference between 1973 and to date. In 1973, Bolivia
6 was unable to export gas. They had no connection with other
7 countries, but they do so today.

8 So, it is essential for Bolivia to capture that gas
9 that is being sold at subsidized prices at 1.3 and exported to
10 Brazil, Argentina, wherever, at a higher price. That is going
11 to generate very significant income revenue for the country,
12 for example, for the construction of Rositas.

13 I respect Mr. Abdala, but I think that his economic
14 analysis of Rositas, whether it should be included or not, is
15 completely wrong.

16 The second item is the indexation of the basic
17 capacity power. We have received information about this, and
18 clearly the problem is that there are no PPI turbine
19 projections. That is a subsector. And as for other sectors
20 such as inflation, exchange rate, and similar sectors, we do
21 have recognized sources that were used by Mr. Abdala and
22 myself, such as the IMF, economist intelligence unit, among
23 others. No one makes projection based on this subindex. Why?
24 Because there are several subindexes in connection with the IPP
25 in the United States. And in the long term, all of these

16:16 1 indexes have to have the same performance. Otherwise, after
2 two or three decades, otherwise, the price of a component
3 within the IPP would be much higher than the other component,
4 and that doesn't make any sense from the economic point of
5 view.

6 Mr. Abdala later on said that that is due to the fact
7 that there was an increase of the electricity demand in the
8 United States. That could be right, but it should also be
9 taken into account that by applying economic principles
10 whenever there is an increase of demand, also prices are going
11 to increase, but what is the reaction? As Mr. Abdala certainly
12 knows as an economist, the higher the prices, the higher the
13 benefits, and that is also going to attract more companies. If
14 year after year the companies that manufacture turbines are
15 receiving very high benefits, other manufacturers are also
16 going to say we can do that too, and that is going to lead to a
17 drop in prices.

18 It is impossible for a component to continue to have
19 an increase in prices above the general inflation level ad
20 infinitum. That is not possible.

21 I disagree with the statement by the Claimant that it
22 is pretty obvious that it should be 10 years. I don't know why
23 it should be 10 years. As I showed at Slide Number 11, if we
24 take a 10-year period, we have a 3.5 rate annually, which is
25 much higher than historical standards.

16:17 1 It should also be said that this week we listened to
2 Mr. Lanza, and he indicated what I was referring to. There was
3 an unexpected increase of cost, and that is reflected in the
4 previous page number 11 when you see the two bars with the
5 increase of prices for turbines over 11 percent.

6 As he said, this was a phenomenon that did happen. It
7 was completely unexpected, and it was an incredible increase.

8 I agreed, prices increased. No one is arguing that,
9 but to assume that that price increase will continue in the
10 future is not correct.

11 At Slide Number 13 I show a graph showing what would
12 happen with the price of capacity if we increase that based on
13 the erroneous or mistaken estimation by Compass Lexecon. Given
14 that in the long term all of the prices are going to increase
15 at the same pace, it is convenient to take the same projections
16 for general price increase of 12.5 percent and use the same
17 rate to 2.5 percent and then take that same rate. Part of
18 EGSA's revenue increased at 2.5 percent and others at
19 3.5 percent of the next 28 years, and this doesn't make much
20 sense.

21 Mr. Abdala--

22 PRESIDENT JÚDICE: This 15 percent and the difference
23 between both of them, this effect is the effect on the
24 valuation?

25 THE WITNESS: If you look at Slide Number 4, that is

16:19 1 the first table that I introduced there, and if you look at
2 Number 3 in the station of price indexation for capacity, and
3 that shows the difference between Mr. Abdala and myself, the
4 12 million difference.

5 And, finally, there is a very high correlation between
6 the two theories. The PPI and also the turbines have index,
7 and that also indicates that prices are moving or growing at
8 similar pace, and that does not happen yearly and as we saw in
9 2009 one to much higher than the other. But a buyer in 2010
10 cannot say this will continue to happen over the next 28 years.

11 Next, we see the discount rate, and at 16 I show you
12 the differences that would be the first conclusion by Econ One
13 and the difference between Econ One and Compass Lexecon. And,
14 here, I would like to devote a minute to clarify an answer to
15 Mr. Conthe, but I imagine it must be a misunderstanding. What
16 is it that we did in terms of the debt-equity ratio? We can
17 see that at Line Number 4. There we see that Compass Lexecon
18 is assuming 80 percent, and we assumed 133 percent higher than
19 what Compass Lexecon assumed in the United States. What
20 Mr. Abdala said is mistaken, and that is clearly shown here.
21 Why did we use that rate that was higher than Compass
22 Lexecon's? We said that that represents the optimal rate of
23 borrowing in the United States, and we used that to unleverage
24 beta, and to estimate the discount rate. First, we do it as if
25 we were in the United States. Therefore, the estimations are

16:21 1 based on parameters relative to the United States, but then to
2 apply it to a country in an Emerging Country, we do the ratios
3 with the relationships based on Emerging Countries.

4 And here is where you can see at row 15, rather 16,
5 they were using a different source. They were using
6 55 percent, but we were using 64 percent.

7 Why do we have different figures? Because this is
8 based through a different source. For the United States we
9 used the same source for the debt-equity ratio than Mr. Abdala.
10 But when we move on to Emerging countries, we use sources from
11 Emerging Countries. And if you wish, I can give you other
12 details later on.

13 And I'm referring to what you have already heard, an
14 itemized discourse, a little bit confusing about the discount
15 rate.

16 PRESIDENT JÚDICE: This is not confusing, but it
17 should be a little bit slower.

18 THE WITNESS: The discount rate, I am going to refer
19 to the data presented by EGSA and Rurelec in connection with
20 the approval of the combined cycle in its presentation to the
21 United Nations.

22 What is the discount rate? We can talk about leverage
23 and beta and risk rates. The discount rate represents the
24 minimum return of an investment to off--to convince potential
25 Shareholders and creditors so as to contribute funds to the

16:23 1 investment. This minimal return is dependent on the risk
2 associated to the investment. The higher the risk, the higher
3 the return to capture funds.

4 So, if I am going to invest in U.S. funds that give me
5 4 percent and I get 4 percent also by investing in a Bolivian
6 company, I'm sorry, but I will remain with the United States.
7 I would have stayed in the United States.

8 PRESIDENT JÚDICE: So, you would have stayed in the
9 United States?

10 THE WITNESS: Yes, but I'm not very happy there.

11 So, there are different names to call this discount
12 rate. We can call it the threshold rate, Minimum Rate of
13 Return, minimum IRR, hurdle rate, cost of capital,
14 capital--cost of capital, discount rate.

15 So, this is done so as to assess projects, so we're
16 going to compare the minimum IRR or the hurdle Rate. That
17 Minimum Rate that I need to compensate for my risk with the
18 expected Rate of Return of the project; that is to say, the IRR
19 of the project.

20 Over the first two days we said that someone said that
21 I used the IRR to assist the investment. That is not what I
22 said. I said that we have to use the minimum IRR. We need to
23 compare the minimum IRR, that is to say the discount rate, the
24 minimum expected Rate of Return, and compare that to the
25 expected rate of the project.

16:25 1 So, what is the IRR? A very clear example. Let's
2 imagine an investment that requires an investment of \$100 per
3 share, and we expect that next year we will be obtaining from
4 that investment \$125, and this is the IRR for the project.
5 That is to say, we expect next year to obtain \$125. The IRR
6 for that project would be 25 percent.

7 So, how do we use this? How do we compare the
8 discount rate to the minimum IRR, the hurdle rate, and the
9 expected return--Rate of Return of the project on the other
10 hand? Let's assume two projects. Both of them require
11 investment. Initially of \$100 we expect for Project A to
12 return \$115 on the second--in the second year, so the IRR for
13 that project would be 15 percent. Let's imagine Project B,
14 that given the same investment would return us \$130, and both
15 have the same level of risk.

16 So, what we need to do is to determine the discount
17 rate, the hurdle rate, the Minimum Rate of Return for that
18 project. Let's imagine that doing after all this we decide
19 that it is 20 percent. Project A does not meet minimum return.
20 Therefore, it has a negative net value, whereas Project B does
21 obtain that minimal Rate of Return. So, we need to compare the
22 internal Rate of Return for the project, expected IRR with the
23 minimum to be expected for that project.

24 If we move on to 21, we see that this can be applied
25 to the CER request before the United Nations. As Mr. Earl

16:27 1 explained during his statement, that the United Nations only
2 offered these credits, if it can be proven that the project
3 needs them to continue. If this is a project that is
4 sustainable without the carbon credits, the United Nations is
5 going to say, no, please go ahead without them. But given all
6 of the risks, if the project is below the level and the
7 addition of the CERs allow for the project to continue, the
8 United Nations will approve it.

9 This is a very serious process that requires the
10 certification by companies indicating that the carbon credits
11 are necessary.

12 Here you have an example that is quite similar to the
13 previous example. Let's imagine that what we used to call
14 Project A is now called the project without CERs. So, by
15 adding the carbon credits, \$15, we can exceed the discount
16 rate, the Minimum Rate of Return, the hurdle rate, so at that
17 point this project would be approved by the United Nations.

18 At 23 we see this German company, I don't know how to
19 pronounce it, and in April 2010 presented in connection with
20 the combined-cycle project, before the United States, the
21 additionality study, and they said, as of April 2010, we do
22 need the surge, because if we do not get them, we won't be able
23 to continue, but if we do, we can. So, it was very necessary.

24 And what did they say? Well, they said that the
25 equity, that is to say, the Internal Rate of Return, the

16:29 1 Minimum Internal Rate of Return to carry out that project is
2 between 25 and 30 percent. If we do not attain 25 to
3 30 percent for return to our investors, we won't be able to
4 create this generation project. If we exceed that rate, we
5 will be able to.

6 So, that is the return on capital that should be
7 incorporated into the WACC. That is my position. And if you
8 have any questions, I will be able to answer them later on.

9 And one of the specific projects, first of all, is
10 that we have the Country Risk Premium, and even though the
11 initial presentation by the Claimants indicated that the
12 country risk premium indicated that 5.5 percent was the
13 percentage that Damodaran considered appropriate, in those
14 tables he mentioned 8.25 percent, and this is just an extract
15 from an Excel page taken from Mr. Damodaran's page, Web page,
16 but he also has some other presentations to other universities
17 where you can clearly see that when he refers to the Country
18 Risk Premium, he always uses the same rate
19 2.5 percent--1.5 percent. And if you look at Slide 25, you see
20 some of his examples, and here we have Compass Lexecon,
21 Professor Damodaran, and this is 825, and this is the one that
22 I suggested, and there is another one that I did not mention
23 and that Mr. Abdala never mentioned. That is, the Country Risk
24 Premium suggested by Ibbotson and Morningstar, and Mr. Abdala
25 and myself have used it.

16:31 1 The rate is 19.02 percent, and I indicated this in my
2 First Report. I said I'm going to use the same method that
3 Compass Lexecon used, but they're only measuring the bond
4 differential and not a share differential, so I applied the
5 multiplier.

6 But bear in mind that there are other sources and
7 other parameters to calculate this, including Ibbotson and
8 Morningstar. As you can see, my risk of premium is not the
9 highest that has been submitted in this case.

10 Another thing that has been indicated during the
11 Opening Statements and today Mr. Abdala said it was well is
12 that that rate of 1.5 percent is not frequently seen. I have
13 looked at the files, but I haven't been able to look at any
14 other examples apart from the ones that I proposed for the
15 application of the 1.5 percent. But undoubtedly this is
16 applied. I'm going to move to give you two difference pieces
17 of information.

18 You can Google this and look at this Web page, and
19 you're going to see that there is a lot of information. This
20 Web page captures every single request for carbon credit that
21 is supposed to be--that is established to the United Nations.
22 And the additionality is precisely the one that uses
23 Mr. Damodaran's method.

24 I'm sorry, I am not able to offer evidence, but I'm
25 here to tell the truth, the whole truth, and nothing but the

16:33 1 truth. I'm also working in another arbitration, and I'm
2 working for the Claimant, and--I'm working for the Respondent,
3 rather. The Claimant is working with Charles River Associates,
4 and that economist that is working for the Claimant is using
5 Damodaran's data using a multiplier. Apparently, I'm the only
6 person in the world that does this, but this is not true.

7 The next point has to do with the Size Premium. For
8 the Size Premium on October 27, you can see the different data
9 sources. Ibbotson Morningstar breaks up all the companies in
10 the stock market, and they go from the larger to the smaller,
11 and here you see the threshold to go to the next group. Using
12 information from 1926, and I used data up until 2009, just
13 before the valuation date, you're going to see that
14 historically no doubt for this period 1926 to 2009, the
15 smallest companies have offered more returns to their
16 Shareholders, and that is clear to see.

17 Regardless of how you measure this, Guaracachi was a
18 small company.

19 He suggested an equity value of \$150 million
20 approximately, but I'm sure it's going to go below the smallest
21 company. That is why we have applied this information. These
22 are very common data from Ibbotson/Morningstar, and we have
23 applied a 6.89 percent.

24 So, you can go to Google and look to the Request to
25 the UN for carbon credits, and you're going to see that you are

16:35 1 going to find energy generators that say that four are discount
2 rates. We are using a size premium.

3 Twenty-eight, Guaracachi and EGSA was a small company.
4 I don't think this is up for discussion. It was a 70 person
5 company. Mr. Lanza accepted this. It said it went beyond our
6 capabilities, Mr. Lanza said.

7 PRESIDENT JÚDICE: It is the largest company in the
8 country it says here. It is not true or is it true?

9 THE WITNESS: It is the largest thermoelectrical
10 company in the country.

11 PRESIDENT JÚDICE: That's what I was thinking.

12 THE WITNESS: There are hydrocarbons companies that
13 are much larger than Guaracachi. I would be very surprised if
14 a 70-person company would be the largest in the country. Maybe
15 in Andorra, but not elsewhere in the world.

16 You can see this in the conversation that we held this
17 week on the effect of what EGSA had to do to obtain new debt.
18 The debt obtained by the bonds, and these bonds were sold in
19 the internal market in Bolivia, well, and then they said that
20 pension fund ponds were the only purchasers and when the
21 pension funds said we're not very interested in EGSA, they
22 found no one else, and they wanted to place 20, and they were
23 only able to place 16.

24 I'm sure you heard about the comparables method, and I
25 also talked about AES Gener, the Chilean company. This company

16:37 1 uses the same multiplier--would you like to say something?

2 MR. RUBINS: I'm marking the time as my colleague did
3 that the time has passed.

4 THE WITNESS: I'm almost done.

5 AES Gener, in Chile, for comparison purposes, uses
6 multiples on the company value on EBITDA of 9.7. This is what
7 Dr. Abdala said should be applied to EGSA's valuation according
8 to the comparables method. That company had 900 employees, not
9 70. It is a company that is publicly traded and has a 4.5
10 capitalization level, \$4.5 billion.

11 So, AES Gener, when it wanted to capitalize itself,
12 came here to Paris, went to BNP, and organized a bank syndicate
13 to be able to get millions of dollars in borrowings, so this
14 9.7 multiple and \$1 for profit of EBITDA in AES has a similar
15 value as \$1 of profit in EGSA. I think that's ridiculous to
16 say that.

17 I don't have access to the file of EDF v. Argentina,
18 but mention was made of this, so if there are any questions, I
19 would be glad to answer it, though.

20 Now, the capitalization factor of 12 percent of the
21 calculation of the basic Capacity Price, this in answer to a
22 question posed by Mr. Conthe. If you go to 34, my opinion is
23 that that 12 percent is lower than the discount rate that an
24 electricity generator investor would use in Bolivia. Why?
25 Because the minimum discount rate for return, well, if I don't

16:39 1 obtain it, I'm not going to invest it.

2 So, 12 percent has to do with a formula that comes
3 from the law. We're going to assume that a turbine is going to
4 be in operation for--operations for 20 years, and we're going
5 to hypothetically assume that we're going to pay you an annuity
6 at 12 percent so that you can cover the costs of this
7 hypothetical turbine. No one follows this. Why? Because one
8 is not obligated to buy that reference turbine that appears in
9 a manual in the United States. You can purchase a cheaper
10 turbine, and EGSA always bought, except for one case, used
11 turbines, and the CCGT turbine was also used because this is
12 much more--this is a much less expensive than if one buys a
13 reference turbine. There are turbines in EGSA that have been
14 in operations for more than 36 years.

