

**GOVERNMENT OF PUERTO RICO  
PUERTO RICO PUBLIC SERVICE REGULATORY BOARD  
PUERTO RICO ENERGY BUREAU**

**NEPR**

**Received:**

**Aug 10, 2021**

**10:54 PM**

**IN RE:**

IN RE: THE UNBUNDLING OF THE  
ASSETS OF THE PUERTO RICO  
ELECTRIC POWER AUTHORITY

**CASE NO. NEPR-AP-2018-0004**

**SUBJECT: Transcripts of Evidentiary Hearing.**

**MOTION SUBMITTING TRANSCRIPTS OF EVIDENTIARY HEARING  
TO THE HONORABLE PUERTO RICO ENERGY BUREAU:**

**COME** now **LUMA Energy, LLC** (“ManagementCo”), and **LUMA Energy ServCo, LLC** (“ServCo”), (jointly referred to as the “Operator” or “LUMA”), and respectfully state and request the following:

1. Evidentiary hearings were held in this proceeding on July 19<sup>th</sup> and 20<sup>th</sup> 2021. During the first day of the evidentiary hearing, on July 19, 2021, Mrs. Margot Everett (“Mrs. Everett” and/or “witness Everett”), Director, Guidehouse, appeared for cross examination. Counsel for intervenor Cooperativa Hidroeléctrica de la Montaña (“Cooperativa”) participated in the cross-examination.
2. The second session of the evidentiary hearing was held on July 20, 2021 and was scheduled for cross-examinations of intervenors Independent Consumer Protection Office (“ICPO”) and the Puerto Rico Manufacturers Association (“PRMA”). Mr. Gerado Cosme testified for the ICPO and Mrs. Y. Pérez for the PRMA.
3. On July 21, 2021, LUMA requested this Honorable Energy Bureau to provide the audio of the proceedings to prepare a transcript.

4. Upon receiving the audio recording of the proceedings, LUMA commissioned a private reporter to produce a transcript.
5. LUMA hereby submits the transcripts of the July 19<sup>th</sup> and 20<sup>th</sup> proceedings. *See* Exhibit 1 (Transcript of July 19, 2021) and 2 (Transcript of July 20, 2021).
6. LUMA understands that to secure a just, speedy and inexpensive determination in this proceeding, it would be beneficial for this Energy Bureau, in its discretion, to permit intervenors ICPO, the PRMA and Cooperativa, and the Energy Bureau, to submit comments, changes and/or revisions to the transcripts within a reasonable time period that this Energy Bureau deems proper.
7. LUMA requests that after any changes or revisions have been submitted and a revised transcript is filed, if applicable, this Energy Bureau rule that the transcripts are a correct and faithful transcription of the proceedings held in this case on July 19<sup>th</sup> and 20<sup>th</sup>, 2021.

**WHEREFORE**, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned, **accept** the transcripts of the proceedings held on July 19<sup>th</sup> and 20<sup>th</sup>, 2021, and **issue** the orders it deems proper to: (1) set a deadline to submit comments, changes and/or revisions to the transcripts of the proceedings held on July 19<sup>th</sup> and 20<sup>th</sup>, 2021; and (2) **rule** that the transcripts are a correct and faithful transcription of the proceedings held in this case on July 19<sup>th</sup> and 20<sup>th</sup>, 2021.

**RESPECTFULLY SUBMITTED.**

In San Juan, Puerto Rico, this 10<sup>th</sup> day of August 2021.

I hereby certify that I filed this Motion using the electronic filing system of this Puerto Rico Energy Bureau. I hereby certify that I will send notice of this filing to intervenors: Cooperativa Hidroeléctrica de la Montaña, via Ramón Luis Nieves Esq, ramonluisnieves@rlnlegal.com; Office

of the Independent Consumer Protection Office, [hrivera@opic.pr.gov](mailto:hrivera@opic.pr.gov) and [contratistas@oipc.pr.gov](mailto:contratistas@oipc.pr.gov); Puerto Rico Manufacturer's Association via Manuel Fernández Mejías Esq., [manuelgabrielfernandez@gmail.com](mailto:manuelgabrielfernandez@gmail.com); and Ecoeléctrica via Carlos Colón, Esq., [ccf@tcm.law](mailto:ccf@tcm.law). It is also certified that I will serve notice of this motion to counsel for the Puerto Electric Power Authority, Katuska Bolaños, [kbolanos@diazvaz.law](mailto:kbolanos@diazvaz.law).



**DLA Piper (Puerto Rico) LLC**  
500 Calle de la Tanca, Suite 401  
San Juan, PR 00901-1969  
Tel. 787-945-9107  
Fax 939-697-6147

/s/ Margarita Mercado Echegaray  
Margarita Mercado Echegaray  
RUA NÚM. 16,266  
[margarita.mercado@us.dlapiper.com](mailto:margarita.mercado@us.dlapiper.com)

*Exhibit 1*  
(Transcript of July 19, 2021)

*In the Matter Of:*

*RE: UNBUNDLING OF ASSETS OF PUERTO RICO ELECTRIC POWER AUTHORITY*

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*JULY 19, 2021*

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EVIDENTIARY HEARING JULY 19, 2021

GOVERNMENT OF PUERTO RICO  
PUBLIC SERVICE REGULATORY BOARD  
PUERTO RICO ENERGY BUREAU

IN RE:	* CASE NO.:
	* NEPR-AP-2018-0004
IN RE: THE UNBUNDLING OF THE	*
ASSETS OF THE PUERTO RICO	* SUBJECT:
ELECTRIC POWER AUTHORITY	* EVIDENCIARY HEARING
	*
-----	*

The evidentiary hearing, held on Monday,  
July 19, 2021, via videoconference, starting at 9:05 AM.

I-N-D-E-X

WITNESS:  
MARGOT EVERETT

PÁGINA

EXAMINATION BY:

MR. LEBEL.....	10
MR. CHERNICK.....	52
MR. VAZQUEZ.....	98
MS. MERCADO.....	132
MR. RIVERA.....	151

## 1 VIDEOCONFERENCE

2 MONDAY, JULY 19, 2021

3 P-R-O-C-E-E-D-I-N-G-S

4 ---

5 HEARING EXAMINER SEILHAMER: Good  
6 morning. It's 9:05 in the morning of  
7 Monday, July 19, 2021. And we are  
8 commencing the evidentiary hearing in the  
9 case number NEPR-AP-2018-0004, in Re: the  
10 unbundling of the assets of the Puerto Rico  
11 Electric Power Authority.

12 I am Attorney Dennis Seilhamer and  
13 have been designated as the hearing  
14 examiner for today's hearing. We are  
15 holding this evidenciary hearing remotely  
16 as a precaution to avoid the spreading of  
17 COVID-19.

18 This morning we are joined by  
19 associate commissioners Ángel Rivera de la  
20 Cruz, Lillian Mateo Santos and Sylvia  
21 Ugarte Araujo. We are going to excuse  
22 today Edison Avilés Deliz, Chairman of the  
23 Energy Bureau of the Puerto Rico Service  
24 Regulatory Board, as well as Ferdinand  
25 Ramos Soegaard, who is an associate



1 commissioner.

2 On February 5, 2021, the Energy Bureau  
3 issued a Resolution and Order through which  
4 it established a procedural calendar for  
5 the instant case. Said procedural calendar  
6 monitors closely the work being performed  
7 by the Puerto Rico Electric Power Authority  
8 and its consultants in order to file its  
9 proposal for the unbundled rate for  
10 wheeling. Further, as part of the February  
11 5 order, the Energy Bureau established the  
12 date of this initial event, evidenciary  
13 hearing.

14 On May 10, 2021, PREPA filed before  
15 the Energy Bureau its motion in compliance  
16 with resolution and order entered February  
17 5, 2021. The Energy Bureau determined that  
18 the filing was insufficient and required  
19 additional revised information from PREPA,  
20 which PREPA filed on May 17, 2021. On May  
21 18, 2021, the Energy Bureau held an initial  
22 technical conference as scheduled in the  
23 February 5 order.

24 On July 15, 2021, the Energy Bureau  
25 issued a Resolution and Order through which

1           it established the agenda for this  
2           evidenciary hearing. The Energy Bureau  
3           established a witness schedule for the  
4           evidenciary hearing. The Energy Bureau  
5           will strictly adhere to the time allocated  
6           to each witness and panel. Each session  
7           will consist of questions directed at  
8           specific witnesses. Witnesses will not  
9           read their testimonies nor make an opening  
10          statement. All sessions will begin with  
11          questions by the Energy Bureau to the  
12          witnesses followed by questions from the  
13          intervenors and lastly questions from  
14          PREPA/LUMA.

15                 This evidenciary hearing will be  
16                 conducted in English and will be recorded  
17                 in audio and video. Further, it is being  
18                 streamed live in both English and Spanish  
19                 through the Energy Bureau's YouTube  
20                 channel. A copy of the recording of the  
21                 technical conference will be made part of  
22                 the administrative file of this case and  
23                 will be available in the Energy Bureau's  
24                 website.

25                 We will now establish the instructions

1 to be followed in this evidenciary hearing.  
2 Before addressing the Energy Bureau, please  
3 unmute your microphone. Before answering  
4 any questions or addressing the Energy  
5 Bureau, all participants must identify  
6 themselves for the record by stating their  
7 full name, by stating their -- and the  
8 entity they represent. Please, keep your  
9 microphones on mute while not answering  
10 questions or addressing the Energy Bureau  
11 in order to avoid disturbances due to  
12 background noise.

13 Now we're going to proceed to take the  
14 oath of Margaret Everett from Guidehouse,  
15 that's going to be the witness for the  
16 morning's panel.