15 The prices on capacity are just a fraction of the
16 percentage of the income of EGSA. So, an investor could say,
17 okay, I'm going to ask for 12 percent as a hypothetical number,
18 so my yield will be more than 12 percent, and if I include
19 income for carbon credits and for Spot Price sales, the yield
20 will be lower, so that 12 percent does not--does not represent
21 the hurdle rate that an investor in Bolivia could achieve.

22 Thirty-four minutes. I am going to stop here.

23 PRESIDENT JÚDICE: Thank you very much, Mr. Flores.

24 MR. GARCÍA REPRESA: Mr. President, excuse me. We
25 have a space in our transcript that has not been filled, but at

16:41 1 16 hours:15 minutes:04, when Dr. Flores said it's erroneous,
2 what Dr. Abdala said is it's not erroneous, so there is a
3 contradiction, so I think that that would have to be corrected
4 using the audio files later on.

5 PRESIDENT JÚDICE: Thank you very much.

6 MR. RUBINS: Thank you, Mr. Chairman.

7 CROSS-EXAMINATION

8 BY MR. RUBINS:

9 Q. Good afternoon, Dr. Flores.

10 A. Good afternoon. Hello.

11 Q. My name is Noah Rubins, and I'm with Freshfields
12 representing the Claimants in this case, and I will be asking
13 you some questions about your Expert Reports, and I will try to
14 be as brief as possible, and I will ask you to try to be as
15 brief as you can as well, keeping in mind the instructions of
16 the Chairman earlier today.

17 I have a few preliminary questions to ask you about
18 your approach to preparing the reports, so I can understand
19 your thought process.

20 If you thought that a document authority, other piece
21 of information was relevant to supporting your position, your
22 opinion in your report, is it fair to assume that you included
23 it in your report?

24 A. Not necessarily. This is a discovery process as I
25 indicated today, and I have been looking for sources in Google

16:43 1 in support of my position, but I didn't do this before
2 preparing my reports, so I think this is a point that supports
3 my viewpoint, but it's not reflected in my report, so I tried
4 to do the best I could, but sometimes we are not reaching
5 objective because the file here is quite voluminous, as you
6 know.

7 Q. Yes. I actually wasn't asking about the Google thing,
8 although maybe I will ask you a question about that in a
9 minute. I was asking more generally. When you are preparing a
10 report, okay? So imagine--think back to when you are preparing
11 your First Report criticizing Compass Lexecon's First Report, I
12 presume that you do your best to include all the information
13 that you're aware of and that you can find that will support
14 your position?

15 A. Again, not necessarily. I can give you an example, if
16 you want.

17 Q. No. I'm trying to understand why you would exclude
18 information that you are easily able to find that you think is
19 supporting your position, and again, I'm not talking about
20 Google. This is a new thing to me. I'm just saying in
21 general, when you as an expert, you go about writing a report,
22 normally one would expect in reading that report that the
23 Expert in question has done his very best to find everything he
24 can to support his position. Isn't that a fair assumption when
25 one is reading?

16:45 1 A. Again, not necessarily.

2 I could explain if you want me to. If not, I don't
3 have to.

4 Let me explain. Let me give an example, very quick
5 example. One of the reasons why I wasn't trying to look for
6 every single information that's out there would be to preserve
7 my independence.

8 Q. When you were preparing your two reports, you had
9 reviewed at the very least Dr. Abdala's Reports and the
10 attachments to them; is that correct?

11 A. The reports, yes, certainly, and the electronic model
12 as well for valuation, and also a lot, perhaps not all, of the
13 exhibits that were attached to the report.

14 Q. On the Size Premium, you impose your 6.28 percent Size
15 Premium on the basis of the Ibbotson/Morningstar
16 classification; correct?

17 A. That was a basis that I used for quantifying the Size
18 Premium.

19 Q. And the Size Premium is something that is outside the
20 classic CAPM method; correct?

21 A. I would have to ask you to show me what you understand
22 by the classic CAPM model.

23 Q. Okay. We're going to turn to Compass Lexecon's First
24 Report, and we're going to turn to Paragraph 149. It's under
25 the heading "Cost of equity."

16:47 1 Do you see that?

2 A. Yes, I do.

3 Q. So, you did not contest in your First Report that this
4 was not a statement of the classic CAPM model, so this is the,
5 I understand, agreed formula of the CAPM formulation.

6 Do you see that?

7 A. I would say that this is what we called a building
8 block, that is to say, the starting points where you start
9 calculating the equity ratio.

10 Q. Dr. Flores, I'm going to ask you questions, and I'm
11 just going to ask you to not try to guess where I'm trying to
12 get to with the questions because we will get there. I just
13 asked you about the CAPM model. I understand that your
14 position is that there are other things besides the CAPM model,
15 and as I understand, Dr. Abdala agrees with you. You both
16 agree, for example, that a Country Risk Premium has to be added
17 to the CAPM model. That's outside also the CAPM model. So,
18 I'm just asking, isn't it so the Size Premium is something
19 outside the scope of the traditional CAPM model?

20 A. I would like to be precise when I am testifying, and
21 you talked about the classic model. Now you're calling it
22 traditional model. I think words are very, very important in
23 these legal contexts, so I don't know. I would rather not say
24 this is a traditional model or this is the classic model
25 because perhaps you can say, well, according to my sources,

16:49 1 classical model is this. Without having a definition of what
2 traditional model means or classic model means, I would rather
3 not say anything about that.

4 Q. I will just ask it one more time, then: Is the
5 size--is the Size Premium part of the CAPM model?

6 A. Yes, I would say yes, yes.

7 Q. And you agreed actually in your report, your report,
8 to use the CAPM model for which you cite this page of Compass
9 Lexecon for the formula of the CAPM model, and it's not there,
10 so I'm trying to understand--I understand that you see it as an
11 adder. Are you saying you don't even see the Size Premium as
12 outside the framework of CAPM?

13 A. No, I think it is within the framework. This is
14 within the same framework.

15 The title of this section, and I'm going to read
16 Paragraph 149. It says to estimate the cost of equity. And
17 the title here is "cost of equity."

18 So, what we're doing in this paragraph is using one
19 method to calculate the cost of equity; and, of course, I know
20 that the Size Premium belongs in that analysis. It is not
21 something that is outside that framework. It belongs in that
22 framework.

23 Q. Okay. I'm going to leave that marking that you didn't
24 answer my question, and we will just move on. It's really not
25 that important.

16:51 1 The Size Premium--

2 MR. GARCÍA REPRESA: Objection. Mischaracterizes the
3 Witness's testimony.

4 PRESIDENT JÚDICE: Well, as I said before, we
5 take--pay attention to what the witnesses say and not exactly
6 the same attention to what each one of the lawyer makes as
7 comment to what the witness said. I understand--I'm a lawyer
8 also--this is a standard procedure, but Arbitrators even not
9 very well-qualified as we pay attention to that.

10 MR. RUBINS: Thank you, Mr. Chairman.

11 BY MR. RUBINS:

12 Q. The Size Premium in your model is based on some
13 studies that showed that the common stock of small firms had on
14 average higher risk-adjusted returns than the common stock of
15 large firms; is that fair?

16 A. I'd say that that is a partial answer. I will
17 supplement it. That is one of the components, some of the
18 studies you mentioned some studies, but apart from that the
19 usual practice of financial analysts is that as well. This not
20 necessarily means that they published an economic study, but
21 they use the Size Risk Premium.

22 Q. And do you accept that the size effect that I've just
23 described is understood in the economic literature as something
24 of an anomaly? Do you accept that?

25 A. What do you mean--I'm sorry, that it is an anomaly.

16:53 1 Well, the theoretical model says that that should not exist
2 because, in principle, if markets were fully transparent and
3 efficient, well, there should not be any risk--any Size
4 Premium. But that is actually observed. I don't know if
5 that's what you mean by when you talk about anomaly.

6 The theoretical model does not contemplate this, but
7 in reality it does occur.

8 Q. Right. And while I think I understand what you're
9 saying, my understanding of anomaly--which isn't worth much, so
10 we're more interested in your understanding of anomaly--I
11 understand anomaly as a phenomenon that is not readily
12 explainable by economic theory.

13 Is that fair?

14 A. If that is your definition, I don't think that that is
15 an anomaly.

16 Q. Would you open to Tab 2010 in your binder.

17 I take it, Dr. Flores, given that your location in
18 Washington, D.C., you can read English documents just fine. Is
19 that fair?

20 A. Yes, that's correct.

21 What happens is that generally when I'm preparing a
22 report in Spanish, I testify in Spanish, and if I prepare it in
23 English, I testify in English.

24 Q. Absolutely fair. That's why I'm wearing these really
25 uncomfortable headphones. No problem.

16:55 1 A. Please repeat what tab?

2 Q. Tab 10.

3 Tab 10 is an article by Horowitz, Loughran and Savin.

4 Have you seen this article?

5 A. Yes, I think I reviewed this article a little while

6 ago, not recently, though.

7 Q. And this is C-248.

8 In the introduction they start out by saying the Size

9 Premium is one of the best-known academic market anomalies, and

10 then citing a couple of the early 1980s surveys on the topic.

11 Do you see that?

12 A. Excuse me, where is it shown, the surveys?

13 Okay. Okay. I'm sorry, you mentioned surveys, where?

14 Q. Reinganum and Banz. Banz is one of the ones you cite

15 as well.

16 A. Yes, I do, yes.

17 Q. So, these gentlemen--and they're relying on also

18 Banz--suggest that there is something unexplainable about the

19 size effects; correct?

20 A. I don't see the word inexplicable here.

21 Q. It's a synonym proposed for anomaly.

22 A. Is there a question?

23 Q. Yes.

24 My question was: These gentlemen suggest that there

25 is something unexplainable about the size effect; correct?

16:57 1 A. Generally speaking, academicians, when they write a
2 paper, they're trying to explain something. I assume that
3 they're explaining something in connection with the Size
4 Premium.

5 Q. Now, Bans--Dr. or Professor Banz, was the first to
6 document the size effect; correct?

7 A. I'm not sure, actually. He was one of the first. I'm
8 not sure whether he was the first or not.

9 Q. To save time, we won't turn to it in the
10 Ibbotson/Morningstar Report, EO-13 to your report, Page 107,
11 End Note 1, it does say that. It doesn't really matter. He's
12 one of the first is fine.

13 Banz used data in his 1980 report from the stocks of
14 the New York Stock Exchange between 1926 and 1975; correct?

15 This is not this document anymore. We're talking
16 about Banz.

17 If you could open to--

18 A. I don't remember it by memory.

19 Q. If you could turn to Page 6, and this is Exhibit
20 EO-30.

21 If you turn to Page 6 of Professor Banz's article,
22 under the heading Data, Section 3, he says the sample includes
23 all common stocks quoted on the New York Stock Exchange for at
24 least five years between 1926 and 1975.

25 Do you see that?

16:59 1 A. Yes, I do.

2 Q. So, his data was the price of stocks on the New York
3 Stock Exchange between 1926 and 1975; correct?

4 A. Yes.

5 Q. So, Banz in this study was looking at the size effect
6 with respect to U.S. companies; correct?

7 A. To be precise, these were companies that traded in the
8 NYSE. It could be companies from other countries, companies
9 that can be bought and sold in NYSE.

10 Q. Yes. The vast majority of the companies listed on the
11 New York Stock Exchange as opposed to, for example, to some
12 other lesser Exchanges, are U.S. companies; is that not right?

13 A. I would state the majority for sure. Vast majority, I
14 don't know. Without looking at the data, I wouldn't be able
15 to--I would rather not respond to that.

16 Q. One of the main authorities you rely on to support the
17 use of a Size Premium is the Morningstar/Ibbotson report;
18 correct?

19 A. Yes.

20 Q. Let's open to that document. It's Tab 23. It's
21 Exhibit EO-13.

22 Now, if you turn to Page 98, please.

23 Now, the Ibbotson/Morningstar Report covers securities
24 between 1926 and 2009; correct?

25 A. It is updated annually and the one I used for my

17:02 1 report, since it was a valuation date of May 2010, I used up to
2 2009. But it has been updated since then three times, I
3 believe.

4 Q. We're looking at this document. I understand there
5 may be others, but this document covers securities from 1926 to
6 2009; correct?

7 A. Yes, this one does.

8 Q. On the right-hand column of Page 98, Ibbotson and
9 Morningstar report talks about seasonality.

10 Are you familiar--and don't explain it to me yet, but
11 just tell me, are you familiar with the concept of seasonality?

12 A. Yes.

13 Q. Okay. In this section on seasonality, the report
14 concludes that virtually all of the small stock effect occurs
15 in January, and I'm quoting now, "as the excess for outcomes
16 for small company stocks are mostly negative in other months of
17 the year."

18 That's what it says; correct?

19 A. Yes, that's what it says. But it also says in the
20 same paragraph demonstrating that the Size Premium is largely
21 promised by the general effect does not seem to refute the
22 existence of such a premium.

23 Q. Fair. We will conclude that for ourselves, and the
24 Tribunal will do so as well.

25 I just to want try to understand this January effect.

17:03 1 And there are some explanations under the next heading of why
2 the entire size effect for the stocks reviewed was felt in
3 January; whereas, the entire rest of the year, the opposite
4 effect was observed. And there are two explanations given
5 here.

6 The first is that fund managers are cleaning out their
7 portfolios of loser stocks as what's called "window-dressing";
8 right?

9 A. You need to refresh my recollection.

10 Q. Sure. It's directly under the heading possible
11 explanations for January effect. And I will read it: There is
12 no generally accepted explanation of the January effect. One
13 potential explanation is that it results from year-end
14 window-dressing by portfolio managers. Window dressing is the
15 process of dumping money-losing stocks just before year-end so
16 such stocks are not included in the portfolio Manager's Annual
17 Reports.

18 Do you see that?

19 A. Yes. And it shows that this is a potential--possible
20 explanation.

21 Q. If that is the explanation--I'm not saying that it is
22 or not. Personally, I don't know. I don't know if anyone
23 knows. But if that is the explanation for the January effect,
24 this has--would have no impact on the price of a direct
25 investment in a long-term business, would it?

17:05 1 A. But if we are going to talk about a direct investment,
2 this is an additional reason to write a Size Premium.

3 Q. Well, let's see. With a direct investment in a
4 long-term project, there is no portfolio manager, and there is
5 certainly no reason to dump shares because that has absolutely
6 nothing to do with the nature of the investment; isn't that
7 fair?

8 A. Yes, but it is also true that a portfolio manager can
9 also decide--here the word they use is "dumping." They say,
10 well, I'm not interested in this one and I am going to sell
11 this one, and he can do so in four minutes. But if you invest
12 in a real company and you're saying EGSA is not having good
13 performance, I'm going to leave it in four minutes, you cannot
14 sell EGSA--you cannot dump it in four minutes, and that's what
15 we're trying to capture in this Size Premium.

16 Q. The second reason--the second explanation is that
17 people are dumping their stocks before the end of the year for
18 tax purposes and buying them back in January as a way to choose
19 the moment to allocate their tax losses so as to maximize the
20 fiscal benefit to themselves.

21 Is that a fair characterization of the second
22 explanation?

23 A. That's what it says.

24 Q. And that's not relevant to a long-term direct
25 investment--sorry, a direct investment in a long-term

17:07 1 enterprise, is it?

2 A. Here we need to clarify that it is relevant because
3 what we are doing is trying to assess a company that is not
4 traded. This is a company that had a Shareholder and another
5 one and another one. So, it is important--or what we're trying
6 to do is to measure the minimal expected Rate of Return of
7 Shareholders, so we have some idea about why it was the small
8 company, and we need to add a premium. We need to quantify it,
9 and the best way to quantify what I found is to use this
10 database.

11 Q. I have to disagree with you a little bit as to what we
12 are trying to do here.

13 I mean, the idea, as I understood it in your report,
14 is that the Size Premium reflects an additional risk that a
15 buyer or seller of Guaracachi in May 2010 would have attributed
16 to the cash flows of the company. Isn't that fair?

17 A. The risks--rather an additional risk to the cash flows
18 due to the size of EGSA, yes.

19 Q. And what we're reading here in Ibbotson is that if
20 there is a phenomenon of a Size Premium, it all happens in
21 January, and the only explanations that Ibbotson and
22 Morningstar can come to about why it happens in January have
23 nothing to do with the risk of the underlying companies at all?

24 A. I disagree with you here. I disagree with you here
25 because if we look at the same page, it said that a potential

17:09 1 explanation would be--and I don't think that they showed
2 anything. They said that it might be that, but I don't think
3 there is any evidence or any empirical study that tells you
4 yes, that is what it is, and I proved it--we've proved it.

5 Q. Now, Fama and French are pretty well-known economists;
6 yes?

7 A. Yes, they are.

8 Q. And they observed the size effect between 1963 and
9 1990 in their early study; correct?

10 A. Early studies, I think that they wrote a lot about
11 this.

12 Q. Earlier.

13 A. Yes.

14 Q. In the Nineties?

15 A. Yes, agreed.

16 Q. And Fama and French completed a new study in 2012;
17 correct?

18 A. Correct.

19 Q. In your reports, you did not consider Fama and French,
20 did you?

21 A. Correct. The reason is that that study is from 2012,
22 two years after the valuation date, and taking into account the
23 academic studies take a while to get to the actual practice of
24 financial analysis because, once again, an article is published
25 in a journal, and then other economists take a look, support

17:11 1 it, criticize it with other data, with other evidence, and
2 that's what happens with the first Fama and French study
3 carried out in the 1990s. It was heavily criticized,
4 supported, and consensus was reached.

5 So the new article by Fama and French, I do respect
6 it, I am going to read it thoroughly, but it will take some
7 time to reach consensus as to whether that analysis is
8 accurate, and this is also and supported by all of the
9 financial analysts.

10 Q. Let's turn to Tab 12, which is that study. And, once
11 you find it, please turn to Page 459. It's Exhibit C-272.

12 We can see what the sample used is, data and
13 variables, you see there, and it says that the sample period is
14 November 1989--

15 A. I'm sorry, to the right or to the left?

16 Q. I do the same thing.

17 To the left-hand column. Right under "3" and
18 variables.

19 They examine a sample period from November 1989 to
20 March 2011.

21 Do you see that?

22 A. Yes.

23 Q. And you can see the sample that they used towards the
24 bottom of that column, 23 developed markets in four regions.

25 Do you see that?

17:13 1 A. Yes. I also see that at the beginning of this
2 paragraph it says that the short analysis period also has an
3 effect on our tests.

4 This is what I said before. I think that this is a
5 preliminary study that others will have to verify with more
6 information, more evidence, more data.

7 Q. Are you aware of any subsequent, more up-to-date
8 report than this one on the Size Premium?

9 A. No, not that has not been published. And I don't know
10 of any other either that hasn't been published.

11 Q. And if you had seen something, even not in an article
12 of this formality, but criticism from a leading economist, you
13 would have told us about it by now, I assume?

14 A. Sorry, I failed to understand the question.

15 Q. Am I correct in assuming that you have not seen any
16 criticism of this report to date?

17 A. No, I haven't been looking for it actively. Once I
18 saw that it was a study published in 2012, it was not my
19 priority to criticize it. I thought that in the Second
20 Report--I think that in the Second Report I do not even refer
21 to it.

22 Q. Turn over the page, please, to Page 460. The
23 right-hand column, 4.1, explanatory returns, the start of the
24 second paragraph says, there is no Size Premium in any region
25 during our sample period.

17:15 1 Do you see that?

2 A. Yes, I see that.

3 Q. Do you disagree with their conclusion?

4 A. When I read this--this is quite at the beginning of
5 your study--of the study, under summary statistics, agreed?

6 So, that does not involve any study. It's just taking
7 data as collected and presenting what they called median, the
8 deviation--the standard deviation, and statistics--or
9 statistical data.

10 Later on in the report, in Sections 5, 6, and
11 following, you are going to see that they actually analyze what
12 determines the return for small companies.

13 This is just a preliminary point without any sort of
14 filter, without any fixed parameter that could control for
15 other factors that may explain this. And in addition to size,
16 you see many other factors on Page 461 that are trying to
17 determine what could be explained and also what correlations
18 there are.

19 This statement at 460 I see it, I understand it, but
20 it refers to data without any sort of analysis.

21 Q. But you did not--

22 PRESIDENT JÚDICE: My question is the following:

23 Shall we go to the conclusions?

24 THE WITNESS: Yes, if we go to the conclusions, you're
25 going to see that that is not repeated there. If you go to the

17:16 1 conclusion, you're going to see that it is quite difficult to
2 understand. That's the reason why I chose not to refer to that
3 report.

4 PRESIDENT JÚDICE: Thank you.

5 BY MR. RUBINS:

6 Q. Now, Professor Damodaran--we have all been talking
7 about him so much--you rely on Professor Damodaran in your
8 reports quite a lot; is that correct? Is that fair?

9 A. That is one of the sources that I use, his data and
10 writings, yes.

11 Q. In fact, you probably--I don't know if we can
12 statistically figure this out, but you probably cite him more
13 than most or all of any other one source.

14 A. I don't know. I think that I also rely on Ibbotson
15 and Morningstar, but I don't know which of the two sources I
16 used the most.

17 Q. Let's open to Tab 21, please, which is Damodaran's
18 blog "Musings on Markets." And if you look down to the end of
19 his discussion, the last paragraph begins as follows: "I have
20 never used a Fama/French model"--this is referring to the old
21 model that assumed a risk premium--"or added a small-cap
22 premiums to a cap-end model in intrinsic valuation. If I
23 believe that a small-cap stocks are riskier than large stocks,
24 I have an obligation to think of fundamental or economic
25 reasons why and build those into my risk and return model or

17:18 1 into the parameters of the model. Adding a small-cap premium
2 strikes me as not only a sloppy and high-error way of adjusting
3 expected returns, but an abdication of the mission in intrinsic
4 valuation, which is to build up your numbers from
5 fundamentals."

6 Now, here, if it's possible, I would just like a
7 yes-or-no answer.

8 Do I understand correctly that you disagree with
9 Professor Damodaran on this point? And I don't necessarily
10 need to know now why; counsel for Bolivia can get into that, if
11 he likes.

12 A. (In English) Yes, I disagree with Professor Damodaran
13 on this point.

14 Q. Now, in the Ibbotson model that you use for your
15 country premium, in order to get the size of it, am I correct
16 in understanding that the cut-off size for adding some Size
17 Premium is a market capitalization of \$14.6 billion?

18 Is that fair?

19 A. I have it in my presentation. I can confirm.
20 At Page 27 of my presentation.

21 Q. So, we can also look at the original, but this is fine
22 for now.

23 So, here the positive Size Premium begins at Decile 2
24 for which the cut-off is 14.691 billion U.S. dollars; correct?

25 A. Yes.

17:21 1 Q. So, is it your position that every company in the
2 world with a market capitalization of less than 14.6 billion
3 U.S. dollars should attract a Size Premium?

4 A. Yes, and this goes hand in hand with what I indicated
5 at Table 7.9. That is not too large.

6 Q. And it's your position that valuers in the
7 marketplace, every time they look at a company of \$14.6 billion
8 or less, will be adding a risk premium like that?

9 A. The question is whether it is my position?

10 Q. Yes.

11 A. No, not necessarily. When we get to these extremes,
12 well, we are talking about Deciles 1, 2, 3 and 4, I think that
13 there will be greater variation as to how to focus on this.
14 This is the type of analysis that is used more frequently when
15 we're getting to the bottom of the table, and it could also be
16 the case that Ibbotson and Morningstar, in this study and in
17 the yearly updates for Decile Number 10, this is broken down
18 into smaller deciles because that is the key of the argument.
19 That is the effect of the risk premium, and usually people do
20 not focus too much on one, two, three, four, five, but they go
21 to the bottom of the table.

22 For example, when Mr. Spiller from Compass Lexecon was
23 working on Guatemala, he used a subsection of Decile Number 10,
24 and both Experts in those case--in that case used a Size
25 Premium, but the discussion was to use--whether to use 10-A,

17:23 1 10-B, or 10-C; that is to say, subsectors within the last
2 category.

3 Q. Well, there was a lot there to talk about. Let's
4 start with this.

5 So, in Ibbotson/Morningstar, there are smaller premia
6 for relatively larger companies; correct?

7 A. Correct.

8 Q. And the reason they're smaller is, in the view that
9 there should be a Size Premium, that Size Premium is less
10 important, the larger the company gets; correct?

11 A. Yes, sir.

12 Q. But what you've told me is that, in fact, the Size
13 Premium drops away as the company gets bigger; not that it only
14 shrink, but, in fact, there may none at all. That's what I
15 understood you to say. Was I misunderstanding you?

16 A. I did not say that it drops down or that it
17 disappears. What I said is that variation was greater among
18 economists--financial economists whether to use it or not.
19 Some might use it or some might not. So, I think that the
20 consensus is greater in the sense that a Size Premium has to be
21 used when we get to the last deciles on that table.

22 Q. Now, you mentioned the Guatemala case, and you
23 mentioned the subdivision in that case in the discussion among
24 the experts in the tenth decile between 10-A and 10-B.

25 A. Yes.

17:25 1 Q. Now, 10-A and 10-B are also subdivided into the
2 Ibbotson/Morningstar; correct?

3 A. Yes, sir.

4 Q. So, there are four categories of Decile 10; correct?

5 A. The truth is I don't remember. There are several.
6 Four or six. I can see the table, but I don't remember exactly
7 the number.

8 Q. Again, t's Tab 23, EO-13, Table 7-6.
9 PRESIDENT JÚDICE: Table?

10 MR. RUBINS: It's on Page 91 of the Ibbotson report in
11 the upper right-hand corner.

12 BY MR. RUBINS:

13 Q. And here, we see the breakdown of that tenth decile,
14 at W, X, Y, Z. Do you see that?

15 A. Yes.

16 Q. Now, the proper categorization of Guaracachi, if one
17 were to use all of this, would be in 10-X; correct? That is to
18 say--I won't jump steps.

19 You have used the Book Value of equity of Guaracachi
20 to find its place in the deciles of Ibbotson/Morningstar;
21 correct?

22 A. What I explained in my Second Report is that even
23 though I mentioned in the First Report that I was referring in
24 a footnote to the Book Value of EGSA, at any rate, regardless
25 of how you look at it, it belongs to group 10. If you take the

17:28 1 value of company as suggested by Mr. Abdala.

2 So, regardless of the way you look at it, it is
3 Number 10.

4 The reason why I stayed with 10 instead of going to
5 10-X, -Y, or - Z, is that we would be assuming the answer. My
6 position is that the--EGSA's company value was lower than
7 Abdala's, so it could be accused this was a circular argument.
8 If I go and say that the company is worth so much, therefore
9 the Premiums--the Size Premium is higher, I have a higher
10 discount rate and the value drops down, and that can't be
11 solved. That is the reason why I refrained from using this
12 subdivision, and I stayed with Decile Number 10, Decile 10 in
13 general, so that we could not go up to nine or eight.

14 Q. Yeah, I hear you. And I certainly agree that that
15 would be circular. But my suggestion is that that is precisely
16 what you have done in effect, if you're taking, for these
17 purposes alone--and I understand you don't agree with the Book
18 Value of equity, I understand that, but you have taken it for
19 these purposes in order to have a benchmark for this purpose--I
20 understand that--but if you're to do that, 133.7, which is the
21 number, falls within 10-X.

22 Now, if one puts it in that proper category and one
23 were to assume that a Size Premium should be applied, then we
24 need to look over on the next page, on Page 192, where the
25 report gives different Size Premiums for each of the four

17:29 1 subdeciles.

2 A. Sí.

3 Q. I'm almost done.

4 And so 10-X, which corresponds to a Book Value of
5 equity of 133.7, involves--according to Ibbotson/Morningstar,
6 involves a Size Premium of 4.91 percent and not 6.82 percent;
7 correct.

8 It's on the next page, 92.

9 A. Yes, I was just looking at the next table to compare.

10 Q. Okay.

11 A. I didn't hear the last portion of your question. I'm
12 sorry. It's my fault. Could you repeat it.

13 Q. Sure.

14 If one were to use the Ibbottson's subdecile that
15 corresponds to a Book Value of Equity of 133.7, the proper Size
16 Premium, if one were to apply at all, is 4.91 percent and not
17 6.28 percent; correct?

18 A. According to Table 77, yes.

19 Q. Let's look now at Tab 14. This is Exhibit C-300, the
20 investment bank reports--singular on the first, plural on the
21 second--and we're going to look at Page 47. The pages don't go
22 exactly in exact order in this document.

23 And we're looking--now, this is an analyst's report
24 from Banco Santander; correct?

25 A. Yes, that's correct.

17:32 1 Q. It is valuing ENDESA and its subsidiaries; correct?

2 A. The purpose of this report, as I see it, is to propose
3 a price for ENDESA's Latin American shares. I don't know if
4 they are conducting an individualized valuation of the
5 subsidiaries, but rather of the whole company. The
6 recommendation is that the company is worth \$63 per share.
7 This is Page 44.

8 Q. If you turn back to Page 46, you can see valuation
9 price per share. At the bottom of the page it is saying
10 specifically we're introducing a target price of \$63 per share
11 for ENDESA Chile, subsidiary.

12 So, this is a Valuation Report. I mean, I would have
13 thought we could at least agree on this, Dr. Flores, because
14 this is how it was presented in Compass Lexecon's report. You
15 never said that it was anything other than that in your
16 Rebuttal Report.

17 So can we at least agree, so that we can move on, that
18 this is valuation of ENDESA's subsidiaries?

19 A. Honestly, I don't think anywhere in the Compass
20 Lexecon Report it is said that this is a valuation of ENDESA's
21 Chile subsidiaries. You could show it to me if you want, but I
22 don't remember seeing in the Compass Lexecon Report
23 subsidiaries of ENDESA Chile.

24 Q. Turn back to Page 46, please. And it says, again,
25 "valuation" at the bottom of the page. It gives a price for

17:34 1 ENDESA Chile. That is a valuation of ENDESA Chile. Can we
2 move on now?

3 A. It is the value that they recommend for the price of
4 one share of ENDESA Chile. It's not a valuation of the whole
5 company. It's one share of the company.

6 Q. And one would assume that a price for the whole
7 company is slightly higher; is that your point?

8 A. Slightly higher?

9 Q. Because of the control premium or something like that.

10 A. Possibly.

11 Q. On Page 40, we see in Figure 10, you can see that the
12 equity values of Chocón and Costanera are given in the third
13 column, equity, as \$1.14 million and \$165 million.

14 Do you see that?

15 A. Yes, I see it.

16 Q. These are both equity values under \$214 million,
17 therefore, in the 10 smallest--in the smallest decile of
18 Ibbotson/Morningstar; correct?

19 A. Yes, correct.

20 Q. In the figure above, Figure 9, we can see the elements
21 of discount rate or the WACC for each of those subsidiary,
22 including those in Chile, for example. There is no Size
23 Premium implemented for any of ENDESA's subsidiaries, is there?

24 A. Of course not. I wouldn't have included that there
25 either.

17:36 1 Here we're talking about one single company. The
2 price, they say, is \$63 per share--that's the recommended
3 price, and what they're saying is this is a company that is
4 operating in Chile with activities in South America, and it has
5 a number of items in common.

6 For EGSA--well, for them it is impossible to have
7 access to international market financing unless it's via CAF.
8 They could not come to Paris to obtain bonds such as ESA Gener.
9 This is a company that is very interrelated. The offices of
10 the company may have been linked to the other ones.

11 PRESIDENT JÚDICE: One doubt, you say that they cannot
12 go to Paris. Is that factual information or is this a
13 conclusion that you've reached?

14 THE WITNESS: It is my conclusion after having read
15 the evidence and heard the evidence in this case, that all of
16 EGSA's accounts--all of EGSA's debts were in Bolivia.

17 BY MR. RUBINS:

18 Q. We're talking now about your reports because remember
19 your reports, both of them, were composed prior to hearing the
20 evidence, okay? And already you came to your conclusions which
21 you did not change one way or the other, okay? And you
22 explained in your Second Report, starting at Paragraph 126,
23 your reasons for using Size Premium. And, frankly, none of
24 what you've said is in there. You didn't explain any of that.
25 And, in fact, your only explanation--your only explanation is

17:38 1 your footnote to literature and to Professor Spiller, frankly.

2 There is no explanation in your article--in your
3 Report as to why in this particular case you apply a Size
4 Premium except for the size. That's the only reason you give;
5 isn't that fair?

6 That's the only reason you give; isn't that fair?

7 A. I invite you to read what I wrote in my First Report.

8 Give me one moment, please.

9 In the Second Report I did not repeat what I said in
10 my First Report. That gives you a more general view of my
11 position on this issue.

12 Q. Yes. I have gone back now to your First Report, and
13 what you say is the financial literature explains small
14 companies tend to produce higher returns than large companies.
15 And the reason you say is that markets perceive that investing
16 in small entails more risk than investing in large companies.
17 That's it. There is nothing else. There is nothing about
18 Guaracachi, there is nothing about anything specific to the
19 company, which now you seem to think is so important.