17 Margaret, are you here? Are you  
18 online?

19 THE WITNESS: Yes. I am.

20 HEARING EXAMINER SEILHAMER: Okay.

21 MS. MERCADO: Good morning. I'm  
22 sorry. This is Attorney Margarita Mercado  
23 for LUMA. I just want to clarify that the  
24 witness' name is Margot Everett, not  
25 Margaret.

1 HEARING EXAMINER SEILHAMER: Okay.

2 Margot Everett, fine.

3 MS. MERCADO: Thank you.

4 HEARING EXAMINER SEILHAMER: Margot,  
5 do you affirm that the testimony that you  
6 are going to provide today is true, correct  
7 and based on your own personal knowledge  
8 and that, to the best of your  
9 understanding, none of the information you  
10 will provide today is misleading or  
11 untruthful?

12 THE WITNESS: I do.

13 HEARING EXAMINER SEILHAMER: Okay.

14 I will go through the list of the  
15 intervenors in this case and ask who's  
16 present.

17 Independent Consumer Protection  
18 Office?

19 MR. VÁZQUEZ: Yes. This is Attorney  
20 Pedro Vázquez on behalf of the ICPO.

21 HEARING EXAMINER SEILHAMER: Good  
22 morning.

23 MR. VÁZQUEZ: Good morning.

24 HEARING EXAMINER SEILHAMER:  
25 EcoEléctrica?

1 EcoEléctrica?

2 Puerto Rico Manufacturers Association?

3 Puerto Rico Manufacturers?

4 Cooperativa Hidroeléctrica de la  
5 Montaña?

6 Well, as established in the agenda --  
7 and I need to mention, sorry, that Paul  
8 Chernick and Mark LeBel of the Energy  
9 Bureau are the technical consultants that  
10 will join us today, and they will be in  
11 charge of asking questions to the  
12 witnesses. However, the commissioners may  
13 ask questions at any given time.

14 So, therefore, we're going to then  
15 proceed with the calendar as scheduled.  
16 The first issue in the agenda is the:  
17 "Cost of service study methods and data  
18 sources; implementation of unbundling  
19 tariffs. Status of PREPA generating units  
20 and data collection capabilities." Also, I  
21 want to remind all parties that, whenever  
22 you guys file a motion, please notify the  
23 other parties so they are aware of what's  
24 going on.

25 It is my understanding that there were

1 two motions filed last night or during the  
2 weekend -- one by the Independent Consumer  
3 Protection Office, and I think Cooperativa  
4 Hidroeléctrica, if I'm not mistaken --  
5 notifying the bureau that they intend to  
6 ask questions to the bureau. So I'm just  
7 letting the witness know of that petition.  
8 But want to remind the parties to please  
9 notify everyone involved in the case.

10 So now I'm going to let --

11 MS. MERCADO: I'm sorry, Attorney  
12 Seilhamer, Margarita Mercado for LUMA.

13 HEARING EXAMINER SEILHAMER: Yes.

14 MS. MERCADO: Thank you for that  
15 clarification. Just for the record, I want  
16 to say that LUMA did not receive those  
17 petitions, and one of them was received  
18 this morning from the bureau. And I think  
19 the petition to ask questions was filed  
20 yesterday, Sunday, July 18, and then on  
21 Friday 15, the notices to ask questions.  
22 Just for the record.

23 HEARING EXAMINER SEILHAMER: Okay.

24 Thank you.

25 So now we're going to let Mister LeBel

1 ask questions to the witness. And after  
2 that, like the instructions dictated then,  
3 the parties will have -- the intervenors  
4 will have the opportunity, and also PREPA  
5 or LUMA if they desire to.

6 So go ahead.

7 MR. LEBEL: Hi. Thank you. Good  
8 morning everyone. My name is Mark LeBel.  
9 I'm an associate with the Regulatory  
10 Assistance Project working as a technical  
11 consultant for the Energy Bureau.

12 Whereupon,

13 -----  
14 MARGOT EVERETT,  
15 -----

16 having been duly sworn, was examined and  
17 declared as follows:

18 EXAMINATION

19 BY MR. LEBEL:

20 Q. Good morning, Miss Everett. Thank you  
21 for joining us so early, I think early your  
22 time. Hopefully the sun is up where you are,  
23 but maybe not quite.

24 A. No. Not yet.

25 Q. Not yet. All right.

1           So, most of my questions are clarifications on  
2           your discovery responses. I'm going to try to  
3           go in order of the -- how the questions came out  
4           starting with Set 1, particularly starting with  
5           Set 1, Question 6, Part E. Sorry, the notation  
6           here is a little cumbersome. This is the  
7           question where we're talking about the potential  
8           for earlier retirement of generation units due  
9           to lower peak demand. If you need a second to  
10          get your response, that's fine.

11           MS. MERCADO: (No audio) Mercado for  
12          clarification.

13           Mister LeBel, you're referencing the  
14          request for information by the bureau. We  
15          did get one from the ICPO. I just want to  
16          make sure that the witness goes to right  
17          file.

18           MR. LEBEL: Yes. The first set from  
19          PREB. The numbering does get a little  
20          confusing because the ICPO was in the  
21          middle there. So Set 2 from PREB is Set 3  
22          overall. And I will try to keep that  
23          consistence.

24          BY MR. LEBEL:

25          Q. All right.



1           Let me know when you're in the right location.

2           A.    I'm sorry.  Is it Set 1 or Set 3?

3           Q.    It's Set 1.

4           A.    Set 1.  Okay.

5           Q.    It's on page -- the response is on page  
6           10 out of 22 in the pdf.  And the specific  
7           question is, "Can reducing PREPA's peak demands  
8           allow earlier retirement of some generation  
9           units?"

10          A.    Okay.  Yes.  I'm in that location, yes.

11          Q.    Great.

12          So the beginning to the response is,  
13          "Perhaps."  Does that indicate that there are  
14          some situations where earlier retirement can be  
15          facilitated by lower peak demand or lower load  
16          growth?

17          A.    There's always a possibility of early  
18          retirements for various different reasons.  And  
19          the lack of need for generation may be one of  
20          those.  So an absolute no would've been  
21          incorrect on that statement.  However, my  
22          understanding of the status of the units, the  
23          load requirements is highly unlikely that  
24          reducing peak demand would allow for earlier  
25          generation -- sorry, early retirement of

1 generation; and, in fact, may accelerate some  
2 costs for things like decommissioning.

3 Q. If a unit is scheduled to be retired  
4 sooner or later, won't those decommissioning  
5 costs be incurred sooner or later as well?

6 A. Yes. Usually, the decommissioning costs  
7 follow shortly after the plant is retired.

8 Q. Okay.

9 And then the next part of your response says  
10 that "If a unit is retired earlier, there's only  
11 a cost savings if the plant is already fully  
12 depreciated." Can you explain that statement,  
13 please?

14 A. Yes. Because if you retire a plant early  
15 and you have not fully recovered the cost of  
16 that plant, you still need to recover those  
17 costs. Those costs will -- are embedded in the  
18 revenue requirement. And sometimes, depending  
19 upon accounting rules, you may have to  
20 accelerate the recovery of that revenue  
21 requirement. So the challenges in retirement is  
22 that you still may have undepreciated plant that  
23 you need to recover and, therefore, the revenue  
24 requirement would not change even if the plant  
25 is retired.

1 Q. Okay.

2 Maybe I'm confused by the grammar, or maybe  
3 there's a miscommunication here. Say a plant  
4 was paid for through the issuance of bonds, just  
5 to simplify things. That even if you retire the  
6 plant, you still have to pay back those bonds on  
7 the schedule you've agreed to. Is that the  
8 idea? This is a fixed cost regardless of  
9 whether the plant is retired or not.

10 A. That's correct. There's the capital that  
11 was paid initially to build the plant and also  
12 for any plant enhancements that might've been  
13 done throughout the life of the plant. If those  
14 dollars have not yet been recovered and are  
15 still part of the balance sheet, basically there  
16 are still costs that have to be recovered, or  
17 they would be stranded, and they end up being --  
18 and those costs flow through into the revenue  
19 requirement.

20 Q. But, in any case, those aren't the costs  
21 that are saved by retirement. Those are the  
22 costs that are incurred regardless of whether a  
23 plant is retired or not.

24 A. They're the costs regardless of whether  
25 the plant is retired. That's correct.

1           Q.    So those are essentially the fixed costs.  
2           Those are not the costs that get saved if a  
3           plant -- that could potentially get saved if the  
4           plant is retired, right?

5           A.    True.  But -- yes.  There are -- but  
6           those costs flow through differently.  I think  
7           it's the way to be careful about this.  So I am  
8           referring to the fixed costs and the capital  
9           costs that are on the books for a plant that  
10          might get retired.  If a plant is retired  
11          earlier because it's not needed, that actually  
12          gets reflected in your energy cost.  There's not  
13          an additional savings.  You might end up  
14          lowering the marginal cost because you've  
15          retired a plant that's more expensive, for  
16          example.  So let's say you have a very expensive  
17          plant.  If you retire it, you're never going to  
18          dispatch it again.  Those dispatch costs then  
19          fall out of the supply stack.

20          Q.    Well, if it's a more expensive unit,  
21          presumably it wouldn't be running anyway in an  
22          efficient dispatch.

23          A.    Correct.

24          Q.    All right.

25          So, what savings can occur from retirement of

1           **a unit?**

2           A.    Relative to -- so, if the plant is not  
3           needed and not used, none.  If the plant is  
4           deemed to be more expensive than an alternative  
5           and, therefore, it's retired, that's already  
6           incorporated in the accounting that goes into  
7           the cost-of-service studies.  So, for example,  
8           if you're looking at a portfolio of plants and  
9           you've determined that, as you said, one of them  
10          is not economic and, therefore, can be shut  
11          down, presumably that plant was probably not  
12          being dispatched anyway.