20 A. But in my Second Report I explain a lot of pages
21 explaining the financial position of EGSA, and that is related
22 to the limited size that EGSA had. I think all of that is
23 relevant to the Size Premium. Perhaps it's not in the same
24 section, but all of this has been explained.

25 Q. Not only, Dr. Flores, is it not in the same section,

17:40 1 but it's not related in any way to the Size Premium in your
2 Report. But I think we have to move on for want of time.

3 Have you looked through the samples from Santander's
4 reports, 300?

5 A. I looked at them as PDF files, and I searched for
6 words using the functions. But it was over a hundred pages. I
7 haven't read it page by page, if you'll make reference to it.

8 Q. But I presume that it would not surprise you, based on
9 what you've just said, that none of the Santander reports
10 include a Size Premium for any of the companies reviewed.

11 A. We know that Damodaran is against Size Premium. That
12 is one piece of information that we have. And I don't discuss
13 that--I don't argue with that. And in his models, Damadoran
14 says I'm going to do things differently. I'm going to
15 calculate the things use cash flows and such.

16 What we know after looking at C-300 is that the group
17 of analysts of Santander Chile--they only have one or two
18 people in Brazil--well, that group of analysts--three or four
19 people, I think--they don't apply that either. That's the only
20 thing we know.

21 Mr. Abdala, in it his Second Report--Dr. Abdala,
22 rather, in his Second Report said, look at the multitude of
23 financial analysts that failed to apply the Size Premium. We
24 only know that it's one. They don't apply it, but I do. We
25 know it's only one.

17:42 1 Q. Yes. We know that you're one as well.

2 And I wonder, you didn't submit with your Second
3 Report any other investment bank analyst's reports with respect
4 to companies like this that did add a Size Premium.

5 Does that suggest that you did not find any?

6 A. I simply did not look for it. I know that Compass
7 Lexecon has access to a database that has them, well, access to
8 free reports. They had access to that. I don't. That's why I
9 don't have it.

10 MR. RUBINS: I would be glad to take a recess.

11 MR. GARCÍA REPRESA: Could you please give me an
12 indication more or less as to how much more the Claimants are
13 going to need for the examination, just for organizational
14 purposes--organizational purposes, rather.

15 MR. RUBINS: Well, I've taken one hour so far. I
16 certainly hoped to be done in another 45 minutes, but it could
17 be an hour. I don't think it will be more than that.

18 See, you're halfway done, Dr. Flores.

19 PRESIDENT JÚDICE: Now we have 15-minute stop. You
20 may leave, but you cannot speak with anyone.

21 THE WITNESS: Thank you.

22 (Brief recess.)

23 PRESIDENT JÚDICE: Okay. Let's return to the work.

24 THE WITNESS: Would you allow me to say something?
25 This is very brief.

18:04 1 I noticed that here you have a translation into
2 English of my second report, and I just noticed that the
3 translation is incorrect at Paragraph 141. I imagine that this
4 is your own translation, but I don't know if this is in the
5 record. This is not in the record? Okay. So, it doesn't
6 matter. Please review 141. There is a mistake in the English
7 version.

8 PRESIDENT JÚDICE: The Tribunal worked with your
9 Spanish version. We do not have your translation, but even if
10 that was the case, we will work with the original.

11 Thank you.

12 BY MR. RUBINS:

13 Q. Dr. Flores, we were just talking about the analysts'
14 reports, and you said about that that the reason you did not
15 look for other analyst reports which might have, I suppose,
16 added a size premium to their discount rates in valuations was
17 because you didn't have a subscription to receive them.

18 Do you remember that?

19 A. Yes.

20 Q. And you also said that Compass Lexecon has a free
21 subscription.

22 A. I didn't mean that it was free. I just said that they
23 do have it. That's what I wanted to say.

24 Q. You understand that they would have paid for that?

25 A. Yes.

18:06 1 Q. And you understand that you also could have paid for
2 that?

3 A. Yes, but I have a risk premium as a small company.
4 Econ One is smaller than Compass Lexecon.

5 Q. Did you ask counsel for Bolivia to cover that cost?

6 A. No, I didn't ask for it, but I was quite sure that it
7 was not going to be an approved expense. And I don't think it
8 was key to the discussion once I proved that the analysis by
9 Mr. Abdala was--had no grounds.

10 Q. Let's turn to the Country Risk Premium.

11 Now, you and Dr. Abdala agree that it is necessary to
12 add a Country Risk Premium to account for the difference in
13 risk between an investment inside a risk-free jurisdiction like
14 the United States and outside in, for example, Bolivia;
15 correct?

16 A. Not exactly. I would not say that the United States
17 is risk-free. I think that there are risks when you invest in
18 the United States, but we are looking into additional risks
19 when you invest outside mature economies outside of the United
20 States.

21 Q. And you disagreed also with Dr. Abdala's statement
22 that the sovereign debt approach is the most usual methodology;
23 right?

24 A. Do you mean that I agree or that I don't?

25 Q. I understand you to disagree with the statement that

18:07 1 the sovereign debt approach, which Dr. Abdala used, is the most
2 usual methodology.

3 A. I would say that it is one of the methodologies. It
4 is accepted, but it is not the most accepted one.

5 Q. But you accepted to use it as the first step in your
6 Country Risk Premium analysis; correct?

7 A. Correct.

8 Q. So, the sovereign debt approach that both of you used
9 as the base for Country Risk Premium takes the yields of the
10 host State's dollar-denominated bonds and compares that with
11 U.S. Treasury bonds of similar maturity; correct?

12 A. Yes, at a very superficial level, that would be the
13 approach.

14 Q. And there was no information about Bolivian sovereign
15 bonds as of May 2010, so Dr. Abdala used a proxy of the EMBI,
16 the Emerging Bond Index, which uses sovereign ratings given to
17 Bolivia by the various agencies; right?

18 A. Correct.

19 Q. And you agree that that was the correct thing to do in
20 the circumstances?

21 A. As a first step to establish the Country Risk Premium,
22 yes.

23 Q. And Dr. Abdala used a one-year average of the bond
24 yields he obtained through the EMBI proxy; correct?

25 A. I'm not sure, but I take your assumption, or I take

18:09 1 your assertion as the right one.

2 Q. It's in Compass Lexecon First Report Paragraph 161,
3 for reference.

4 A. Yes.

5 Q. So, you accept that the EMBI proxy is one of
6 appropriate ways to assess the Country Risk Premium, subject to
7 the 1.5 multiplier; correct?

8 A. We have been talking a lot about the 1.5 multiplier,
9 but it should be stated clearly that we are multiplying this by
10 the relative volatility on the return of the--given the return
11 of the Shares over the return of the bonds. And since we did
12 not have a value for Bolivia, we use 1.5. That is a common
13 value for all of the countries. If we had data, we could use a
14 specific number that could be higher or lower than 1.5.

15 Q. And as a base you accept that 7.02, which is the EMBI
16 result that Dr. Abdala reaches is proper as a base; correct?

17 A. It's like a base to calculate additional risk that the
18 investors in bonds need to invest in Bolivia as opposed to
19 invest in the United States.

20 Q. Your support for the use of the 1.5 multiplier is the
21 work of Professor Damodaran; correct?

22 A. Correct.

23 Q. And in your Report, in your First Report you did not
24 provide any other support for the 1.5 multiplier; correct?

25 A. I don't think I did.

18:11 1 Q. Let's turn to the source that you cite, which is
2 Professor Damodaran's 2003 article, which was EO-25, and which
3 you will find at Tab 24.

4 Now, the part we're interested in starts at Page 7,
5 and Damodaran, as you say, offers different ways to measure a
6 Country Risk Premium, and the first one we just described using
7 bond default spreads. The second is relative market standard
8 deviations, and the third is a combination of default spreads
9 and standard deviations.

10 Now, you are looking at third way; right? And adding
11 1.5. That's a combination method; correct?

12 A. Yes.

13 Q. Now, at Page 11, Professor Damodaran compares the
14 three approaches and shows that the melded approach, the third
15 approach that you used, generally yields higher premiums;
16 correct? Higher market equity premia; correct?

17 A. That is correct, and behind him at Table 1 it also
18 says, "We believe that the larger Country Risk Premiums that
19 emerged from the last approach are the most realistic for the
20 immediate future, but that Country Risk Premiums will decline
21 over time."

22 Q. Yes.

23 So, that suggests that that third approach is best
24 suited to the short term; correct?

25 A. If you want it to be that way, yes, but as it shows,

18:14 1 as time goes by, yes, it could be that there is a decline in
2 risk.

3 Q. What do you consider to be a long term "investment"?

4 A. It depends. As I indicated in my Second Report at
5 Paragraph 141, there I say that I do not disagree with the
6 theoretical possibility that in the very long term the
7 volatility of the Shares or of the stock converge with that of
8 the bonds, but there I am referring to the situation in the
9 United States, and after such a long time, there hasn't been
10 such a convergence. But in almost a century of data that
11 convergence has not been observed in the United States, I do
12 not think that the convergence may be a reality in emerging
13 economies in a similar period of time. Maybe within a hundred
14 years Bolivia may have the same volatility for shares for stock
15 holding as for bonds, but I don't think that this is something
16 that is going to happen in the next decades.

17 Q. Dr. Damodaran clearly is not thinking the way you are
18 thinking in this text, Dr. Flores. If we look at it, he says,
19 "We believe these larger premiums that result from your method
20 are most realistic for the immediate future." Immediate
21 future. But, but meaning they are not the most realistic over
22 time.

23 So, the contrast is not between 100 years and 30 years
24 but between the immediate future and the not immediate future.

25 Don't you agree with that?

18:16 1 A. As we presented in our second report, Professor
2 Damodaran studies over ten years, and for me that is not the
3 immediate future, and he still applies those factors.
4 Therefore, I disagree with you that the immediate future only
5 means today or tomorrow. What Mr. Abdala says only a day--some
6 days or only some months I do not think is what Mr. Damodaran
7 is saying.

8 Q. Do you think that four years is the short term?

9 A. I imagine it would be borderline. I would say
10 midterm.

11 Q. Okay. Let's turn to your Second Report at
12 Paragraph 207. Here you're talking about cash flows to
13 creditors as financing, and you say, "Before your delay such as
14 the one that Compass Lexecon is assuming is not a short-term
15 plan."

16 Four years is not short term; correct?

17 A. Yes. We could call it midterm, as I just said.

18 Q. And 28 years, surely that is long term.

19 A. Yes, it all depends on the borders that you establish,
20 but for the context, we need to establish when we can be
21 reasonably certain that the relative volatility would have
22 decreased and disappeared, so I think that the parameter is
23 different if we refer to midterm, short term, very short term
24 as opposed to when I am going to pay my gas supplier. Here,
25 the short term is different in both contexts.

18:18 1 Q. In Page 12, if you turn over the page of Damodaran's
2 article, you can see in that first full paragraph that
3 Damodaran, refers to the possibility of adjusting the premium
4 obtained by your approach in a valuation over time.

5 You do not do that in your model, do you?

6 A. It's true, I do not do that because I did not have any
7 quantitative phases to do it. Dr. Damodaran here is using a
8 relative term as the longer the term, et cetera. But the truth
9 of the matter is that only in examples that I was able to
10 attach to my report Mr. Damodaran says or Professor Damodaran
11 says that for the residual value of the company, I will remove
12 that, but when it is procedural, it captures cash balances ad
13 infinitum.

14 So, I have not seen any information by Professor
15 Damodaran that says use it for 10, 12 years and then stop after
16 that, or use it as at 100 percent and then decline step by step
17 until year Number 20.

18 There is no research by Professor Damodaran or any
19 other person for that matter that allows me to quantify that.
20 Therefore, I leave it then, and it should be mentioned that if
21 at some point you started--the discount rate started to
22 diminish gradually as of 2022-2025, the result in my model
23 would be quite reduced in the sense that at that level the cash
24 flows are deeply discounted.

25 Q. Damodaran gives an illustration at the bottom of the

18:20 1 paragraph. He says, for example, a Country Risk Premium for
2 Brazil under the method you use with the 1.5 multiplier would
3 be 7.67 percent for the next year, but decline over time to
4 either the 6.01 percent country default spread or 3.6 percent
5 Relative Standard Deviation.

6 Do you see that?

7 A. I'm sorry, where?

8 Q. At the same paragraph we were looking at at the top of
9 Page 12.

10 A. Yes, I can see that.

11 Q. And so, he's suggesting that even using his
12 multiplier, without having any quantitative indicators of any
13 kind, it would be appropriate to decline after the first year
14 from the highest result for country risk; correct?

15 A. Yes, but there is no indication here as to how that
16 would happen. And we know in other studies by Professor
17 Damodaran he maintains it's fixed for 10 or 12 years--for five
18 or 10 years, and this is what I found.

19 Q. Let's turn to Tab 15, which is C-308, and this is the
20 famous Damodaran spreadsheet.

21 Now, we've already looked at the default spread column
22 which is the second column which for Bolivia has 550 basis
23 points, and at the top of the page, he explains how he gets
24 this default spread. This is in the box at the top,
25 explanatory note, and he says, in the short term especially,

18:23 1 the 1.5 multiplier should be--let me quote it exactly. "In the
2 short term especially, the equity Country Risk Premium is
3 likely to be greater than the country default spread. You can
4 estimate and adjust the Country Risk Premium by multiplying the
5 default spread by the relative equity market volatility for
6 that market," and he says below, "I've used 1.5."

7 Do you see that?

8 A. Yes.

9 Q. Now, the 550 basis points that Professor Damodaran
10 uses for Bolivia, that corresponds, does it not, to the
11 7.02 percent that Dr. Abdala calculated for the default spread;
12 correct?

13 A. Yes, with a different methodology in both cases,
14 something is calculated without multiplying it by something
15 that would take into account the higher volatility of the
16 Shares over the bonds.

17 Q. Yes.

18 And precisely when Professor Damodaran uses his 1.5
19 multiplier, he doesn't mix methods. He doesn't apply it to
20 7.02. He applies it to 550, doesn't he?

21 A. I do not understand your question.

22 Q. Well, Professor Damodaran takes 550 basis points which
23 is under his method, the method that includes the 1.5
24 multiplier, the proper assessment of the default spread; right?
25 You follow me so far?

18:25 1 A. The right one. That is one of the options, and
2 Mr. Abdala did it differently, but in all cases the idea is to
3 look for measure of the additional return of the sovereign debt
4 of a country over the sovereign debt of the United States.

5 Q. Sure. But Dr. Abdala covers volatility in a different
6 way. Damodaran covers volatility by doing his 1.5 multiplier,
7 and that's why Professor Damodaran comes to a total using the
8 1.5 multiplier of 8.25 percent, which is, of course, 1.5 times
9 the 550 basis points; right?

10 A. Yes, that is what Professor Damodaran does.

11 Q. And what you have done is you've taken from a
12 different method a higher base rate of 702 basis points and
13 applied Professor Damodaran's 1.5 multiplier to that; correct?

14 A. Yes, that is correct.

15 Q. Let's go back to Tab 14 which is the investment bank
16 reports in the six months on either side of the
17 nationalization, and let's go to Page 47. We have seen this
18 before. This is the calculation of the WACC of ENDESA's
19 subsidiaries.

20 And do we still have access to Compass Lexecon's
21 slides? Does Dr. Flores have that? It's not necessary.

22 (Pause.)

23 Q. Okay. So, let's look at the country risk for Peru,
24 for example. The country risk for Peru, which is the last
25 column on Page 47, Figure 9, is 2.4 percent.

18:28 1 Do you see that?

2 A. Yes.

3 Q. Now, if now we turn over to Tab 42, we have the same
4 information that Dr. Abdala showed this morning which shows the
5 EMBI spreads in various reports and, for example, August
6 '09--that's also on the screen--and so, for example, for August
7 '09, the EMBI spread is 2.4 percent, exactly the same as
8 country risk, and you can follow that all the way down. They
9 match.

10 A. Which page?

11 Q. Yes, that's it. It's marked as Slide 0 here.

12 So, do you agree that the country risk from C-300,
13 which we just looked at, matches pretty much the EMBI spread?

14 PRESIDENT JÚDICE: This document, for the record, is?

15 MR. RUBINS: The document is a table of Santander's,
16 Investment Bank report. It's a summary of two figures that are
17 contained in those reports, first the EMBI spread and, second,
18 the country risk indicated for various points in time.

19 PRESIDENT JÚDICE: Thank you.

20 BY MR. RUBINS:

21 Q. And the point that I just wanted to confirm is, given
22 that the EMBI spread is the same as country risk in all of
23 these Santander Investment Bank reports, we know for a fact
24 that Santander is not multiplying the country risk by 1.5; is
25 that correct?

18:30 1 A. Santander did you say?

2 Q. That the analysts from Santander are not multiplying
3 the country risk by 1.5 in their valuations.

4 A. Yes, that is correct, yes.

5 I just wanted to clarify something. I have not
6 verified the data that are labeled EMBI spread in that column.
7 I assume that they are correctly calculated, but I cannot
8 verify that.

9 Q. Sure. You verified the ones that go into Compass
10 Lexecon's models and you've agreed with them; but you haven't
11 confirmed that these particular numbers on this paper
12 correspond to those?

13 A. Exactly.

14 Q. Understood.

15 Just a couple of questions on Market Risk Premium.

16 Dr. Abdala adopted a 5 percent Market Risk Premium
17 relying on Professor Damodaran; correct?

18 A. Yes, that's correct.

19 Q. And you say that Dr. Abdala selected the low end of
20 Professor Damodaran's limit or range, which was 5 to 6 percent;
21 correct?

22 A. Yes, that's correct.

23 I think that that was due to the fact that Mr. Abdala
24 failed to indicate--well, a source was being used that he then
25 changed.

18:32 1 Q. So, if we turn to Tab 3--Tab 3--Tab 3 is the Damodaran
2 article that has caused this discussion.

3 Now, if we turn to Page 67.

4 At 67, at end of the first paragraph on the page, the
5 last sentence we find the statement of Damodaran that caused
6 the difference of opinion here.

7 He said--this is October 2009--he said, "Since October
8 of 2008, I have moved to a 5 to 6 percent mature market Equity
9 Risk Premium and will continue to use this higher premium until
10 I'm convinced otherwise." Right?

11 A. Page?

12 PRESIDENT JÚDICE: Page?

13 MR. RUBINS: Page 67. Paragraph at the top of the
14 page, last sentence.

15 BY MR. RUBINS:

16 Q. So, you see that?

17 PRESIDENT JÚDICE: Yes.

18 THE WITNESS: I don't know if you were asking me or
19 the President.

20 I do see it.

21 BY MR. RUBINS:

22 Q. Now, if we turn to Page 77, we can see some of the
23 information that Professor Damodaran used to come at his
24 conclusion for--in September or October--October of 2009,
25 various sources and the Equity Risk Premiums they come to. Can

18:35 1 you confirm that 5.1 percent is the highest result on the
2 table?

3 A. Yes.

4 Q. And if we turn now to Tab 25, this is EO-29, which is
5 the updated version of Professor Damodaran's 2009 discussion of
6 Equity Risk Premiums from February 2010. If we turn to
7 Page 68, we find that--do you see where I am, Dr. Flores?

8 A. Page...

9 Q. Page 68, first full paragraph, in the middle of the
10 paragraph, the sentence that begins, "Having watched."

11 Do you see that?

12 A. Yes.

13 Q. He says, "Having watched the reversion to historical
14 averages in 2009, my valuations in 2010 will be based upon
15 Equity Risk Premiums of 4.5 to 5 percent."

16 Do you see that?

17 A. Yes, I do.

18 Q. So, 5 percent is the upper range for Damodaran in 2010
19 valuations; correct?

20 A. To be precise, it's February 2010, yes.

21 Q. Let's look back at Tab 15, the spreadsheet again,
22 C-308. Let me know when you find it.

23 A. I've got it, yes.

24 Q. So, again, January 2010 around the same time, we find
25 here the Equity Risk Premium, the market premium, in the yellow

18:37 1 box at the top of the set of yellow boxes, where Damodaran uses
2 4.5 percent in all cases; correct?

3 A. Yes, in that table it uses 4.5 because...

4 Q. Well, because Damodaran believes that 4.5 percent is
5 the proper Market Risk Premium for 2010; correct?

6 A. In February 2010, yes. I know that sometimes
7 Damodaran changes his risk premium in mid-year. He doesn't
8 always keep it fixed for 12 months intervals.

9 Q. Are you aware in this case that Damodaran actually
10 changed his view in 2010?

11 A. I know that he changed it. The rate for 2011 is
12 higher, but I don't know exactly whether he changed it in
13 January or December or where.

14 But the answer is no. The next update that he
15 conducted was to increase the Market Risk Premium.

16 Q. Professor Damodaran said in the article we just looked
17 at in his statement of assumptions for Equity Risk Premium for
18 2010 valuations that he will use that 4.5 percent for all
19 valuations in 2010. That's what he said. We saw it. Will
20 use.

21 A. For all these valuations?

22 Q. He says, and I can go back into the record, if you
23 would like. He said, "Having watched the reversion to
24 historical averages in 2009, my valuations in 2010 will be
25 based upon Equity Risk Premiums of four-and-a-half to

18:39 1 5 percent."

2 A. It says will be based. It's not that every single one
3 of them will be based. It says it will be based.

4 Q. So, you used 6.7 percent as your market Risk Premium;
5 correct?

6 A. That is correct, yes.

7 Q. So, you thought that using Damodaran's 1.5 multiplier
8 was a very good approach, but using his 4.5 percent Market Risk
9 Premium was not a good approach; correct?

10 A. That is not correct. What I think is correct is to
11 increase the spread in connection with the return on Emerging
12 Country bonds--I don't know if you were listening to me or
13 not--you were, okay--the Relative Volatility has to be
14 adjusted. If I had had specific data for Relative Volatility
15 for the share market in Bolivia for the bond market in Bolivia,
16 I would have used that number. It wasn't going to be the
17 number used by Damodaran. It could have been 1.5, 1.8, 2.5 any
18 number. I didn't have that, so I reverted to Damodaran. It's
19 not that I used Damodaran's method. I used his quantification
20 as an average for 20--I did not use the Damodaran method. I
21 used his quantification for an average of 26 countries.

22 MR. RUBINS: If you bear with me for just a moment.

23 (Pause.)

24 BY MR. RUBINS:

25 Q. Dr. Flores, you're aware, I think, that Dr. Abdala

18:42 1 uses a benchmark analysis in his first report which deals with
2 multiple comparable companies.

3 Do you understand that?

4 A. Yes. He called them comparable companies. I'm
5 disagreeing with that, that the companies he used are
6 comparable to EGSA.

7 Q. You did not propose your own benchmark method of any
8 kind, did you?

9 A. Yes, I did propose a comparative or comparables
10 analysis.

11 Q. You did not propose an alternative method to using
12 comparables; correct?

13 A. Yes, yes, I did. Can I explain?

14 Q. I personally, looking through your report, didn't see
15 a number, a valuation number, that would result from a
16 comparable--for some alternative methodology other than the
17 DCF. That's what I'm trying to understand.

18 A. Yeah, a specific number, no, I didn't--I didn't use
19 that.

20 Q. Did you consider using some alternative valuation
21 method before completing your First Report?

22 A. Yes.

23 In principle, I don't disagree with the comparables
24 method. I have used it in certain occasions. But one has to
25 be very sure that there are comparables. If there are no

18:44 1 comparables, the method cannot be applied.

2 Just one minute to very briefly explain to you. To
3 me, comparables are used in many aspects of everyday life, for
4 example, prices of apartments in Paris. So, it is a
5 relative-valuation method. It is done in euros per square
6 meters. It doesn't matter if an apartment is 100 square meters
7 or 300 square meters, 400 square meters. What's important is
8 to find the price per square meter, so that can be used and
9 applied to an apartment I was thinking about buying.

10 What you cannot do, and that's a problem, is to take a
11 sample of apartments in Paris, London, Barcelona, and Madrid,
12 and I get an average of 120 euros per square meter, and then
13 I'm going to Bolivia to rent an apartment for 120 euros per
14 square meter. That makes no sense, so one has to be sure that
15 the comparables are really comparables, and the companies that
16 Dr. Abdala has contributed in this 30-company sample are not
17 comparable to EGSA.

18 Q. But you did not create your own model based on
19 comparables. Are you suggesting that in the entire world there
20 were no companies that would form suitable basis for comparison
21 with Guaracachi?

22 A. I would have applied that model if there had been
23 other similar companies to EGSA in Bolivia. Then I would have
24 used it. But because of the features of the Bolivian market,
25 well, are different from any other countries, so this would not

18:46 1 have been applicable. With no adjustment at that, Mr. Abdala
2 says, okay, I put them from higher to lower, and I choose one
3 in the model, and he uses a Chilean company, AES Gener, and
4 that makes no sense.

5 Q. Right, but you could, then, have made an adjustment,
6 if you thought one was appropriate and still come to a
7 valuation based on comparables. You could have adjusted it, if
8 you thought that was appropriate.

9 A. But the kinds of adjustment required are so many that
10 it is not a valid alternative to the DCF method.

11 In the Second Report, I said--I criticized Mr. Abdala.
12 I said, look, you're assuming that the CCGT starts operating
13 today, is operational today as of May 2010, and he said okay,
14 it is not operational as of May 2010. It's going to take
15 another six months.

16 So, he adjusts his multiples. But to conduct the
17 adjustment, he has it do a DCF method for those six months.
18 And he deducts this from the multiples valuation method. So,
19 the adjustments would be so many that it wouldn't really be
20 worthwhile doing this.

21 Q. Yes. And you're saying that Bolivia is so unique that
22 there is no country in the world that has sufficiently similar
23 conditions to even compare?

24 A. If I said Bolivia, I made a mistake. I meant EGSA in
25 Bolivia.

18:47 1 Q. But every company is unique; isn't that right?

2 A. Yes, just like every apartment is unique. But the
3 apartment that I see from here, and the one right next to it,
4 I'm sure they're comparable. One is more to the center of the
5 street, and the other one is closer to the corner. But if I
6 know that the apartment here sold last month for 500,000 euros,
7 I will know that the apartment next to it is going to be around
8 that figure. That's reasonable.

9 What is not reasonable is what Dr. Abdala does.

10 Q. You're again saying to me that it's not about EGSA.
11 You're saying to me that it's about Bolivia--by comparison,
12 Paris, this street--the place where it is, not the thing it is.

13 I'm trying to understand. You seem to be telling me
14 that any comparables with any company in Bolivia, that analysis
15 is useless even as a benchmark.

16 Is that what you're trying to tell me?

17 A. I wasn't referring to Bolivia in this example. I was
18 referring to one apartment vis-à-vis another apartment in the
19 same neighborhood. That is what I was making reference to.

20 Q. I presume the neighborhood, by analogy, is Bolivia;
21 right?

22 A. No, it is a thermoelectrical company in Bolivia. I'm
23 looking at comparables to that. A small company, a
24 thermoelectrical company in Bolivia.

25 Q. And you can't make a single comparison that would be

18:49 1 useful outside--to any company outside of Bolivia; is that your
2 position?

3 A. Yes. If they show it to me, I would be ready and
4 willing to consider it, of course. But in the Second Report I
5 look at this detail, and I look at the features of EGSA, and
6 this is why it cannot be assimilated to any other company.

7 Q. One last point on comparables. In your First Report,
8 you used Professor Damodoran's sample of companies in Emerging
9 Markets to calculate a proxy for the optimum capital structure;
10 correct?

11 A. Yes, that's true.

12 Q. And this is his database of 322 power companies in
13 Emerging Markets in 2010; correct?

14 A. Yes, that is correct. It's true.

15 Q. Very few of those companies are located in Bolivia;
16 correct?

17 A. I think so.

18 Q. So, you're okay to use the database for some things,
19 but you didn't use the database to try to find comparable
20 companies and to calculate some benchmark for your DCF;
21 correct?

22 A. As I explained in my Second Report, the problem that
23 we have with Emerging Country companies is that, for most of
24 them, there is little information available.

25 So, it is true that Damodaran has a Web page where he

18:51 1 calculates some financial ratios that are basic, such as
2 debt-to-equity ratio. We tried to identify Web pages for those
3 companies around the world in Emerging Countries, and we were
4 unable to find information. Many of them don't even have Web
5 pages.

6 So, we had to use an example that, it is true, it is
7 less accurate than the example that we used to determine the
8 beta coefficient in connection with the United States,
9 companies because companies have very good information in the
10 United States, and they submit reports to the SEC.

11 Q. Let's now move to discuss something completely
12 different, Spot Price revenues.

13 Do you accept that in a fair-market valuation you
14 should assume that the willing buyer and willing seller will
15 have access to all information available in the market about
16 the asset or project being valued?

17 A. Could you please repeat the question? I think I
18 understood it, but would you please repeat it?

19 Q. Yes.

20 Do you agree that, in a fair-market valuation, the
21 valuer should assume that the hypothetical willing buyer and
22 willing seller will have access to all of the information
23 available to the market and it is on the basis of all that
24 information that they will assess the value of the project or
25 company in question?

18:53 1 A. Yes, I agree with that statement.

2 Q. Now, we heard in your direct about your interactions
3 with Mr. Paz and the conversations, meetings, telephone calls
4 and so forth, were not described in your Reports.

5 I just want to understand, I understood that Mr. Paz
6 supplied the elements of information to--that he himself
7 included in his model, that you then used for your projection
8 of Spot Prices and also Spot Price sales volumes; is that
9 correct?

10 A. If you allow me, I can actually explain the process.

11 Q. Can you start with just clarifying whether I
12 understand that correctly or not; and then if it really needs
13 clarification, we can get to that.

14 Do I understand that correctly, or not?

15 A. No, that was not the case.

16 Q. So, in fact, you used your own judgment in choosing
17 which information to use; is that correct?

18 A. No, that is not correct, either.

19 Q. Did you feel yourself qualified as an expert to make
20 decisions about future capacity in the market and about the
21 future course of Spot Prices and Spot Sales revenues?

22 A. If I was qualified to make decisions, myself, on Spot
23 Price issues and such, no, I would say that I, myself, would
24 have not been able to reach the results that I reached when I
25 worked together with Mr. Paz.

18:55 1 Q. So, Mr. Paz--you relied on Mr. Paz, the General
2 Manager of Guaracachi--to select the factual assumptions and
3 carry out projections with respect to those variables; correct?

4 A. No. The process was very simple. We sat down simply.
5 We read together the relevant sections of the Compass Lexecon
6 Report and of the MEC report.

7 I have been involved in a number of international
8 arbitrations, and I know what the Tribunals expect out of this
9 kind of analysis. For Mr. Paz, this was the first time that he
10 dealt with this.

11 I had never dealt with the SDDP program, and Mr. Paz
12 has been working with that program for all his life, ever since
13 the firm was created, so we had to work together for both of us
14 to agree as to what was it that should be done.

15 Q. So, did you view Mr. Paz's input to you or the
16 contribution that he made to your analysis as the contribution
17 of an independent expert or a fact witness?

18 MR. GARCÍA REPRESA: Objection. You are making a
19 legal characterization. You know that is not appropriate.

20 MR. RUBINS: Mr. Chairman, I'm certainly not asking
21 that. I assume Dr. Flores--

22 PRESIDENT JÚDICE: If you're not asking that, please
23 put it in a different way to convince me that that's not what
24 you are asking.

25 MR. RUBINS: Sure.

18:57 1 BY MR. RUBINS:

2 Q. Dr. Flores, you appear often in international
3 arbitration as an independent expert; correct?

4 A. Yes.

5 Q. Okay. And you have also seen, for example, for
6 example, fact witnesses appear in those same arbitrations;
7 correct?

8 A. Yes.

9 Q. You understand by your Declaration you make as an
10 independent expert that it is very important for the
11 decision-maker to understand that, since you are making your
12 opinion based upon your general experience rather than your
13 personal knowledge, it's very important to the decision-maker
14 to know that you're independent; right?

15 A. Yes, I agree.

16 Q. Well, this is what I'm trying to get at. Because the
17 inputs--the contribution that you got from Mr. Paz, it's
18 unclear whether he was playing a role beside you as another
19 Expert like you, in which case one would expect him to be
20 subject to that same independence, or was he something else, in
21 which cases that's not an issue?

22 So, I'm just trying to understand, when you took the
23 inputs from him or however that comes about, whether it be by
24 exchange by telephone or meeting and looking at the papers--it
25 doesn't really matter--did you understand that he was giving

18:58 1 you material which was based upon his general expertise or his
2 personal knowledge?

3 MR. GARCÍA REPRESA: Objection. Again, we are wasting
4 time which we don't have, trying to have an Expert tell us
5 whether he thinks that an Excel spreadsheet came from an Expert
6 or came from a witness.

7 Frankly, I think it's a waste of time.

8 PRESIDENT JÚDICE: If you allow me, I will put the
9 following question: The information provided by Mr. Paz was
10 just information that he could obtain as an expert on that
11 field of practice, or it is that and also information that he
12 was able to obtain personally based on his position in this
13 case?