13          It's always relative to -- the analysis is  
14          always relative to the alternative.  So  
15          retirements really don't save an avoided cost  
16          because those -- because you -- if you actually  
17          need that generation, you're still -- you're  
18          paying up front capital costs.  And a lot of  
19          these plants in PREPA's portfolio, to my  
20          understanding, are near or fully depreciated.  
21          So you're really just talking about variable  
22          costs that these plants are incurring, and those  
23          variable costs would not occur if the plant is  
24          not being dispatched.

25          **Q.    But what about Fixed O&M?  There's**

1       operating and maintenance expenses of having a  
2       building and all sorts of other things that  
3       occur regardless of the dispatch of that unit  
4       onsite. Is Fixed O&M reduced or eliminated by  
5       retiring a plant, selling the land?

6       A. Certainly, selling land and some O&M  
7       costs would be saved, but they would potentially  
8       be offset by decommissioning costs. It really  
9       is a plant-by-plant assessment. And, again, as  
10      I mentioned, when you think about how these --  
11      the treatment of these costs flow into a cost-  
12      of-service analysis, this is all being done  
13      upstream, and it's being done in the IRP, the  
14      Integrated Resources Planning process.

15      And what you're doing in that process is  
16      you're making this assessment that says, "I have  
17      this load that I need to cover, and I have these  
18      resources that I can use to cover it, and here's  
19      the cost of doing so." If there's an  
20      opportunity to retire a plant because it's not  
21      needed and the cost savings of that plant are  
22      relevant, that would flow into the cost-of-  
23      service study. So, to the extent that those  
24      decisions have been made in the IRP, they would  
25      be included in the cost-of-service study that

1 we've provided and would not be incremental to  
2 anything that we submitted in the cost-of-  
3 service.

4 Q. What if an order providing for Integrated  
5 Resource Plan going forward provides flexibility  
6 for updates and smart decision making as load  
7 growth or other circumstances evolve?

8 A. You're saying that what if that's a  
9 process that's put in place?

10 Q. What if an order for an IRP and an action  
11 plan coming out of an IRP allows for flexibility  
12 and changes to retirement schedules or timing  
13 for new generation?

14 MS. MERCADO: This is Attorney Mercado  
15 for the record. For clarification, this is  
16 a hypothetical question, not grounded on  
17 the cost-of-service study that was filed,  
18 right? Your question is a hypothetical?

19 MR. LEBEL: Well, I believe my  
20 question is an accurate reflection of the  
21 current order issued on the IRP last year  
22 where there is discretion for the  
23 generation operator -- PREPA at the time --  
24 to make changes or updates or file  
25 different documents with the bureau

1 reflecting schedules for retirement of  
2 units or different timelines for build out  
3 of different units depending on load  
4 growth, prices for solar and battery  
5 storage, that the IRP ordered and the  
6 process laid out in that order was not  
7 actually a specific plan, but rather had  
8 significant elements of discretion where  
9 PREPA could optimize.

10 HEARING EXAMINER SEILHAMER: We're  
11 going to allow the question.

12 Mister LeBel, please proceed.

13 THE WITNESS: So, I think the thing to  
14 remember about cost-of-service studies is  
15 that they're always done at a moment in  
16 time for -- and they are a forecast. And  
17 so, while they're maybe that sort of  
18 flexibility allowable, it would not find  
19 its way into a cost-of-service study,  
20 unless it was explicitly predicted as part  
21 of the expectations of what the costs were  
22 going to be.

23 So, in other words, cost-of-service  
24 studies take a look at a moment in time and  
25 say what are the costs that we expect, how



1 do I classify those costs, how do I  
2 allocate those costs. And, as you bring in  
3 a hypothetical retirement, for example,  
4 that would be a scenario in a cost-of-  
5 service study. So, while it could happen,  
6 it would not impact a cost-of-service study  
7 because the cost-of-service study does not  
8 run -- it is not a scenario-based analysis;  
9 it's just a forecast analysis.

10 BY MR. LEBEL:

11 Q. But isn't the whole principle of marginal  
12 cost, even if you just limit it to load growth,  
13 isn't the whole principle of that how the  
14 generation owner and operator would rationally  
15 respond with extra capacity in response to extra  
16 load growth? Isn't that an attempt to link how  
17 the cost would change with the change in load?

18 A. I agree that a change in load and the  
19 change in --

20 MS. MERCADO: Sorry Margot.

21 THE WITNESS: Sure.

22 MS. MERCADO: I'm going to -- I was  
23 just going to state an objection. And I  
24 believe the question was argumentative with  
25 the witness.

1 HEARING EXAMINER SEILHAMER: Can you  
2 rephrase the question?

3 MR. LEBEL: Happy to rephrase.

4 BY MR. LEBEL:

5 Q. When you're estimating a change in costs  
6 with load growth, is that not an estimate of how  
7 plants would change for the utility?

8 A. It is, but it's a forecast of that  
9 change. And I believe the example that you're  
10 providing is like -- would be like a scenario.  
11 So, in other words, there is an established plan  
12 of what needs to -- what PREPA, the POLR  
13 provider, is intending to spend over the next 10  
14 years to meet reliability needs. And if those  
15 reliability needs would change, if load changes  
16 from what the forecast that's used in the cost-  
17 of-service or in the integrated resource  
18 planning process, then there would be a change.

19 But my point is that -- so, I want to  
20 differentiate between what the cost-of-service  
21 is doing versus ongoing marginal costs. And  
22 what I'm talking about is the cost-of-service  
23 study has -- is computing an estimate of what  
24 marginal costs would be given inputs of load and  
25 decision making and planning in the IRP process.

1 If load is different in the future, then it's  
2 possible that the decisions around plants would  
3 change. But what we're doing is we're creating  
4 an estimated relationship between what the  
5 expected change is given -- of load given the  
6 expected resources.

7 So cost-of-service studies are just not that  
8 dynamic. If I were to compute something, it  
9 would be hypothetical number that -- of avoided  
10 cost from O&M from a plant that might retire --  
11 might be retired. And that would not flow into  
12 rates. It might flow in through some sort of  
13 trip mechanism or rate update, but not into the  
14 rates that way.

15 Q. So, if a utility is growing, and it's  
16 projected to need capacity and you show a  
17 positive marginal generation capacity cost --  
18 let's just call it a dollar the kilowatt just  
19 for simplicity's sake here; it doesn't  
20 particularly matter -- what does that one dollar  
21 a kilowatt represent?

22 A. That one dollar a kilowatt represents an  
23 expectation that the utility has to build an  
24 incremental kilowatt of generation. There is an  
25 expectation about what type of generation that

1 is. It could -- usually, the IRPs also estimate  
2 that, and they would say, "Well, this is a  
3 combustion turbine. It's a base-load plant,"  
4 whatever it might be, and there's a cost per  
5 kilowatt that's estimated to install that  
6 capacity. And that's what that dollar per kW  
7 represents. So, again, that dollar per kW could  
8 be 90 cents per kW in reality because the  
9 utility was able to install that kW for less  
10 than what they anticipated, and the converse is  
11 true.

12 **Q. All right.**

13 **I'm happy to move on to my next topic.**

14 MR. LEBEL: Are there follow ups? And  
15 appear to be -- I think Paul turned on his  
16 camera at one point.

17 HEARING EXAMINER SEILHAMER: Well,  
18 we're going to allow the bureau's  
19 consultants to do the questions, and then  
20 other parties then can, after you guys are  
21 done, ask questions.

22 MR. LEBEL: Oh. No, sorry. I was  
23 asking whether Paul -- and I think one of  
24 the commissioners --

25 HEARING EXAMINER SEILHAMER: Okay.

1 MR. LEBEL: I think Lillian turned on  
2 her camera at one point as well. I was  
3 just wondering if they had a follow up on  
4 this specific topic.

5 HEARING EXAMINER SEILHAMER: Okay.

6 MR. CHERNICK: No, Mark. I think  
7 you've covered what we need to on this.

8 MR. LEBEL: All right. Thank you.

9 BY MR. LEBEL:

10 Q. My next question is going onto the  
11 second -- sorry, the second set of discovery  
12 responses from the bureau, which is the third  
13 set overall.

14 MS. MERCADO: Attorney Mercado for  
15 LUMA. I just want to state for the record,  
16 those -- I know we provided responses to  
17 request for information in discovery. I  
18 believe the direct questioning was going to  
19 revolve around the direct -- the pre-filed  
20 testimony as cross examination. So I would  
21 ask that the questions be geared towards  
22 the pre-filed testimony and not go into  
23 other details that are not directly related  
24 to the prior testimony.

25 MR. LEBEL: So this particular -- I'm

1 looking at Question 2, Set 2. We asked  
2 about a statement that was made in the  
3 cost-of-service study report. I would like  
4 to get further clarification on exactly  
5 what was meant by the statement in the  
6 cost-of-service study report.

7 MS. MERCADO: I just want to state a  
8 standing --

9 HEARING EXAMINER SEILHAMER: We're  
10 going to allow the --

11 MS. MERCADO: I just don't want to  
12 keep interrupting, so that is my standing  
13 objection and/or request, is that the  
14 questions be geared towards the direct  
15 testimony. I know there's many responses  
16 to request for information, so that would  
17 be -- I don't want to keep interrupting.  
18 That's why I interrupted --

19 MS. MATEO: Attorney Mercado, this is  
20 commissioner Mateo. I understand your  
21 objection, but we're going to keep asking  
22 what is in the direct testimony now. But  
23 if our consultants or any of the  
24 commissioners have questions that we  
25 understand are important to make a

1 determination in the case and to have a  
2 complete administrative record, we're going  
3 to issue an order and ask for the people  
4 that provided the answers to appear and  
5 give testimony.

6 The fact that the petitioner did not  
7 call them as witnesses does not completely  
8 preclude the bureau from bringing them to  
9 the process if we understand that it is  
10 important for having a complete record. So  
11 I just wanted to let you know that. And  
12 hopefully we would not have to do that, but  
13 it is an option that we have and, if need  
14 be, we are going to exercise our discretion  
15 on that.