14 THE WITNESS: I'm going to be very frank. Before
15 starting working in this case, I didn't know when the POES were
16 published or how often the PMP came out and all that. I read
17 this in the MEC report, and I didn't understand it. I
18 explained--I got an explanation from Mr. Paz.

19 He facilitated data to me, and how the--about how the
20 market operates in Bolivia.

21 PRESIDENT JÚDICE: So, Mr. Paz provided to you
22 information that a person who knows the way the electricity
23 market works, whether EGSA--or from EGSA or not could do so,
24 and you received that information in that manner.

25 THE WITNESS: Yes, that's exact.

19:00 1 PRESIDENT JÚDICE: But information was communicated to
2 you that are not--that is not market information without being
3 involved in the position of one of the Parties?

4 THE WITNESS: I think the answer to that is no. The
5 only thing that I needed from Mr. Paz was the fact that he had
6 access to these software program, the SDDP, et cetera, and he
7 knew how to run them correctly.

8 PRESIDENT JÚDICE: Very well. Can we proceed, then.

9 MR. RUBINS: Sure.

10 BY MR. RUBINS:

11 Q. Last topic, I think, the Spot Price claim. I would
12 like to talk first about the damages in relation to the
13 pre-nationalization period, 2008 to 2010.

14 If we could open in your First Report to
15 Paragraph 112. So, in Paragraph 112, you say that you focused
16 on a study carried out by the CNDC in 2012 using an actual
17 historical database.

18 Do you see that?

19 A. Yes.

20 Q. And the point of this historical study, as I
21 understand it, was to figure out what the real impact was on
22 Guaracachi of Operating Standard 3; correct?

23 A. I did not understand the last section, operating what?
24 Are you referring to the standard?

25 Q. Sorry.

19:02 1 The point of the whole historical study was to assess
2 the real impact on Guaracachi of the change on the Spot Price
3 formation regime; right?

4 A. Yes. Given the exclusion of the dual year-endings and
5 the formation of marginal prices.

6 Q. You said that the study used an actual historical
7 database prior to the valuation date; right?

8 A. Yes.

9 Q. Now, did you understand at that time, the time of your
10 First Report, that the CNDC had not actually provided Spot
11 Prices in the actual scenario that corresponded to historical
12 reality?

13 A. No, I did not have that understanding back then.

14 Q. But you understand it now; yah?

15 A. No, I don't. This morning I heard the statement, but
16 honestly it's not clear. I did not have an opportunity to talk
17 to people from the CNDC, and I don't know. You heard the
18 information, and I don't know whether it is clear to you; it is
19 not clear to me.

20 Q. Did you check whether, for any one of those times or
21 periods, the results for the Node Price actually corresponded
22 to the actual Node Price for that period of time?

23 A. Well, I reviewed the data, the calculation carried out
24 by MEC in one of the reports, and it was impossible to figure
25 out what they had done. They provided an Excel file with

19:04 1 various thousand rows, and they included some numbers, but I
2 have no idea how they estimated those numbers.

3 Q. Did you ask them whether they were estimations or
4 actual prices in the actual scenario?

5 A. I was referring now to Mercados Energéticos.

6 Q. Sorry. Did you ask Mr. Paz or the CNDC whether the
7 numbers you were going to put into your model to calculate
8 these damages were in the actual scenario actual historical or
9 estimated?

10 A. Yes, I did ask that.

11 Q. And the answer was?

12 A. Yes, that they were actual data.

13 PRESIDENT JÚDICE: Sorry, I assume that--I assume that
14 you asked Mr. Paz, not CNDC?

15 THE WITNESS: Correct. I talked to people from CNDC
16 after they talked here today. I hadn't met them before.

17 PRESIDENT JÚDICE: Thank you.

18 BY MR. RUBINS:

19 Q. And did you see the report, the CNDC report, that came
20 back to Mr. Paz from the CNDC?

21 A. You're referring to a letter, yes, a letter.

22 Q. And did you see what we were looking at this morning
23 with the CNDC, where the core results were marked as an
24 estimation of Node Prices?

25 A. That's the reason why I told you it wasn't

19:06 1 clear--that's the reason why I told you a moment ago that this
2 was not clear, because my understanding up to this morning was
3 that they were actual numbers. But now, honestly, I don't
4 know. I haven't had an opportunity to read the transcript.

5 Q. But if you read that report this morning, you saw that
6 it clearly said "estimated Node Prices"; correct?

7 PRESIDENT JÚDICE: The Tribunal will do that, even if
8 Mr. Flores agrees or disagrees with your interpretation, that
9 would be for the case actually important. It's not speaking as
10 something he knows, but since he's making an interpretation
11 based on information that he has been provided perhaps today.
12 Then, please, ask--it's possible to ask, but clearly I think it
13 would be better to use your time with other issues. Thank you.

14 MR. RUBINS: Thank you, Mr. Chairman. I'm merely
15 trying to explore with Dr. Flores whether at least now he
16 understands that there was a mistake in using the wrong
17 numbers, and he asked for the transcript, and I could give him
18 the transcript.

19 PRESIDENT JÚDICE: But respectfully, if--Mr. Flores's
20 opinion at this stage, what is important for us is the opinion
21 he provided in a different moment. If that is a response or
22 want to what actually is the truth, that's something that the
23 Tribunal, and with the help of counsel in the final pleadings,
24 will decide.

25 Thank you.

19:07 1 MR. RUBINS: Fine. Thank you, Mr. Chairman.

2 BY MR. RUBINS:

3 Q. Then, for the post-nationalization period, the CNDC
4 was not involved nor was Mr. Paz in your calculation of damages
5 for the post-nationalization period; correct?

6 A. Correct.

7 Q. What you did was took the gap between the CNDC report,
8 which you assumed to be actual, and the MEC results, and you
9 found a 50 percent gap, and you applied that to Dr. Abdala's
10 number and going forward; correct?

11 A. Yes.

12 Q. Did you ask Mr. Paz to project--based on the other
13 information that had been used to project Spot Prices and so
14 forth for the post-2010 period, did you ask Mr. Paz to
15 undertake projections with the help of CNDC, I suppose, with
16 respect to this claim?

17 A. I asked him, yes.

18 Q. Did he refuse?

19 A. No. He told me that this is going to take several
20 weeks of analysis and for the amount of the future damage, it
21 is so small that jointly we decided it wasn't worth it.

22 As you can see at Table 7 of my Second Report, even if
23 I use the data provided by MEC for future projections, as
24 Mr. Abdala explained to us, very soon after 2010, future years
25 are going to go down because with the addition of new capacity

19:09 1 included in his model in 2012, there are no further damages
2 under this concept. So, we're talking about a very small
3 damage that is discounted minus cost, and it doesn't make any
4 difference if you sit here if you use my data or the procedure
5 I used or the procedure suggested by MEC.

6 For this claim, at any rate, the significant amount is
7 the past one, not the future amount.

8 Q. But if the Tribunal were to find that, in fact, what
9 CNDC provided to you was not historical, then the 50 percent
10 sort of rate across the board, that would be an incorrect
11 approach; correct?

12 A. Yes, it would be, and the difference would be minus
13 100 million--less than \$100 million.

14 MR. RUBINS: Just one moment.

15 (Pause.)

16 MR. RUBINS: I have no more questions. Thank you very
17 much, Dr. Flores.

18 THE WITNESS: Thank you.

19 PRESIDENT JÚDICE: Thank you, Dr. Rubins.

20 MR. GARCÍA REPRESA: I'm sorry, I'm the one who is
21 going to ruin the party, but I'm the last one, and I do have
22 some questions.

23 PRESIDENT JÚDICE: Yes, but you can rest assured that
24 we will be listening to you with interest.

25 REDIRECT EXAMINATION

19:11 1 BY MR. GARCÍA REPRESA:

2 Q. Good afternoon, Mr. Flores. I am going to ask you to
3 bear with us, I know this has been a long day.

4 Questions by my colleagues, at the very beginning you
5 were asked about what the Capital Asset Pricing Method would be
6 or the classical--classic or standard method, and assuming that
7 nowhere has it been seen that that includes Size Premium;
8 correct?

9 Do you remember that?

10 A. Yes.

11 Q. I would ask you to go to--I don't know if you still
12 have what I used for the examination of Mr. Abdala. I don't
13 know if you still is have it, but it is Number 12.

14 And we're going to give you a copy.

15 As you may see, this is Exhibit C-270 that was
16 presented by the Claimant. This is an article from 2011, where
17 there is an explanation of what to take into account when
18 applying company-specific risk or a size-premium factor. And
19 it says those are different items and that you should try to
20 avoid their overlapping.

21 If you look at the first paragraph, there is a
22 definition of "small business" based on this article, and it
23 refers to Ibbotson 10, and it refers to market capitalization
24 of almost \$75 million.

25 A. Did you say 85?

19:13 1 Q. Yes, I did say 85.

2 And if you look at the first page, is there anything
3 in this document that actually confirms that the CAPM may and
4 has included Size Premium?

5 A. Yes. We are seeing this on the same page, based on
6 the buildup approach or the addition, we add elements. Because
7 the idea is that if there is no risk at all, then we have R-F,
8 that is, the risk-free rate, what the United States gives me.
9 And that is a very low rate because I'm only compensated for
10 time, but no additional risk.

11 So, to that risk-free rate we add other components
12 such as, for example, Size Premium.

13 Q. And now you would you remember that you were referred
14 to Ibbotson and Morningstar at Tab 23 of the binder you
15 received.

16 And you were asked several questions. First, you were
17 asked to look at Page 98, to refer to the seasonality. But
18 before referring to that, I would like for you to look at the
19 beginning of this section on the previous page, 96.

20 Would you please explain the meaning of the serial
21 correlation in small company stock returns in this document?

22 A. That is a difficult question at this time in the
23 evening. Let me try.

24 In the first paragraph to the right, it says that this
25 is a first-degree correlation, and it is an attempt to measure

19:16 1 how a variable is related to the next one. That is to say,
2 whatever happens to a variable today depends on what happened
3 to it in the earlier period.

4 Q. And how is this related to the notion of risk in
5 small-size companies?

6 A. I imagine it could be that the wealthy become
7 wealthier and the poor, poorer. It should be--it could be a
8 similar message. If a company had smaller returns last year,
9 it could be that they continued to be small.

10 Q. And if we continue with this document, as I mentioned
11 before, on Page 98, you were asked about the January effect.
12 And you were not shown the last paragraph in this section. And
13 once again, I like conclusions, and I would like for you to
14 look at Page 99 to the left, and read the last paragraph that
15 starts, "this argument vanishes," and tell me whether that
16 confirms your opinion in and, in that case, why.

17 A. Should I read it out loud or just to myself?

18 Q. Just read it to yourself, if you don't mind.

19 (Witness reviews document.)

20 A. Yes, it says that the argument of the January effect,
21 even though it is true that someone has measured it, vanishes
22 if one looks at it carefully.

23 Q. When you measured the size of EGSA, did you do it
24 based on Market Value only, or did you consider any other
25 aspect of EGSA to determine that it is a small company?

19:18 1 A. For Market Value and taking into account the fact that
2 EGSA does not have publicly-traded stock, that is not something
3 that we can use. We need to resort to other criteria.

4 Q. And what other criteria did you take into account to
5 determine that EGSA a small-sized company?

6 A. Well, in the First Report I referred to the Book Value
7 as the starting point, and I also referred to the fact that the
8 absolute cap for the valuation in this Report would also have
9 the valuation by Mr. Abdala.

10 Q. And continuing with this document, since you were
11 asked about it several times--

12 A. I also see that there is a reference to the number of
13 employees, and that is a factor that clearly shows that EGSA
14 was a small company.

15 Q. Thank you.

16 As I mentioned before, if we continue with this
17 document, you were asked why you chose Category 10 as opposed
18 to 10-Y, -Z, or -X, sorry--and I understand this is dealt with
19 at Page 92, where it says, choosing the right Size Premium.

20 Would you please read the first two paragraphs in the
21 bottom left as opposed to the first paragraph in--to the right,
22 and then after you read that, I will ask you a question.

23 (Witness reviews document.)

24 A. Yes, I read it. And I think that we discussed this
25 during RDC versus Guatemala. There, both Experts, Pratt and

19:20 1 Professor Spiller from Compass Lexecon, did agree on applying
2 the Size Premium, but the discussion was around this topic,
3 indeed.

4 Q. Agreed.

5 And what is the conclusion you reach after reading
6 this comment on the categories to apply in case one has various
7 options?

8 A. What I said and what seems to be reasonable is that if
9 we have so much granularity that we don't know whether to put
10 it here or there, it is advisable to sacrifice granularity and
11 have more scientific confidence. That is to say, to remain in
12 the last of the deciles Number 10, instead of going to 10-W,
13 10-X, or 10-Y, -Z.

14 Q. In the same binder, you were shown the document at
15 Tab 21, 3--C-360, that is an article by Professor Damodaran of
16 2011. And you were asked whether you agreed with Professor
17 Damodaran or not. And you said that you did not agree with
18 him, and you said that you could explain, but you were not
19 given the opportunity to explain.

20 So I would like to know why you do not agree with
21 Professor Damodaran.

22 A. Here it should be mentioned that Professor Damodaran
23 said that he never used it. This is what Mr. Abdala says, that
24 until recently, everyone accepted this, but now there is no
25 literature by French and Fama of 2012, and now everyone is

19:22 1 saying no, let us not use it again because it has been proven
2 that it doesn't exist.

3 That is not what Mr. Damodaran said--Professor
4 Damodaran said. Professor Damodaran said that he never used it
5 even though the consensus developed with all of the financial
6 analysts was to use it.

7 Here, he's one of the extremes. He said, I have never
8 used that. That, on the one hand--and I respect his criterion.
9 But he also says that at the same time, since I did not the use
10 it, and that might be the reason why it is not used, he does
11 say that he applies adjustments to the valuation and the
12 expected return given illiquidity factors. And that is what we
13 discussed this morning.

14 Small companies are less liquid. And what would be
15 clearly wrong is if one applied a premium due to lack of
16 liquidity to the Discount Rate and a Size Premium. Those two
17 factors would be overlapping, and that would be incorrect. But
18 I haven't done that. I have not applied a premium due to lack
19 of liquidity.

20 Q. And to continue with Professor Damodaran, I know this
21 has been the word that has been cited the most in this
22 transcription. I'm not going to show you the document, but you
23 were told or explained that, based on the 1.5 multiplier that
24 he uses in connection with a Country Risk Premium, in one of
25 the options suggests a reduction through time.

19:24 1 Do you know if Compass Lexecon reduces its rate
2 throughout time, considering that this was Professor
3 Damodaran's opinion?

4 A. What do you mean by reducing it? It starts higher and
5 it goes down? No. They are low from the very beginning.

6 Q. And in connection with the Size Premium, you were told
7 that there was nothing in the report and that you had to
8 explain why you applied Size Premium in connection with EGSA,
9 and you said that there was a section in your Report.

10 Could you please explain or look at the contents of
11 your Second Report and refer what sections you were referring
12 to when you said you did study EGSA's situation.

13 A. Yes. That is--or rather, I was a little bit offended
14 when I received the report by Compass Lexecon.

15 PRESIDENT JÚDICE: Well, there is no reason. This is
16 like working with the lawyers.

17 THE WITNESS: I have worked with Mr. Abdala in several
18 arbitration cases, and we have a very good relationship, but in
19 this arbitration I think that he was a little bit too
20 aggressive, that I was doing something astronomical that was
21 never seen before, but I guess it's part of the game.

22 So, I thought it was necessary to say let's look, is
23 this-my valuation so crazy to say that EGSA was \$91 million's
24 worth?

25 Well, Section 2 it refers to this. It refers to the

19:26 1 reasonability of the--the reasonableness of a valuation. And I
2 referred to all of the problems faced by the company, in
3 particular Section 2(a), liquidity problems. I think that this
4 is closely related to this item.

5 BY MR. GARCÍA REPRESA:

6 Q. And to continue with this topic, you were asked
7 whether in your reports you had any benchmarks, and I see that
8 you had a positive answer, but it caused certain surprise in
9 your colleagues. What benchmark are you including in your
10 reports?

11 A. We tried to establish with these benchmarks, or
12 reference points, comparable elements to me. EGSA's sale, if
13 comparable to another sale, another EGSA sale. I always
14 explained that whenever EGSA was sold, it was sold at a value
15 lower than the one established in the book. So, that is a
16 benchmark. Is it reasonable for that value to be below the
17 Book Value? That is in section that starts on Page 29--19,
18 sorry--Paragraph 53 and 54, and that's where I explained that
19 there were some other operations within the stock holding
20 package, but I do understand that there is a dispute whether
21 the one in 2006 actually happened or not. But based upon the
22 publication and also the documents, the values cited were lower
23 in both instances to 2003 and 2006. They were below the Book
24 Value.