16 MS. MERCADO: Thank you, commissioner.  
17 And I do understand that the bureau, under  
18 Regulation 8543, has discretion on the  
19 manner to conduct. I just want to state  
20 for the record that discovery in these pre-  
21 filed testimonies were due before discovery  
22 was issued. So LUMA does reserve any  
23 rights to issue -- to present arguments as  
24 to how the calendar was structured and may  
25 be precluded filing of additional pre-filed

1 testimony by LUMA after discovery ended.  
2 So I do understand that you have  
3 discretion, and I don't want to be arguing  
4 here some scenarios that haven't come up  
5 precisely, but I just want to state that  
6 for the record, that pre-filed testimonies  
7 were -- and discovery ended in June. The  
8 discovery answers were given in June, per  
9 the calendar.

10 MS. MATEO: Duly noted. Thank you.

11 HEARING EXAMINER SEILHAMER: So,  
12 Mister LeBel, you can proceed with your  
13 line of questioning.

14 MR. LEBEL: Thank you.

15 BY MR. LEBEL:

16 Q. So it's Question 2 in Set 2 from the  
17 bureau, which is Set 3 overall. Part A is  
18 asking about the statement made in the cost-of-  
19 service study, that NCP is best used for  
20 distribution because demands are locationally  
21 driven. Just a terminolo -- let me know when  
22 you've gotten to the right spot.

23 A. I am there.

24 Q. Thanks.

25 So just a terminology clarification. So



1           there's many different types of coincident peak  
2           or non-coincident peak. So, in the course of  
3           the explanation here, you talk about class non-  
4           coincident peak. Can you explain what class  
5           non-coincident peak is in your terminology?

6           A. Yes. It is the hour -- it's the energy  
7           in the hour where, if you were to add up all the  
8           load in a specific customer group, that is the  
9           highest load for that customer group. So some  
10          customer groups peak at different times than the  
11          system does or each other. And so the non-  
12          coincident peak is when that group of customers  
13          peaks. And you can define those peaks of  
14          customers and a lot of -- the groups of  
15          customers in very different ways, they can be  
16          residential, they can be large commercial and so  
17          on.

18          Q. Great.

19          But class NCP is different than what might be  
20          called "customer NCP" where customer NCP is  
21          typically a bigger number that reflects the sum  
22          of all the individual customers' non-coincident  
23          peaks. Is that correct?

24          A. An individual -- if you were to add up  
25          the peak of every individual customer in a

1 customer group, that would be greater than the  
2 peak of all those customers if you were to add  
3 up all their loads together and find the hour  
4 where all of those customers collectively peak.  
5 So yes, an individual customer's -- the sum of  
6 every individual customer's peak is greater than  
7 the sum of the class. And the sum of the class  
8 NCPs is usually greater than the system peak.

9 Q. Okay. Thank you.

10 My next set of questions is about question --  
11 Set 2, Question 11, which is Set 3 overall, of  
12 course.

13 A. Is it on page -- this is page 17?

14 Q. Page 17 of the pdf, yes.

15 A. Uh-hum.

16 Q. All right.

17 So the statement in the cost-of-service study  
18 is: "The lack of a consistent pattern between  
19 MEC," which stands for Marginal Energy Cost,  
20 "and load is concerning." Can you explain why  
21 you'd expect to see such a correlation or  
22 consistent pattern?

23 A. Yes. Normally, you would expect marginal  
24 cost to follow load because what you're doing --  
25 when load is high, you're dispatching more of

1       your expensive plants. And when load is low,  
2       you're typically dispatching lower plants. So  
3       you would expect to see that, during periods of  
4       time where customer demand on the system is  
5       high, that the costs to serve are higher because  
6       you're dispatching more expensive plants and  
7       vice-versa.

8       So you would typically look at -- there's  
9       usually very strong relationships between  
10      marginal energy cost, which is specifically --  
11      just to be clear -- is the cost of creating the  
12      kilowatt hour. So the capacity is already  
13      built, it doesn't include any of that. But you  
14      need to dispatch a unit to meet an incremental  
15      kilowatt hour of demand on the system. So those  
16      marginal energy costs, in kind of typical  
17      economics, you're climbing that supply curve as  
18      your load increases. And so that's why you  
19      would expect to see that relationship.

20      **Q.    Okay.   Thank you.**

21      **Would you expect to see that relationship**  
22      **still if other independent variables in the**  
23      **model are changing?**

24      A.   Potentially. I mean, what typically  
25      breaks that correlation down is a region with a

1 significant amount of solar energy or must-run  
2 energy that then creates a generation that --  
3 regardless of what load is doing. And so there  
4 are indications of that. I can't really think  
5 of other situations where that might be the  
6 case, any other hypotheticals that might be the  
7 case.

8 **Q. What about maintenance schedules? Could**  
9 **that shift the dispatch curve, and have it lead**  
10 **to a different relationship?**

11 A. It does. But usually you would see that  
12 happening in months when load is low. So you  
13 would still -- while you wouldn't necessarily  
14 see really, really low prices when load is low,  
15 you would still expect to see lower prices when  
16 load is low because plants are being dispatched.  
17 So if a plant's being -- if a plant is being  
18 dispatched in the spring, for example, the  
19 prices would not go down as far. And it also  
20 only holds true if those plants that are being  
21 serviced and that maintenance schedule of those  
22 plants is occurring in the low-cost plants.

23 So you're turning off a base load plant for  
24 maintenance, and so you basically shifted down  
25 the supply curve. So there it -- that does

1           happen periodically, but you would still expect  
2           prices to have sort of a pattern that's  
3           consistent with load, even in those situations.

4           Q.    Were you able to examine the inputs of  
5           the Aurora modeling to understand whether there  
6           were issues like the ones we were just  
7           discussing?

8           A.    No.

9           Q.    Okay. All right.

10          Happy to move on to my next area of questions,  
11          the embedded cost allocation of the FCA and PPCA  
12          costs. We can start with Set 2 from the bureau,  
13          Question 13, which is very closely nearby here.

14          A.    Okay.

15          Q.    So I think we were asking a simpler  
16          question. What does "Renewable (as generated)"  
17          mean?

18          A.    So renewable energy typically occurs when  
19          the renewable fuel -- sun, wind -- is available.  
20          And these plants are typically dispatched when  
21          those fuels are available. And to say they're  
22          dispatched is actually a little bit loose with  
23          the language. Basically, they run when the fuel  
24          is available, and the energy shows up for the  
25          system operator to include.

1           And just to put this in context, a lot of  
2           renewable rich jurisdictions will actually  
3           consider renewable load as a reduction to --  
4           sorry, renewable generation as reduction to load  
5           as opposed to a, quote/unquote, dispatch  
6           generation. But that's what we mean by  
7           renewable as generated, it's appearing when the  
8           fuel is available. Same is true, by the way,  
9           for hydro if the hydro facilities cannot be  
10          curtailed. In other words, like -- I think some  
11          run of river hydro is another example of as  
12          generated resource.

13           **Q.    Okay.**

14           **So how is your calculation of renewable as**  
15           **generated different from the nameplate capacity**  
16           **of the unit? Just take one -- say we have 100-**  
17           **kilowatt solar unit. The nameplate capacity,**  
18           **how would renewable as generated be different**  
19           **than 100 kilowatts?**

20           **A.    In part because of whether or not the**  
21           **fuel is actually available at the time. So the**  
22           **nameplate capacity implies what the unit is**  
23           **capable of generating and whether or not the**  
24           **fuel is available at a level that allows the**  
25           **plant to generate at its maximum amount. So 100**

1 kW plant could be producing at a 100 kW, or it  
2 could not be producing at all.

3 Q. I think what we're looking for here is,  
4 is there a reference in the spreadsheet where  
5 that calculation is literally done or some --  
6 I'm happy to take this response later if you  
7 don't have it offhand. But I think we're  
8 looking to understand where the calculation to  
9 translate from the nameplate capacity or  
10 whatever other measurement you have of those  
11 renewable resources to renewable as generated.  
12 Literally, what those mathematical formulas are?

13 A. Right. So I can tell you what the  
14 mathematical formula is, but I will tell you  
15 that we did not calculate these numbers. So  
16 what we're referring to with nameplate capacity,  
17 capacity factor -- and I apologize if I'm saying  
18 something that's so blatantly obvious to folks.  
19 So, the capacity factor is the ratio of the  
20 total kilowatt hours that a plant generates in a  
21 specific period of time -- let's say over a  
22 specific number of hours; let's say  
23 hypothetically a year -- divided by the capacity  
24 of that plant times the number of hours in that  
25 same period. So a plant that has a 20 percent

1 capacity factor generates kilowatt hours equal  
2 to the nameplate capacity on an expected value  
3 about 20 percent of the time. It's a way to  
4 think about it.

5 Q. So let's say if there's 100-kilowatt  
6 nameplate capacity solar unit and has a capacity  
7 factor of 20 percent, the renewable as generated  
8 capacity that you're using is 20 kilowatts?

9 A. On --

10 Q. On average.

11 A. -- average? Yes, but not necessarily in  
12 every hour. It could be 100 in one hour, and 0  
13 in another.

14 Q. I'm just trying to understand the  
15 capacity weightings in that table to understand  
16 how that that calculation works.

17 A. Right. Is the potential of the plant, a  
18 way to think about that. We have rank -- we  
19 have stacked them relative to their total  
20 capability.

21 Q. Okay.

22 I'm just trying to understand exactly how that  
23 calculation works for the purposes of your  
24 weightings. And I think we got there, but maybe  
25 we'll have to double back.



1 MR. LEBEL: Paul, you --

2 MR. CHERNICK: Yes.

3 BY MR. CHERNICK:

4 Q. Can I just make sure that I understand  
5 what you're saying then, Miss Everett? If you  
6 look at the updated revised Table 2-10, in the  
7 response to Question 7 of our Set 3, it shows  
8 Renewable and have PPA units as having a 222-  
9 megawatt capacity for this weighting purpose.  
10 So is that the nameplate capacity of the PPOA  
11 renewables? Is it the nameplate capacity times  
12 the capacity factor or something else?

13 A. So just to be clear, you're referring  
14 back now to Question 7?

15 Q. Yes.

16 A. And table 10 --

17 Q. Yes.

18 A. -- in Question 7? Okay. And the 222 in  
19 the PPOA is what you're referring to?

20 Q. Yes.

21 A. My understanding is that it is an -- that  
22 is the capacity of those plants.

23 Q. So that's nameplate, and it doesn't take  
24 into account any of the considerations we were  
25 just talking about -- that you were talking to

1           Mister LeBel about. And, if you left out the  
2           parenthetical "As generated" from that title, it  
3           wouldn't have change anything because it's just  
4           the nameplate capacity or the maximum capacity  
5           of those PPOA units?

6                     MS. MERCADO: This is Attorney Mercado  
7           for LUMA.

8                     I believe the question was compound.  
9           Could you rephrase to break it down in  
10          different questions?

11                    MR. CHERNICK: Yes.

12          BY MR. CHERNICK:

13                    Q.    So I guess the first part of that  
14           question would be the -- that's simply the  
15           nameplate or maximum capacity of the renewable  
16           PPOA units. Is that correct?

17                    A.    It's the sum of the expected capacity of  
18           those plants, yes. I'm parsing my words because  
19           I would -- I don't know if it's quote/unquote  
20           nameplate. But my understanding is it is  
21           expected capacity.

22                    Q.    Okay.

23                    In the example that Mister LeBel was talking  
24           about before, if you have a wind turbine with  
25           100 kW capacity, that is -- that's the most you

1           ever expect it to operate at it in the most  
2           favorable winds. That would be counted as 100  
3           kilowatts for this calculation. Is that right?

4           A. That is correct. Yes.

5           Q. Okay.

6           I think the thing that was confusing us is  
7           this parenthetical "As generated." As I  
8           understand your testimony here, that doesn't  
9           really affect the calculation of that 222  
10          megawatts. It's more like -- well, first of  
11          all, is that correct?

12          A. It's meant to -- so what's included in  
13          this bucket of energy, the capacity in this  
14          bucket of energy, are resources that may  
15          technically not be renewable. And that's why I  
16          say, "As generated." So it was really meant to  
17          be a representation of generation resources that  
18          are considered renewable must-run. They  
19          basically appear when the fuel appears. And  
20          that's why that was noted that way. So they may  
21          not be renewable.

22          Q. So these are units which are dispatched  
23          as available, and that's what that parenthetical  
24          means "As generated." Is that correct?

25          A. Yes. Yes. And I would say they're not

1 even dispatched. They just appear.

2 Q. Yes. Thanks. That's all for right now.

3 MR. LEBEL: All right. Thank you.

4 BY MR. LEBEL:

5 Q. This next part gets a little confusing  
6 because there's answers that refer back to each  
7 other. So, there's two relevant pieces: one is  
8 Question 7, which is -- we just went back to;  
9 and then the other is Question 17 in the same  
10 set. Because the answers to Question 17 refer  
11 back to these tables in Question 7. So  
12 hopefully we can keep that all in mind here. So  
13 I think the -- so we asked in discovery about  
14 the percentages that were used in these tables.  
15 And, in Question 7, there is now an updated  
16 table. There're actually two updated tables, 2-  
17 12, using slightly different methodologies. Is  
18 that correct?

19 A. Yes.

20 Q. Yes. Okay.

21 So, let's start with the first updated Table  
22 2-12. That's on page 10 of the pdf. So, if you  
23 look in the table -- and you talk about this in  
24 the text -- the marginal energy cost is now --  
25 there's a 7.9 cent marginal energy cost. Do you

1           **see where that is?**

2           A.    Under "Dispatchable Rates?"

3           **Q.    Yes.**

4           A.    For 2017?

5           **Q.    Yes.**

6           A.    Yes, "0.07984."

7           **Q.    Yes.**

8           A.    Okay.

9           **Q.    Great.**

10           So, in the original cost-of-service study  
11           report, there was a version of this table. And  
12           this calculate -- this updated table replaces  
13           the old Table 2-12. The old number in that spot  
14           used to be 5.1 cents. Is that correct?

15           A.    I believe so. Would you like me to  
16           double check?

17           **Q.    I'm happy to -- well, your lawyer may be**  
18           **jumping in here.**

19           MS. MERCADO: Yes. For the record, I  
20           intervene now because this was one request  
21           that we had -- that I had in my note for  
22           the record, request that the bureau  
23           accepted revised Response 7 to the third  
24           request for information. So I would ask  
25           that this be accepted, and then I would

1           also ask that the witness be allowed to  
2           double check with the original 2-12 to  
3           answer your question before the record.

4           MR. LEBEL: You were getting a lot of  
5           feedback here. Sorry (audio interference)  
6           that is.

7           HEARING EXAMINER SEILHAMER: Can you  
8           repeat the --

9           MS. MERCADO: Yes. Sure. I'm sorry  
10          about that. I don't know if it was in my  
11          end. I was referring that --

12          HEARING EXAMINER SEILHAMER: For the  
13          record, can you state your name? Sorry.

14          MS. MERCADO: Margarita Mercado for  
15          LUMA. For the record, I was going to ask  
16          the bureau for leave to accept this revised  
17          table that Mister LeBel is referring to,  
18          that was submitted in Response 7 to the  
19          third request for information, revised  
20          Table 2-10, 2-12A and updated Table 2-12.  
21          Those are additions and revisions to tables  
22          that were included in the original cost-of-  
23          service study that was filed with the  
24          bureau along with the direct testimony of  
25          Margot Everett. And we would like to admit

1           this in evidence for the bureau to consider  
2           them. And also my second request was to  
3           allow the witness to look at the initial  
4           Table 2-12 to answer Mister LeBel's  
5           question on the dispatchable rate that was  
6           included in the cost-of-service study.

7           HEARING EXAMINER SEILHAMER: I'm going  
8           to ask the commissioners if they have any  
9           objection to the petition.

10          MR. RIVERA: Not from my part.

11          MS. MATEO: No.

12          MS. UGARTE: No.

13          HEARING EXAMINER SEILHAMER: Then,  
14          we're going to allow -- if there's no  
15          objections of the commissioners, then we're  
16          going to allow, and then you can make  
17          reference to the document.

18          MS. MERCADO: And, on housekeeping  
19          matter, Mister Seilhamer, would you like to  
20          mark this as an exhibit, or is it enough to  
21          reference Response 7 --

22          HEARING EXAMINER SEILHAMER: Let the  
23          response -- if it's in the record, we'll  
24          just allow the response, like we have been  
25          going on.

1 MS. MERCADO: I just referenced  
2 because not all of the responses have been  
3 referenced to in the record of this  
4 evidentiary hearing or filed for as  
5 evidence. So I will request that this one  
6 be --

7 HEARING EXAMINER SEILHAMER: So if the  
8 request -- that the request then is if we  
9 should mark, then we can mark it as Exhibit  
10 8.

11 MS. MERCADO: Thank you. Thank you  
12 for that.

13 HEARING EXAMINER SEILHAMER: Go ahead,  
14 Mister LeBel.

15 MR. LEBEL: So I think that exchange  
16 actually gets at the point I was getting  
17 to.

18 BY MR. LEBEL:

19 Q. So, in the original report, there was  
20 a -- in the summary up front -- you could feel  
21 free to check this -- there was a Table E-1.  
22 Are you familiar with that table? Or you can go  
23 look at it.

24 A. I am. And I'm looking at it right now.  
25 Yes.



1 Q. So, in the original report, the marginal  
2 energy cost listed in that table is 5.1 cents?  
3 Is that correct?

4 A. That's correct.

5 Q. Along with the update to Table 2-12,  
6 should this now be updated to reflect the  
7 updated Table 2-12, number of 7.9 cents?

8 A. Yes.

9 Q. Okay. Thank you.

10 So to get back to Question 7 here, just a  
11 quick clarification. So fiscal year quarters --  
12 just to stick on page 10 of the pdf and the  
13 second set of requests from the bureau. Which  
14 months is fiscal year Quarter 4 of 2021?

15 A. It is March -- excuse me. April, May,  
16 and June of 2021.

17 Q. So, in this table, that is an updated  
18 calculation to reflect the FCA and PPCAs that  
19 were in effect for those three months?

20 A. Correct.

21 Q. All right.

22 And then fiscal year Quarter 1, 2022, which  
23 months are those?

24 A. Those would be -- you're testing me  
25 here -- July, August, and September.

1 Q. It is not intended to be a calendar test.

2 A. Quite (audio skips).

3 Q. Just a confirmation for the record of  
4 what this represents.

5 A. Yes.

6 Q. So this updated calculation is for the  
7 FCA and PPCA rates that are currently in effect  
8 during those three months?

9 A. These are the filed rates. I have not --  
10 I did not go back and confirmed that these rates  
11 were actually adopted. So I will say these were  
12 what were filed by LUMA for fiscal year --  
13 Quarter 1, 2022.

14 Q. Okay. Thank you very much.

15 My next questions are going over to Set Number  
16 3 from the bureau, which is Set Number 4  
17 overall, particularly start with Question 6.

18 A. Okay.

19 Q. Which is on page 9 of the pdf.

20 A. Yes. Thank you. I'm there.

21 Q. Okay.

22 So it's a little bit of, perhaps, a -- it's a  
23 lengthy question, which may be part of the  
24 problem.

25 So the end of Part B we asked about how long

1 estimation of actual hourly generation top cost  
2 is anticipated to take. So you have an answer  
3 here. Is it right that this answer is mostly  
4 talking about forecasting?