25 Q. Thank you very much. I should have called you

19:28 1 Professor.

2 A. I used to be a professor.

3 MR. GARCÍA REPRESA: Thank you very much.

4 PRESIDENT JÚDICE: Dr. Rubins, do you have recross?

5 MR. RUBINS: Just two questions.

6 PRESIDENT JÚDICE: Okay.

7 RECCROSS-EXAMINATION

8 BY MR. RUBINS:

9 Q. The first is not really a question but just a
10 suggestion. I certainly am prepared to take responsibility for
11 the astronomical characterization of your discount rate. I
12 certainly wouldn't want Dr. Abdala to take the blame for my
13 choice of words, by which I stand, but I'm a lawyer, not an
14 independent expert.

15 Secondly, I just wanted to test with you what you
16 said, which I think you may not have meant what you were
17 saying. You were sort of in the middle of a stream of thought,
18 and I think you may have gone a little bit too far. You were
19 talking about Damodaran and his statement about never using the
20 Size Premium, and you said why you disagreed with him, and I'm
21 going to just read. It's in English, but I don't have the
22 Spanish one in front of me.

23 You say, here, he's one of the extremes. He says I
24 have never used that, that on the one hand, and I respect his
25 criterion--sorry, that's not it.

19:30 1 Professor Damodaran said he never used it, and
2 although the consistency with all of the financial analysts was
3 to use it. Okay? That's what you said. So you're suggesting
4 that at a time when there is complete consensus among all an
5 analysts, you say, Professor Damodaran says I'm not going to
6 use it, I never used it. Okay?

7 And I think you will agree with me that even the
8 documents, even the articles that we've looked at that support
9 the use of a size premium to recall, for example, Tarbell, even
10 they start from the premise that a lot of people dealt the Size
11 Premium, a lot of analysts, a lot of economists at all times
12 have doubted the Size Premium, and that was, in fact, the
13 purpose of Tarbell's PowerPoint that you were looking at or
14 that you were showing before. Right? So I just wanted to
15 confirm that you didn't really mean it to be that absolute a
16 statement. You didn't mean to suggest it was an absolute
17 consensus at any particular time with respect to the Size
18 Premium; is that fair?

19 A. I would like to review the transcript in Spanish to
20 see the exact words that I uttered, but I agree that never in
21 economics or finance are you going to find something that
22 100 percent of the economists and financiers agree on.

23 PRESIDENT JÚDICE: You've done that to help the
24 Tribunal.

25 BY MR. RUBINS:

19:31 1 Q. One more thing for completeness.

2 There was a discussion with Mr. García Represa about
3 whether--I have this in Spanish--whether the Size Premium fits
4 within the CAPM model.

5 Do you remember that?

6 A. Yes.

7 Q. And the suggestion that came out of that, as I
8 understood it, was that you say it does come within the CAPM
9 model.

10 A. Yes, the CAPM model includes--well, the determination
11 of the cost of equity following the CAPM methodology includes
12 the additional factors.

13 Q. I want to confirm for the record that the source of
14 the statement that I would make that I made to you before that
15 it is not part of the CAPM method is from your First Report,
16 Paragraph 75, which, in Spanish says, "However, the CAPM
17 approach does not take into account the additional risk and
18 yield due to the size of small-sized companies."

19 A. The first?

20 Q. 75, in the middle of the paragraph. "Sin embargo."

21 A. Sí. Yeah.

22 Q. So, I assume you confirm the statement that you made
23 in your first opinion that the CAPM model does not take into
24 account the Size Premium.

25 A. As I said initially, the CAPM model has a basic

19:33 1 component. I think I called it the building block, and that is
2 what I mentioned here. The single component that tries to
3 determine the beta and the country--and the Market Risk Premium
4 is not included. This is called an anomaly, like any other
5 article you mentioned. That is why the CAPM model has to have
6 other things added to it to solve that anomaly.

7 PRESIDENT JÚDICE: Thank you, Dr. Rubins.

8 QUESTIONS FROM THE TRIBUNAL

9 ARBITRATOR CONTHE: Members of the tribunal also have
10 to tell the truth. I'm not a doctor. I'm very happy when they
11 call me "Doctor." I'm not a doctor like my father. It's a
12 joke, really, but let's start with the first methodological
13 question I posed to Mr. Abdala before. I was talking about
14 North Korea, et cetera, but I could say the deterioration of
15 the business climate and private investments in connection with
16 the arrival of a government which nationalizes a company.
17 Should this be taken into account or not when valuing this
18 company? If we said yes, it has to be taken into account
19 because the willing buyer is going to buy a company in that
20 country, but also we could reach a self-fulfilling prophecy,
21 and everything could be national and said nobody can come here,
22 that our companies are valued at zero, and they can be
23 expropriated. The increase in political risk of a government
24 that ends up nationalizing should not be taken into account to
25 value a company that has been the subject of nationalization.

19:35 1 THE WITNESS: The way I understand this--and I apply
2 this--when one conducts a valuation, one has to exclude the act
3 that takes place; in this case, nationalization. It would be
4 unfair to say, "Look, the night before I announced that you
5 were going to be nationalized, so the next morning the price of
6 your shares drops to zero, and the value of your company is
7 zero, and I will pay you nothing." One has to exclude this,
8 and the value of the company should be calculated the day
9 before the announcement of nationalization.

10 Now, what cannot be excluded is the perception by the
11 market agents, sellers and buyers in connection with what the
12 political risk is in a given country. Independently of the
13 fact that, "Okay. We are going to nationalize Guaracachi."
14 That needs to be maintained there because when Mr. Earl decided
15 to come and invest in Bolivia, by that time, I think--well, we
16 know that was Latin America, of course, and Latin America is a
17 country or, rather, a region that goes to the left and to the
18 right, there are nationalizations and there are privatizations
19 and so on and so forth.

20 So, for valuation purposes, what would be fair was to
21 eliminate any kind of political risk saying they were doing so
22 because we were conducting an international valuation because,
23 if not, people would be in the business of going to places in
24 the world where they know that oftentimes governments try to
25 control the resources, and they would say, "Okay. Fine. In

19:37 1 four or five years I think we're going to become nationalized,
2 so we're going to buy cheap, we'll wait for nationalization,"
3 and we say, "Okay. Value our company as if the nationalization
4 price would be zero." So, they sold--they bought by 20 and the
5 arbitral value would be 100.

6 Do you understand?

7 ARBITRATOR CONTHE: Yes. The increase in the time
8 period is irrelevant, of course. This is a very crucial issue.
9 Sometimes we're always disregarding other methods to evaluate
10 companies such as Book Value, multiples, et cetera, and we say
11 the discount rate is the ideal method and then we discuss this
12 for 24 hours, and it's not as clear; right? So, the discount
13 flow method actually provides an incentive to the country
14 that's nationalizing because if there's a pattern that is
15 hostile to foreign investment, the fair market value of the
16 investment is becoming depreciated.

17 A new Government that is hostile to foreign investment
18 with the discount rate we have been discussing buys or
19 nationalizes cheaper than a country that does it because of
20 public utility reasons and not because it wants to have
21 productive assets. A country that is more prone to
22 nationalization generates more political risk, and the purchase
23 of the companies that it is willing to nationalize comes
24 cheaper. So, it is perverse to favor a nationalization method
25 that favors hostility to foreign investment.

19:39 1 THE WITNESS: Yes, of course. One has to be careful
2 when analyzing this. Let's think about a country like
3 Paraguay, the Paraguay that is in the middle of South America.
4 Let's assume Paraguay has never had a leftist Government, it
5 never thought of nationalizing--nationalizing or anything or
6 being hostile to foreign investment. But all of the countries
7 around Paraguay have done it in the past 30 years, although in
8 the Constitution of Paraguay are going to say, We will never
9 nationalize. The investors when they go there, they say,
10 "Okay. I have a 20-year investment in Paraguay and another in
11 Argentina and Chile has nationalized. Well, that has to be
12 taken into account."

13 ARBITRATOR CONTHE: Yes. This is a practical
14 application in this case. Mr. Abdala talks about the evolution
15 of the future generation capacity. I think in your case we
16 have this self-fulfilling prophecy. In Paragraph 122, when you
17 talk about the minimum return that Harris and company suggests,
18 it would demand a ROI, a return of investment, from 25 to
19 30 percent. And I'm assuming they're talking about now and not
20 when Rurelec made the investment. Right?

21 THE WITNESS: Two points: The letter by Hitchens,
22 according to the company--well, this is undated. We don't know
23 when the letter was sent by the broker to Rurelec to be
24 submitted together with this report. A number of things
25 happened, and I don't think this letter--well, let's see. If

19:41 1 the plan was presented in April 2010, or it was approved or
2 presented in April 2010, I assume that letter is something that
3 predates that date.

4 ARBITRATOR CONTHE: A second question--and I posed
5 this to García Represa the first day. I'm going to speak
6 Spanglish, and that's the way we speak in finance terms between
7 Spanish and English.

8 There is the Expected Return on Equity, and the second
9 one is Weighted Average Cost of Capital. So, let's forget
10 about the IRR, which is a way to apply those to kinds of
11 income. If I understand your methodology correctly, in this
12 cocktail maker, you include an expected return on equity of
13 27.6. You mix this with foreign financing of 8.88, and then
14 you get a WACC of 19.85; correct?

15 THE WITNESS: Yes, correct.

16 ARBITRATOR CONTHE: The statement by Mr. Earl as the
17 person responsible for Rurelec in South Africa, when he said he
18 wanted a profitability of 20 percent, my understanding is that
19 that 20 percent is comparable with your 27.6 percent expected
20 return on equity and not with your WACC, which is a mixture,
21 which became the discount rate.

22 THE WITNESS: I'm not sure. That's what happens when
23 you come to a hearing for a week. You come here with your
24 ideas very clear in your mind, and then you leave very
25 confused.

19:42 1 The Hitchens letter for the approval of the EGSA,
2 states very clearly that this is the minimum return on equity,
3 IRR, we are expecting or something to that effect. They're
4 talking about equity for sure there, 25 to 30 percent minimum,
5 and that is compared to the 27 percent. No dispute about that.

6 Now, the other document that I produced in my report
7 has to do with the presentation in the London Stock Exchange of
8 the investment in South Africa. The document clearly
9 establishes minimum project IRR. I think it said project IRR
10 of no less than 20 percent. So the word they use is "project."
11 Mr. Earl said he was referring to equity IRR. That is what he
12 said. And I assumed his word had more weight than what the
13 document said that was presented to the London Stock Exchange.
14 This is an important issue.

15 ARBITRATOR CONTHE: There was a little bit of
16 confusion in Mr. Represa's statement because apparently
17 Mr. Earl has said I say 20 percent and Econ One says 19.88 and
18 apparently you agree. You go to Paragraph 118 and it says the
19 investments validated by EGSA have to have a Minimum Rate of
20 Return of 20 percent, otherwise, EGSA is not going to invest
21 in--

22 THE WITNESS: Excuse me. I'm sorry?

23 ARBITRATOR CONTHE: It's Paragraph 118.

24 THE WITNESS: Yes, I found it.

25 ARBITRATOR CONTHE: The second phrase is the one that

19:44 1 I think is--it says, Therefore, that is the discount rate that
2 should be used to value electric generation projects in South
3 Africa. It is suggesting that that discount rate is comparable
4 to your 19.88 percent.

5 THE WITNESS: That is my understanding, according to
6 the paragraph in English. It says the project IRR of no less
7 than 20 percent. So, the IRR can be calculated as everything
8 included in a project, and financing terms they may come from
9 the lenders or the Shareholders. So the IRR can be calculated
10 as such as things coming in and things going out. Where he
11 says "project IRR" instead of "equity IRR," it seems to make
12 reference to the whole project.

13 This is not what Mr. Earl said. Perhaps you are
14 right. It's referring to the 20 percent in connection with the
15 Minimum Rate of Return on equity.

16 ARBITRATOR CONTHE: The WACC does not concern the
17 investors. They are concerned about the money, with the money
18 that they're going to get. So this is very unfortunate, the
19 phrase in your report. It created this confusion, and I'm
20 assuming that in the Closing Arguments tomorrow, things are
21 going to be completely clarified as to what the point of view
22 that they put is. In connection with the unfortunate nature of
23 this phrase that you mentioned, Mr. Earl said that a clear
24 distinction needed to be drawn between "project IRR" and
25 "equity IRR." That is what he said before the explanation, so

19:46 1 I used that principle to guide myself.

2 PRESIDENT JÚDICE: Yes, Mr. García Represa.

3 MR. GARCÍA REPRESA: Thank you, Mr. President. I want
4 things to be very clear in connection with the comments we have
5 heard.

6 The Second Report of Mr. Flores and the answers that I
7 provided the Tribunal at the beginning of this hearing are
8 based on what the documents say. The comments we heard from
9 the Tribunal refer exclusively to the verbal statement given by
10 Earl during this hearing. If that statement corrects something
11 that was submitted to the Stock Exchange of London, that is an
12 issue that just came up now.

13 PRESIDENT JÚDICE: Well, he is trying to obtain
14 answers from Mr. Flores. He was trying to obtain answers.

15 ARBITRATOR CONTHE: I heard a new argument by
16 Mr. Abdala. I thought you were a lawyer because you were there
17 all the time, so you've heard things right, I thought. I was
18 asking Mr. Abdala how can you explain the distance that exists
19 between the 20 percent of the expected IRR by Mr. Earl or
20 others vis-à-vis the 14 percent expected IRR?

21 Mr. Abdala proposed a new argument. The relevant
22 thing to evaluate companies is not the expected IRR that is
23 average for the investment community--that is the average for
24 the investment community, but the expected IRR for those that
25 are most optimistic and are going to buy the company if it's

19:48 1 ever sold.

2 So, we don't have a lot of time to make questions as
3 Members of the Tribunal, and we are faring very poorly
4 time-wise, but if I interpret Mr. Abdala correctly, he was
5 talking about the winner's curse. The one that buys the
6 company is usually the most optimistic person. So, it doesn't
7 have to do with the average investment community people think
8 but those that are thinking about buying the company without
9 going out into the market. This is a new argument. What do
10 you think about it? I don't know if you know about it.

11 THE WITNESS: It is not new for me. I've heard
12 Mr. Abdala say this in other arbitration proceedings, and I
13 disagree. If that were true, all the market is using a
14 10 percent except for EGSA when it goes out and asks for money
15 to the United Nations, and they say, "Okay. The minimum that
16 we use is this," and the other one says that "The minimum thing
17 we use is this." The consequence of Mr. Abdala's statement is
18 that Mr. Earl would have never invested in any company. That
19 is a consequence and that, of course, makes no sense because he
20 has invested in companies.

21 To say that the financial market is very competitive
22 and the rate I used is everyone's rate, but I don't believe
23 that rate because my rate is higher, well, I'm not trying to
24 measure the minimum expected rate by Mr. Earl. I'm using the
25 rate for the hypothetical market for the buyer. What we're

19:50 1 using is a proxy to estimate something that is unknown.

2 We can know for sure what the Spanish Government bond
3 rate is. We know that. But no one knows with absolute
4 certainty what is the expected Minimum Rate by investors. But
5 to use this argument to say that the average investment or the
6 average investor is risk-averse--and I'm not--

7 ARBITRATOR CONTHE: Well, we don't have any time, but
8 the willing buyer process is a self-selection process. It is
9 not aleatory. But to end this financial type matters to
10 calculate the Net Present Value of the cash flow, you have to
11 use a WACC, which is a financial artilage (ph.) to convert
12 future flows in present value or present value in future flows.

13 So, to do this, to convert the capital price of a
14 turbine and its covenants in an annuity, the Bolivian
15 authority, starting in 2000, as we saw in one of the
16 presentations by Mr. Abdala this morning, decided to use an
17 actual discount rate of 12 percent, and as Abdala was saying in
18 nominal terms, this would be about 14.5 percent. So this
19 nominal discount rate was accepted by the authorities in
20 Bolivia themselves in 2000 to convert turbine values in
21 annuities that were then, in turn, turned into dollars for
22 kilowatt hours for Capacity Price. I was saying that tribunals
23 are accuse of splitting the baby, but that rate is halfway
24 between the discount rate by Mr. Abdala of 10.63 and the
25 discount rate of Econ One of 19.85.