5 A. My understanding of the question was  
6 regarding forecasting of hourly generation cost  
7 going forward.

8 Q. That was not, at least, my intent in  
9 helping the bureau draft this question.

10 What we were trying to ask about is, say we're  
11 sitting here on July 19, how long or when or  
12 would PREPA or LUMA would they know about actual  
13 hourly generation costs on July 18, yesterday?

14 A. My understanding is that they --  
15 currently, their processes allow for collection  
16 of this data. Within the quarter, it's  
17 various -- there's different data collected at  
18 different periods of time; data gets updated.  
19 So I think the answer to that question -- it's  
20 difficult to answer that question precisely  
21 because it would depend on the plant, it would  
22 depend on timing. My understanding is that they  
23 collect this data, and they do use actual data  
24 and total cumulative cost data, for example, in  
25 truing up the FCA and the PPCA.

1 But to know exactly what each plant did and  
2 the cost of that plant on July 18, firstly, I  
3 think it -- there's a bit of a lag. I'm not  
4 overly familiar with their processes, but I  
5 understand there's a lag. And I would also say  
6 that I understand that those costs are not  
7 necessarily collected on a plant by plant or day  
8 by day or even hour by hour basis right now.  
9 And that's why we were saying that it's going to  
10 take time to create those processes that are  
11 auditable and available to then use in the  
12 imbalance rate.

13 Q. Okay. That's helpful. Thank you.

14 So then your response to Part A here, talking  
15 about LUMA's capabilities to implement -- do we  
16 need to have a detailed understanding of those  
17 current capabilities and what we know when in  
18 order to implement an hourly imbalance rate?

19 A. I think you need to know what it will be.  
20 I would say I don't think that they're in place  
21 today, and so these processes have to be  
22 determined. And part of the linkage here that  
23 we're trying to point out is that the type of  
24 data that's collected, the frequency that it's  
25 collected, and how it's stored, the processes

1 for quality control, is important when it  
2 comes -- and must relate to decisions around how  
3 the hourly imbalance rate is computed.

4 So we have to remember that this is a rate  
5 that will be charged to ESPs or credit for  
6 energy that they were unable to supply their  
7 customers or conversely a credit that they  
8 receive if they provided additional energy above  
9 what their customer was demanding. So we  
10 anticipate that there is going to be some  
11 requirements around the data systems in order to  
12 make sure that there's transparency,  
13 auditability, of the imbalance rate.

14 **Q. Thank you.**

15 **So what's the best way to figure out what**  
16 **these capabilities will be?**

17 A. I think that that is, again, is dependent  
18 upon what the final rules and what the final  
19 uniform services agreement would say. So I  
20 can't put a timeline on it. It all depends, but  
21 they are all interrelated. And until you  
22 actually -- as a utility, until you actually  
23 know what you're going to be required to charge,  
24 how you're going to be allowed to charge it,  
25 will all drive your back end -- your back office

1 processes to make sure that you're doing --  
2 you're compliant with the requirements, and you  
3 create transparency around that. So it's a big  
4 "It depends" because you really just don't know  
5 until we know what all those rules are.

6 Q. Right.

7 But then, once you have the rules, it takes  
8 some time to implement those things in the back  
9 office, right?

10 A. It does. It takes a fair amount of time.  
11 And we've seen direct access markets take a  
12 while to mature in -- precisely for this process  
13 related questions.

14 Q. All right. Thank you. That's all the  
15 questions I had. I think Paul, Mister Chernick,  
16 probably has some separate questions as well.

17 HEARING EXAMINER SEILHAMER: Before we  
18 proceed, I'm going to ask Miss Everett if  
19 she needs a 10-minute recess before we go  
20 on, or if you're okay to continue.

21 THE WITNESS: I'll always take a  
22 break. Thank you so much.

23 HEARING EXAMINER SEILHAMER: So, if  
24 you're done, then let's all take a 10-  
25 minute recess, and then we'll come back and

1           whoever has questions, then we can proceed.

2           MS. MERCADO: Thank you for that.

3           THE WITNESS: Thank you.

4           HEARING EXAMINER SEILHAMER: Okay.

5           MR. LEBEL: Thank you, Miss Everett.

6           (Whereupon, a brief recess  
7           transpires.)

8           HEARING EXAMINER SEILHAMER: Are we  
9           ready to proceed?

10          MS. MERCADO: Yes. Attorney Mercado  
11          for LUMA. I am ready. Let's see if the  
12          witness is remote -- yes. I see her. I  
13          see Miss Everett.

14          HEARING EXAMINER SEILHAMER: Okay.

15          Before we proceed, I want to make sure  
16          that any of the interveners that weren't  
17          present at the beginning of the hearing  
18          are -- it's to see if there's someone that  
19          has joined the hearing.

20          EcoEléctrica? Is there someone from  
21          EcoEléctrica?

22          Puerto Rico Manufacturers Association?

23          Cooperativa Hidroeléctrica de la  
24          Montaña?

25          MR. SMITH: "La cooperativa está

1           presente".

2           HEARING EXAMINER SEILHAMER: Can you  
3           identify yourself for the record?

4           MR. SMITH: For the record, Ramón Luis  
5           Nieves is present. He's the attorney  
6           representing the cooperative. And then --

7           HEARING EXAMINER SEILHAMER: Okay.

8           MR. SMITH: And the cooperative's  
9           executive director, C.P. Smith, also  
10          present.

11          MR. NIEVES: Good morning.

12          MR. SMITH: "Buenos días".

13          HEARING EXAMINER SEILHAMER: Good  
14          morning. Thank you very much.

15          So then let's proceed with the  
16          hearing. Mister LeBel doesn't have any  
17          more questions. I do have to ask Mister  
18          Chernick if he has questions.

19          Paul?

20          MR. CHERNICK: I do have some  
21          questions. Some of them following up on  
22          issues that Mister LeBel covered, and some  
23          of them separate.

24          ///

25          ///



## EXAMINATION

BY MR. CHERNICK:

Q. I would like to start with the response to Set 1, Question 1, from bureau, in which you expressed concern that, quote: "The challenge of computing avoided costs in a situation where a customer chooses an alternate supplier. Is that the market for energy does not change, and thus the capacity needs of the market do not change." I'm just trying to parse that out.

Would you agree that the capacity needs of the default supplier change if a customer chooses an alternative supplier?

A. Only if that customer never returns back to the provider, a provider of last resort, the POLR provider.

Q. Okay.

So the issue you're raising there is that a customer signs up with an ESP, is served by the ESP for some time, then allows its contract to lapse, perhaps, and it returns to PREPA supply?

A. There are a number of different scenarios, but that's basically the idea. A customer has left the POLR provider and then returns later on, and is expected to receive

1 full service from the POLR provider. And then  
2 the POLR provider now has that incremental  
3 capacity cost.

4 Q. In that situation, for an island system  
5 such as Puerto Rico, what do you anticipate  
6 would happen to the supplier's generation, to  
7 the competitive supplier's generation?

8 A. So I would say that -- my understanding  
9 is that the supply of capacity is now going to  
10 be handled through a competitive wholesale  
11 process, and that LUMA or the POLR provider will  
12 be responsible for procuring energy from the  
13 market to meet customer needs. If an ESP has  
14 built a generation unit to serve a specific  
15 customer, no longer serves that specific  
16 customer, that supply may sit idle if it is not  
17 awarded as a generation resource for LUMA to  
18 purchase, or the POLR provider to purchase. So  
19 there's two separate processes here because,  
20 right now, in Puerto Rico there is not a market  
21 where customers can bid electricity in that they  
22 have available. It is all done through purchase  
23 power agreements or, in some cases, where  
24 there're some legacy units. But my understating  
25 is those legacy units will also be soon

1 converted to some sort of a contractual  
2 agreement.

3 So you could have a situation where that  
4 capacity sits idle. It also would perhaps  
5 require the POLR provider to go out and ask for  
6 an RFP and, therefore, commit to that energy,  
7 that capacity. And, therefore, then have a  
8 long-term contract with respect to that  
9 capacity. Still facing the risk now that that  
10 customer could leave again and go to a different  
11 provider. So there's many different  
12 hypotheticals or scenarios that one could think  
13 of that would occur in this case.

14 Q. Let me see if I understand your first  
15 hypothetical, which is that the customer leaves  
16 a third-party supplier, the generation serving  
17 that supplier is not able to compete with other  
18 resources available to PREPA or whoever is  
19 running the system and, therefore, it is not  
20 selected and it shuts down. Is that the  
21 situation you were thinking about?

22 A. Not completely. I wouldn't classify it  
23 as being competitive or not. I would say  
24 whether or not there was the capacity need  
25 relative to the planning that PREPA has had. So

1           there continues to be other opportunities that  
2           could be cheaper than that resource certainly.

3           But, again, this is a difficult hypothetical  
4           because there's so many moving pieces. You  
5           don't really know what the situation is, what  
6           the customers load look like, and so on. But at  
7           the end of the day, what you're doing is you're  
8           asking the POLR provider to be on call to  
9           provide capacity for any customer that leaves  
10          their ESP.

11          Q.    But this specific problem that you  
12          obviously suggest might occur is that the  
13          customer leaves PREPA for generation that's  
14          built to serve them and presumably other  
15          customers, then returns to PREPA and PREPA has  
16          excess capacity and does not need to buy power  
17          from the least capacity, and maybe energy  
18          either, from the generator that serve the third-  
19          party supplier. Is that what you're suggesting?

20          A.    I'm saying I don't know what that  
21          would -- what would actually occur. There's a  
22          number of different scenarios. But the point is  
23          that, the minute a customer comes back, PREPA is  
24          on the hook, on the day the customer comes back,  
25          to provide capacity. So, even if they are able

1 to go out there and procure, they may not  
2 have -- they may have a capacity need that they  
3 can't meet because the customer has returned to  
4 them. It -- maybe even for a short period of  
5 time because we don't know why the customer  
6 left. Maybe the unit failed, for example. So  
7 that capacity may not even be available. So  
8 there's many different scenarios here. And the  
9 fact of the matter is that, if customers who  
10 have departed and, therefore, capacity costs are  
11 avoided, they are only avoided if that customer  
12 never comes back to PREPA -- or, excuse me, to  
13 the POLR provider.

14 Q. Right.

15 Let's use those terms independently for  
16 convenience in this discussion. Okay. But I  
17 just wanted to get clear that the situation you  
18 were describing, in which the generation that  
19 previously served the customer would not be  
20 useful to PREPA, the first situation that you  
21 suggested was that PREPA would not choose to use  
22 it because PREPA had better options or excess  
23 capacity of its own. So I don't see that as  
24 being a problem. Is that -- that they just  
25 leave PREPA with a cost burden if a customer

1 leaves and returns. And that's the situation --

2 MS. MERCADO: I have an objection,  
3 respectfully, to the question. It's  
4 argumentative. Arguing a position within  
5 the question.

6 MR. CHERNICK: My apologies. I wasn't  
7 being argumentative. I was trying to see  
8 whether --

9 HEARING EXAMINER SEILHAMER: Can  
10 you --

11 MR. CHERNICK: -- Miss Everett --

12 HEARING EXAMINER SEILHAMER: (Audio  
13 skips.)

14 MR. CHERNICK: See whether Miss  
15 Everett agreed with that --

16 HEARING EXAMINER SEILHAMER: We lost  
17 connection. (Audio skips) feed --

18 MS. MERCADO: Mister Seilhamer, at my  
19 end, I cannot hear you. I don't know if  
20 anyone else is having the same issue.

21 HEARING EXAMINER SEILHAMER: Yes.

22 Is there a way you can rephrase the  
23 question, Mister Chernick?

24 MR. CHERNICK: Yes.

25 HEARING EXAMINER SEILHAMER: Go ahead.

1 BY MR. CHERNICK:

2 Q. You've laid out a number of scenarios, as  
3 we've been discussing this. And I'm just trying  
4 to understand which of those scenarios you think  
5 cause a real problem. And I think you would  
6 agree that, if a customer comes back to PREPA or  
7 PREPA has excess capacity and does not need to  
8 pay the generator that previously served that  
9 customer, then that is not problem for PREPA in  
10 that situation. Is that what you were saying?

11 A. So what I'm getting at -- and maybe just  
12 let's walk through an example because I don't  
13 want to confuse anybody. So there's scenario  
14 one: a customer leaves PREPA, leaves the POLR  
15 provider. The POLR provider no longer plans for  
16 that customer to be in their portfolio and they,  
17 in turn, provide a discount to their rates to  
18 that customer through the supply credit equal to  
19 the avoided cost of that capacity. They have  
20 given the customer the benefit of -- the  
21 departing customer -- the benefit of the energy  
22 saving of the capacity savings as an offload to  
23 the POLR provider's customer. It is only -- it  
24 is provided actually to the departing customer  
25 through the supply credit in a marginal capacity

1 payment. In that case, those marginal capacity  
2 payments are expected to exist through the life  
3 of a plant that is used in the capacity  
4 estimation.

5 If a customer then returns, it is most likely  
6 that the POLR provider would have to go and  
7 procure capacity. And they may procure that  
8 capacity from the provider that the customer  
9 went to, or they may incur that capacity from  
10 somebody else. But they incur that incremental  
11 capacity. And the customer -- and now the  
12 customer has received a benefit for avoided  
13 capacity that is no longer avoided. So that's  
14 the key issue here. And, even if...

15 And departure could occur for a couple of  
16 reasons. It could occur because the plant has  
17 failed, and the supplier is no longer able to  
18 supply. It could occur because the provider of  
19 last resort's rates are now lower than what the  
20 ESP can provide, and/or the customer is  
21 basically unhappy for whatever reason. So  
22 there's a multiple of reasons why that customer  
23 would return. And what happens is that the  
24 customer returns and, if they're placed back on  
25 the average rate, they get the benefit of the



1 portfolio for -- that the POLR provider has.  
2 And the incremental cost above -- that  
3 incremental cost that comes in, is borne by our  
4 customers.

5 So that's the challenge when you think about  
6 capacity in the context of Puerto Rico because  
7 there isn't a capacity market. In a lot of  
8 other direct access markets, there are -- month  
9 ahead, year ahead, or even three year ahead  
10 capacity markets that everybody is participating  
11 in. So when a customer comes and goes, those  
12 problems tend to go away because it's all -- the  
13 market is what the market is. So it's something  
14 to pay attention to with respect to Puerto Rico  
15 because that doesn't exist.

16 And my understanding is that there's going to  
17 be this competitive process for procuring  
18 energy. A lot of that energy that's going to be  
19 procured is going to be renewal in nature  
20 because of other reasons. And, therefore, the  
21 capacity obligation could be harmful to those  
22 Customers. The capacity obligation of a  
23 customer returning could be harmful to the  
24 customers that are currently -- and this is one  
25 of the reasons why you typically see indirect

1 access markets either a separate rate that the  
2 customer who returned has to go on, a commitment  
3 by that customer to stay with the POLR provider  
4 once they come back on, or some sort of a buy in  
5 back into the portfolio. So this is not an  
6 unusual mechanism to see to address this  
7 variation.

8 Q. Okay.

9 So, if I can boil it down, what I think I've  
10 heard you saying is that the problem for the  
11 customers who continue to be served by the POLR  
12 would potentially be that a customer that  
13 chooses a wheeling arrangement returns to the  
14 system and, when they return, the cost of the  
15 capacity that needs to be added by the POLR to  
16 serve that load is higher than the capacity  
17 cost -- than the average capacity cost,  
18 therefore, driving up average capacity cost for  
19 the customers who've stayed with the POLR. Did  
20 I get that right?

21 A. There is the potential for that. Or it  
22 just ends up being additional cost. It's  
23 just -- there's all -- and the problem is that  
24 the customer has received the credit of the  
25 savings that no longer exist, so that's part of

1 the challenge. Is that you've given these  
2 customers a discount on their -- or you've given  
3 them a supply credit that is supposed to  
4 represent the fact that these costs are avoided  
5 for a long time. And then the customer comes  
6 back, and now those costs are being incurred.  
7 So there's a mismatch there as well.

8 Q. When you say you assume that they would  
9 be -- the cost to be avoided for a long time, if  
10 a customer leaves the POLR for -- I'm not sure  
11 what you consider a short-term -- five or six  
12 years, and then returns. And for those five or  
13 six years the POLR does not need to replace  
14 aging plants or build renewals to meet the  
15 renewal requirement because its load is lower,  
16 and then the customer comes back, the savings in  
17 that five or six years has still occurred for  
18 the POLR, has it not?

19 A. It has to some degree. But remember that  
20 the savings is a levelized savings. So it's  
21 taking the average revenue requirement over a  
22 20, 30, 40-year period in levelizing that.

23 Q. So if the commission set up a system  
24 where the credit was based on not a 40-year  
25 period, but a much shorter period representing

1           the cost that can be saved over the next say 5  
2           years, than that would alleviate some of your  
3           concern with it?

4           A.    Yes. Well, what you're doing, basically,  
5           in that case is really time value of money. So  
6           the marginal cost savings would be quite small.  
7           So, if I have to make 100,000 or let's say  
8           1,000,000 dollars investment in a generation  
9           unit, if I invest in it in 2022, it's going to  
10          cost me a certain amount. If I delay that  
11          investment to 2025, I've saved the time value of  
12          that 1,000,000-dollar investment. But I still  
13          have the 1,000,000-dollar investment, so I would  
14          have to compute the avoided cost in a completely  
15          different way. I wouldn't compute it as the  
16          revenue -- the way we compute it today is we  
17          calculate the revenue requirement as if the  
18          capital was built. And here all we're saying is  
19          that we're going to still have that revenue  
20          requirement, it's just going to be delayed a few  
21          years. So it's basically time value of money of  
22          that capital investment. So it wouldn't be --  
23          so the avoided cost would most likely not be  
24          great.

25          Q.    Okay.

1 But you're saying there could be some for a  
2 shorter period of time, but it might not be as  
3 long as a 40-year avoided cost?

4 A. That's right.

5 Q. Okay. Thank you. That helps clarify  
6 what we've been talking about.

7 In Set 1, Question 6, Part E, in talking about  
8 the savings from shutting down plants if the  
9 POLR's load requirement declines, you say that  
10 if a unit is retired earlier, there is only cost  
11 savings if the plant is already fully  
12 depreciated. Now, it was my understanding that,  
13 if there are undepreciated costs that need to be  
14 paid off, then, whether the plant is operating  
15 or not, those costs would have to paid off,  
16 undepreciated capital costs. And so the savings  
17 are any new investment that you would make, or  
18 operation maintenance costs, refurbishments,  
19 that kind of thing. I'm having some difficulty  
20 seeing how depreciation affects avoided costs.  
21 Could you clarify that?

22 A. If a plant hasn't been fully depreciated,  
23 there's still a revenue requirement that  
24 persists even if the plant is not operating. So  
25 customers continue to pay for the plant even

1           though the plant is not operating.

2           Q.    Right.

3           A.    So you don't save those costs.

4           Q.    Right.

5           And, if it's fully depreciated, then you also  
6           don't save any of those costs because there are  
7           no costs.

8           A.    Correct.

9           Q.    Right.

10          So, whether a plant is fully depreciated or  
11          not, any remaining capital costs are not  
12          relevant to avoided cost. Is that right?

13          A.    Any remaining capital costs are not  
14          relevant to avoided cost? Yes. Any remaining  
15          capital costs that have not been depreciated  
16          would not be a cost savings.