19:52 1 So, you have said that 12 percent rate should be
2 dismissed and it's irrelevant. What's the argument to consider
3 it irrelevant?

4 THE WITNESS: A number of points: The easier and
5 simpler of them is Mr. Abdala and I agree that the discount
6 rate must be calculated at a specific point in time. As you
7 know, all financial variables go up and down in time. The fact
8 that this rate is provided for in a law or a regulation or the
9 fact that it's stated there and it's fixed there, well, that
10 shows that it is not a valid financial analysis. What we need
11 to know is what the discount rate is at the date of valuation
12 and not what it was in 2000.

13 Second, the discount rate is the minimum expected
14 return, and that has to include the minimum expected return
15 taking into account the risks of that investment specifically
16 speaking. I have seen no analysis of this kind in the sense
17 that 12 percent takes into account the risks of the investment.

18 A simple example. You're right in connection with
19 this annuity. You take what a hypothetical turbine would be
20 worth or would cost in the United States, and then you're going
21 to get a monthly payment for you to say that. There is no
22 guarantee that that payment is going to be made during the
23 20-year period. All you have to do is to put in the Rositas
24 project. What happens? Because hydroelectrical generation is
25 so much cheaper, it's going to displace a number of

19:54 1 hydroelectrical units, and it's going to displace EGSA. So,
2 you would have been happy with that monthly payment for
3 capacity, and that would disappear. That 12 percent cannot
4 measure the risk of the investment because it is assuming a
5 series of circumstances that did not occur in reality.

6 ARBITRATOR CONTHE: I will reserve my opinion.

7 Next question: We have spoken about the small Size
8 Premium, and that was mentioned in the report. In
9 Paragraph 223 of the report, mention is made of the Spot Price,
10 and we can look at it briefly if you want.

11 You state something that is a little contradictory.
12 You just said EGSA, as a large generator company, had a certain
13 market power, and because of that, it could control the new
14 installed capacity. And that is why, like Bolivia, it did not
15 remove Aranjuez 1, 2, and 3 just to benefit from that market
16 power and to have a windfall on the Spot Price because it knew
17 there would be no other competitor that was going to enter the
18 market and to reduce that price and to make the three Aranjuez
19 units to become units in cold reserve, et cetera.

20 So, in 223, you say that EGSA had a certain market
21 power. Isn't this a bit incompatible with the calculation of
22 the discount rate, whereby you apply a small Size Premium to
23 EGSA as if it were a small company and it has to pay a return
24 that is six points higher than a large company?

25 THE WITNESS: I think the contexts are different. The

19:56 1 electrical market in Bolivia, the whole of it, in this period
2 from 2000 to 2001 is a small electricity market. We are
3 talking about an install capacity of 1,000 megawatts. Perhaps
4 I'm mistaken, but just to have a point of reference, I'm sure
5 that you have heard about the Three Gorges Dam in China. This
6 is a unit that has thousands and thousands of megawatts. We
7 are talking about one dam in China that is 32 times higher than
8 the one in Bolivia.

9 When we talk about market power, if you have 20 kids,
10 and there is one that is stronger and taller, he's going to be
11 the king of the clan. But if you put that same kid in the
12 middle of the city, you are going to get lost. You can be big
13 in a small space or you can be small in a big space.

14 ARBITRATOR CONTHE: But if you're a local monopoly,
15 the monopolist or the one that has market power controls the
16 market and has less risk.

17 So, traditionally, the electric utilities were
18 considered in some countries. Good securities for widows and
19 orphans because of the risk was very, very low. What Bolivia
20 was saying and what you were saying, perhaps with reason, is
21 that there were very few players in the market, and
22 theoretically the marginal cost system and the fact that the
23 competition makes it that there is always new capacity. And
24 for the prices to go down, in practice, doesn't work very well
25 because this would be a perfect competition scenario and in

19:58 1 Bolivia this does not happen. That is the argument the
2 Superintendency stated to marginalize units one, two, and
3 three. But that argument also needs to be applied when
4 calculating the discount rate.

5 THE WITNESS: I don't think so, because, again, we're
6 talking about two different things. We are talking about the
7 market power when you have few small companies, or rather we
8 have small companies that are very, very small.

9 ARBITRATOR CONTHE: I also have very, very brief
10 questions. We don't have a lot of time to talk about
11 alternative methods, but in the multiples valuation system, I
12 was wondering whether this metaphor you used in connection with
13 the apartments is something that can be applied. You talked
14 about the dollars that one has to pay for each dollar of EBITDA
15 that it needs to obtain. The multiple is price, and one can
16 say how many euros and how many dollars do I have to pay for a
17 unit of EBITDA? One EBITDA dollar is very similar to a dollar
18 in Bolivia, Peru, New York, et cetera, but an apartment is not
19 the same to have an apartment in the Champs-Élysées than have
20 it in the Puerta del Sol or in a different city.

21 So, we have used a comparison that exaggerates the
22 diversity of the companies' universe but have to apply the same
23 multiple. But multiples have to do with price with the unit in
24 the denominator and that EBITDA which is money. There is a
25 little bit of money, but we're not talking about intangibles.

20:00 1 So, it's almost like a lottery ticket. The price of a
2 lottery ticket in Bolivia, in Paris, and in Spain is very
3 different or a burger is very different.

4 THE WITNESS: I'm sorry, but I completely disagree.
5 When you're thinking of a lottery ticket, it depends on the
6 auctions and whether--or how many have been issued, whether
7 1 million or 1,000, and the payment is going to be the same
8 everywhere. And this is something important, and I wouldn't
9 like to conclude on this note.

10 One EBITDA dollar is what has to be related to the
11 price, but the price, that is, how much am I willing to pay for
12 each EBITDA dollar? One EBITDA in a company in Chile with a
13 very de-regularized market and very adverse has nothing to do
14 with one dollar in Bolivia.

15 ARBITRATOR CONTHE: Agreed.

16 And my last question has to do with Book Value and the
17 paragraph you already quoted, and it is quite interesting, and
18 it has two components. That is Paragraph 53, Page 21 of your
19 report, first bullet point where you say that in December 2003
20 a subsidiary sold its participation to Integrated Energy
21 Limited with a loss of 33 million. That is to say the value
22 was 33 million below the Book Value. That is to say that was
23 the Book Value for First Energy, but my question is, do you
24 know what that Book Value was?

25 THE WITNESS: No. I don't know it. I looked for it,

20:02 1 but I couldn't find it.

2 ARBITRATOR CONTHE: But at some point I seem to
3 understand that you were saying things that are bought below
4 its Book Value, but you're talking about two different
5 concepts. On the one hand you have the carrying value, what
6 you have in the asset, and the other one is the net value what
7 you have in the books.

8 So, these are two completely different comments.
9 You're saying that some assets are sold at a lower value
10 because that value is less than the value that I have accounted
11 for, but it has nothing to do with the net value that I have in
12 the company that I am selling.

13 THE WITNESS: When one sells a company, in the
14 accounting you say this was the net value, the value--the net
15 value of both the assets minus liabilities. I have a net
16 value, and that is what I accounted for in my books, in my
17 financial accounts, that say that was 50 million. So, I go in
18 and sell for 60 million, so I delete this subsidiary from my
19 books, and what I am deleting is the assets minus liabilities.
20 I sell everything, so I am deleting the net value, the net
21 worth.

22 So, what I am going to put in my cash account is just
23 the 60 million that I got for that transaction, but what I
24 understand is that here it says that less was paid, 33 million
25 below the Book Value, that is to say, the net worth, what that

20:04 1 company was worth, based on the seller's books.

2 ARBITRATOR CONTHE: But you just changed something as
3 you were talking. One thing was the value of the accounting
4 for the American company, and the other one is the net worth
5 for the Bolivian company. There is an assumption in which
6 those two values have to coincide, and that is conciliation
7 based on correspondences. But I would be very surprised to
8 have an American company to use this correspondence method in
9 Bolivia, so then you'd have the method that Enron used; very
10 high values for subsidiaries and they may have been worth less.

11 So, if that was overvalued in their books by selling
12 them, they would have losses, but you're confirming to me that
13 you are confusing two terms, what happens in accounting to the
14 seller and the net worth. That is a U.S. company, and the U.S.
15 company communicated that value to its shareholders, and that
16 has nothing to do with the net worth based on the Bolivian
17 accounting. One thing is the seller and the other thing is the
18 company that you sold.

19 THE WITNESS: But you're saying that that loss was
20 registered with the American company. That is what you said.

21 ARBITRATOR CONTHE: That is what you said.

22 THE WITNESS: No. I said with the subsidiary. Now, I
23 need to go back to the file.

24 PRESIDENT JÚDICE: If you allow me, this is a debate.
25 It's very interesting, but I don't think it is key to our

20:05 1 decision, with due respect, because when we see people that
2 have this technical and scientific people, this is very
3 interesting debate for people like me, but--and also when both
4 speakers are Spaniards.

5 I do not want to ask any questions.

6 Mr. Flores, thank you very much for your cooperation,
7 for your effort, for the time, for the long hours here in the
8 room, and for all the assistance provided to us.

9 THE WITNESS: Thank you very much. Thank you. And I
10 would like to thank the interpreters, and I know that I am
11 difficult to interpret. Thank you very much.

12 PRESIDENT JÚDICE: Thank you very much.

13 (Witness steps down.)

14 MR. SILVA ROMERO: Mr. President, this is something
15 that we have not discussed. Bolivia has a lot to say, a lot to
16 say, and we need two hours for our Closing Arguments in
17 connection with the merits and also with the way--the
18 procedure.

19 So, the proposal would be for them to do their--to
20 have their Closing Arguments between 1:00 and 3:00, and we can
21 have it between 4:00 and 6:00 because we need one hour to
22 organize our notes and be able to answer the arguments
23 presented by the other Party, and they will be able to prepare
24 overnight and tomorrow morning.

25 That is Bolivia's suggestion.

20:07 1 PRESIDENT JÚDICE: We might need a little bit longer
2 because we have questions and pauses and breaks.

3 MR. RUBINS: Mr. Chairman, I was going to ask the
4 Tribunal and counsel for Bolivia whether, given that there are
5 less than 16 hours left between now and the time when we
6 certainly are to make a presentation, two hours to cover things
7 we've heard just today, in particular, but the rest of the
8 hearing as well, whether it's really an exercise that we need
9 to engage in, given that it sounds like the Tribunal is, in any
10 event, interested in hearing--in reading the Parties' written
11 Post-Hearing Submissions.

12 Again, we're ready to do it. We will do it, but I
13 just want to check with the counsel for Bolivia whether they
14 are certain they want to put us all through that tonight before
15 I answer because, certainly, we will not give up a single hour
16 of preparation, but it just seems to me a bit--I don't want to
17 say "unfair" because it's perfectly fair--painful. And I
18 sympathize with counsel for Bolivia's team as much as my own;
19 we're all very tired.

20 PRESIDENT JÚDICE: Well, we need to proceed to a
21 solution, and I assume you made a proposition, and this
22 proposition is to begin at 1:00 p.m., and you begin at
23 4:00 p.m., and you have some time in between for organizing
24 your documents and to be allowed to answer.

25 And, if I understand, you are assuming the possibility

20:10 1 of not having final oral pleadings?

2 MR. RUBINS: Yes, that's correct. That is one
3 solution, but, of course, if Bolivia wants to have them, we
4 will have them. Certainly--

5 PRESIDENT JÚDICE: Sorry. Even before, even before
6 the answer of Bolivia, I think it has been agreed, and we
7 think--well, at least I think that that the final oral
8 pleadings are not exactly the same as the written part of
9 briefing, and to receive your input after six days or five days
10 of very, very tough hearings, may be good for all of us.
11 Obviously if the Parties agree not to have them, we will not
12 impose it on the Parties, but unless the Parties agree not to
13 have, we rather prefer to have. Okay? And that's why it's
14 incumbent upon us to call on Mr. Silva Romero to see what he
15 thinks.

16 MR. SILVA ROMERO: Mr. President, Bolivia's position
17 was always very clear. We do want oral Closing Arguments
18 tomorrow, and we don't think that written pleadings are
19 necessary after the hearing. I don't know how many pages have
20 written by the Parties in this case to date. You will have the
21 transcript with whatever happened here, and tomorrow you will
22 be listening to the hearing argument.

23 This is fresh in our minds. Clearly, we're not going
24 to sleep overnight or we are going to sleep very little, but
25 this is not going to be the first time. This is what happens

20:11 1 every time. Oral arguments are useful, in my opinion, because
2 you have in your mind fresh in your mind what has happened.

3 As an arbitrator I usually appreciate those final
4 arguments because they are like the final curtain call. And if
5 there are any issues that we have not solved--how many
6 memorials do we have on jurisdiction on the case? If you still
7 have something that is still unclear, I think it is more
8 convenient to decide that tomorrow after the oral arguments,
9 and say that on 40 or 50 pages based on having the hearing, you
10 could clarify what happened from here to there, points one to
11 five. That would be Bolivia's understanding.

12 PRESIDENT JÚDICE: I just wanted to tell you the
13 following: I understand there is a lot of information. I
14 understand that there are a lot of memorials, a lot has been
15 written. It has been a great effort by the lawyers, the
16 witnesses, the experts. You have helped us a lot, but when
17 there is a lot, sometimes it could be useful for the Tribunal
18 to be channeled by the attorneys of the Parties. So, in my
19 opinion, the Post-Hearing Briefs, given some direction by the
20 Tribunal, or to complete the so-called "improvisation" during
21 the oral pleadings might be important. At any rate, the
22 Tribunal will be deciding that tomorrow.

23 So, we have final oral pleadings, and we might have
24 written pleadings, but it hasn't been decided yet. We need to
25 leave it with that. I understand it's an enormous effort.

20:14 1 MR. RUBINS: No problem at all, Mr. Chairman. We will
2 certainly rise to the challenge.

3 PRESIDENT JÚDICE: But for sure I'm not saying two
4 hours is better than one hour. I am not sure if a size premium
5 or size risk exists, but clearly on final oral pleadings,
6 dimension may be good or bad. Then it may be shorter. If it's
7 shorter, we will end sooner, but it's up to you. You are
8 entitled--as Mr. Silva Romero is expecting to have two hours,
9 you are entitled to have two hours, but that does not mean that
10 your strategy cannot be different and speak less.

11 MR. RUBINS: Absolutely, Mr. Chairman.

12 PRESIDENT JÚDICE: Beginning at 1:00 p.m. is
13 acceptable for you?

14 MR. RUBINS: No, it's not, Mr. Chairman.

15 PRESIDENT JÚDICE: No?

16 MR. RUBINS: No. We agreed we would start at 2:00,
17 and certainly we are not prepared that we would lose an hour of
18 what is now less than 16 hours. We need the full time.

19 And I should say I also don't agree there should be an
20 hour of break between the two presentations. 15 minutes just
21 to refresh ourselves should be sufficient.

22 PRESIDENT JÚDICE: I agree with you that if there is
23 no agreement as to 1:00 p.m., 2:00 p.m. would be, I would say,
24 more standard.

25 Second issue: We need to authorize Bolivia to have

20:15 1 one hour to prepare. I understand that could be useful, but I
2 also understand that it is not necessary. The Tribunal is not
3 expecting an immediate answer to the point of view. The
4 Tribunal has to decide there is no agreement. The Claimants
5 think that 15 minutes is enough. The Respondent thinks that
6 they need an hour. So, if you allow us, it is better to
7 clarify this because your preparation is important. We're
8 going to leave the room for two minutes, and we will be right
9 back. Thank you.

10 (Tribunal conferring outside the hearing room.)

11 PRESIDENT JÚDICE: We have made a decision. We accept
12 the principle that it is reasonable to have some time in
13 between the oral pleadings, but, as we are short of time, our
14 proposal or our decision is to have 30 minutes with some
15 flexibility. So, it doesn't need to be 30 minutes, but 30
16 minutes instead of an hour.

17 And we start at 2:00, 2:00 sharp. Thank you all. See
18 you tomorrow morning.

19 (Whereupon, at 8:22 p.m., the hearing was adjourned
20 until 2:00 p.m. the following day.)

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CERTIFICATE OF REPORTER

I, David A. Kasdan, RDR-CRR, Court Reporter, do hereby certify that the foregoing proceedings were stenographically recorded by me and thereafter reduced to typewritten form by computer-assisted transcription under my direction and supervision; and that the foregoing transcript is a true and accurate record of the proceedings.

I further certify that I am neither counsel for, related to, nor employed by any of the parties to this action in this proceeding, nor financially or otherwise interested in the outcome of this litigation.

DAVID A. KASDAN