17          Q.    Okay.

18          In Part F of that same response, you talk  
19          about looking at FEMA regulations regarding the  
20          avoidability of costs. Did you have any  
21          particular FEMA regulations in mind there? And  
22          I'm not asking for the numbers of regulations,  
23          but the kind of things that FEMA would regulate  
24          that would affect whether shutting down a plant  
25          or not building new plant cost would be

1           **avoidable.**

2           A.     Certainly. So what we're referring to  
3           here is the fact that there has been some FEMA  
4           grant funds available to restore plants. From  
5           Puerto Rico's perspective, that money is capital  
6           infused into Puerto Rico from the federal  
7           government. By taking a plant that you planned  
8           to restore or refurbish using the FEMA grant  
9           money, doesn't really create a savings to Puerto  
10          Rico; it just means that that capital infusion  
11          would not occur. And that's what we're trying  
12          to emphasize here.

13          Q.     And your answer is based on the  
14          assumption that the -- if PREPA has been hoping  
15          or expecting that FEMA would pay a certain  
16          amount of money towards the refurbishment of a  
17          particular plant and that particular plant were  
18          to be retired rather than refurbished, that FEMA  
19          would simply keep the money and not make it  
20          available for any other resilience or  
21          rehabilitation project in Puerto Rico. Is that  
22          right?

23          A.     The understanding is that FEMA -- that  
24          PREPA -- the receiving entity of the grant money  
25          does not have unilateral authority to decide how

1 to spend that money. FEMA has a say. And so  
2 there is an expectation under the FEMA rules  
3 that there would -- that if a plant is retired  
4 rather than restored, those -- you can't  
5 automatically assume that that grant money can  
6 be used for something else.

7 Q. I understand that. But obviously, it has  
8 to fit the FEMA regulation.

9 So, when you're talking about examining FEMA  
10 regulations, are you saying you would want to be  
11 sure that whatever money was being freed up by  
12 not rehabilitating a plant would be available in  
13 Puerto Rico for some other purpose?

14 A. Right. In other words, that those --  
15 that by retiring that plant, you actually avoid  
16 those costs. It's not just that -- because the  
17 funds are designed to -- the funds can be  
18 reallocated.

19 Q. Thank you. That's helpful.

20 In Part G of the same response, you talk about  
21 avoiding replacement capacity, not -- that  
22 voiding capacity replacement would not reduce  
23 long-term costs.

24 A. I'm sorry. Which one?

25 Q. This is Part G.



1 A. Okay.

2 Q. And I'm wondering why you're saying that  
3 avoiding replacing capacity would not reduce  
4 long-term costs.

5 A. So, life-cycle replacement costs are not  
6 part of the marginal cost because marginal cost  
7 is creating that linkage between needed load and  
8 meeting that with incremental capacity. Life-  
9 cycle replacement exists to maintain the  
10 availability of all plants for all customers.  
11 And so, when you're doing your integrated  
12 resource planning process, you're looking at  
13 plant replacements along with new plant built.  
14 And so those life-cycle costs are going to --  
15 the life-cycle replacement cost are integrated  
16 into the IRP. The decision making around those  
17 life-cycle replacement costs are integrated into  
18 the IRP.

19 If load is lower, there is a potential that a  
20 plant would then be chosen to be retired. But,  
21 again, that's sort of a hypothetical in a cost  
22 of service. As I mentioned before, cost-of-  
23 service studies are a moment in time with a  
24 forecast. And so, to the extent that those  
25 types of decisions and anticipated load

1 departures are integrated in the IRP, then they  
2 are integrated into the cost of service. So  
3 that's what we're trying to say, is that just  
4 because load depart doesn't mean that you avoid  
5 a life-cycle replacement cost necessarily.

6 Q. So, if I understand you correctly, what  
7 you're saying is if you are in a situation where  
8 you're looking at the possibility of needing to  
9 add 100-megabyte unit because of load growth,  
10 then that 100-megabyte unit is an avoidable  
11 cost; it's a marginal cost. But if you can  
12 avoid replacing an existing 100-megabyte unit  
13 with a new one at the end of that unit's  
14 reliable operating life, then you're -- if load  
15 decreases, then you're saying that's not a  
16 marginal or avoidable cost?

17 A. I'm saying it's not as cut and dry. It  
18 depends on what actually is in the plan. So,  
19 right now, we have not been able to identify any  
20 costs that are related to meeting or that are  
21 related to meeting incremental load. In other  
22 words, there's a load decline forecast in the  
23 IRP. And only if load declines at a greater  
24 rate than that, will you have life-cycle cost  
25 that are not already incorporated in the IRP

1 and, therefore, savings.

2 Q. So you're in a situation where the IRP  
3 reflects the cost of meeting a particular level  
4 of load going forward, which in this case is  
5 declining. And if load were to decrease more  
6 slowly because of some load growth by some class  
7 of customers or some particular customer, then  
8 there'll be a marginal or avoided cost of  
9 retaining some of that generation or adding  
10 replacement generation. So that's an avoided  
11 cost. Is that what you're saying?

12 A. What I'm saying is -- what we're talking  
13 about here are hypothetical scenarios, right?  
14 And the going back to what are cost-of-service  
15 study does is it takes an expected case, and it  
16 says, "Given this expected case, this is what  
17 our costs are going to be. And, therefore, this  
18 is how you would allocate those costs." And so  
19 what I'm saying here is that any anticipated  
20 life-cycle replacement costs that are avoided,  
21 are already baked into the analysis. There's no  
22 incremental avoided cost.

23 Q. There can't be any? You can't save any  
24 cost that are in the IRP?

25 A. I'm not an expert on the IRP, so I don't

1 know where --

2 Q. I'm just talking about -- a well done  
3 IRP, however you would do it, if it's in the  
4 IRP, then you assume that cost cannot be  
5 avoided. Is that what you're saying?

6 A. I'm saying it's planned. So it's not  
7 something you should give somebody a credit for  
8 doing incremental to what's already planned.  
9 So, again, what we're talking about doing here  
10 is creating a rate that gives customers a credit  
11 for leaving the system because the system would  
12 benefit from that customer leaving. And so the  
13 only way you can do that is a two-step process,  
14 which is first, determining what marginal costs  
15 are. And then, secondly, determine whether or  
16 not those marginal costs are avoided by the  
17 customer leaving. So, in the first case, the  
18 marginal cost, I'm saying those estimates of the  
19 expected marginal cost are part of the cost-of-  
20 service study.

21 The avoidability of those costs -- that's one  
22 of the things that we were just talking about  
23 earlier -- is, "Are those costs truly avoided?"  
24 And that's why we had the fairly long  
25 conversation about the customer returning

1 because the costs aren't avoided. So, while I  
2 would agree that there's savings from life-cycle  
3 replacement cost if a system doesn't need to do  
4 life-cycle replacements, that's an IRP question.  
5 And we received the cost-of-service study, and  
6 we compute the cost-of-service based off of that  
7 estimated forecast. I've not seen marginal  
8 life-cycle replacement costs incorporated into  
9 avoided costs calculations. I've not seen that  
10 in evaluation of energy efficiency programs, for  
11 example.

12 Q. So it's your testimony that you've never  
13 seen the cost of any replacement generation  
14 counted as being an avoided cost for DSM  
15 purposes or for marginal costs for rate design  
16 purposes? That if it's a replacement for a  
17 retiring unit, it's not considered marginal or  
18 avoided in any study you've ever seen?

19 A. What I usually see are an estimate of the  
20 forecasted capacity cost that is the estimate of  
21 what the utility would have to spend to serve an  
22 incremental kilowatt hour. And that is the cost  
23 that's used as an avoided cost number. There're  
24 many ways to calculate it, but that is,  
25 generally speaking, how it is done. And so

1 to --

2 Q. Can I just ask? When you say  
3 incremental, do you mean incremental over the  
4 load today or incremental compared to the  
5 forecast that's in the IRP?

6 A. It is the -- avoided costs are typically  
7 based off of marginal costs, which are the  
8 incremental costs the utility will incur for  
9 creating the capacity, in the context of  
10 capacity, to accommodate an incremental increase  
11 in capacity. And that's normally how it is  
12 done. Life-cycle replacement costs -- the way  
13 you can think about it is, if you're doing life-  
14 cycle replacement costs, if they are -- would  
15 only play in if they are much cheaper than the  
16 incre -- you wouldn't get a cost savings unless  
17 they're much cheaper.

18 So there's always an economic decision being  
19 made in the IRP process that says, "Should I  
20 replace this kilowatt? Should I replace this  
21 plant, or should I build a new plant?" That  
22 decision is being made in the IRP process. And  
23 so, whatever the IRP comes back and says,  
24 "Here's what our marginal costs are. Here's  
25 what we plan to spend for whatever reason. And

1 here's the load growth that goes with that  
2 spend," then that is what you compute the  
3 avoided cost on.

4 Q. Okay.

5 I think I understand what you're saying about  
6 you start with the costs in the IRP. But then  
7 you're limiting the load that's associated with  
8 those costs to growth of load from today's  
9 level. And that reduction of load from today's  
10 level, even if it avoids a cost that's in the  
11 IRP, you would not consider that an avoided  
12 cost. Is that what you're saying?

13 A. Because it's not planned. Yes, because  
14 it's not planned to be avoided. So --

15 Q. Well, the new additions are not planned  
16 to be avoided either. There's a plan to build  
17 100-megabyte unit in 2025; that's planned. It's  
18 not planned to be avoided. But you're saying  
19 that could be avoidable but if it's meeting load  
20 growth, anticipated load growth. But if it's  
21 replacing an existing unit which need to be  
22 replaced because of existing load, then it's not  
23 avoidable by reducing that existing load.

24 MS. MERCADO: Attorney Mercado for  
25 LUMA. The question began being

1 argumentative, and it's also a compound  
2 question. I would (audio skip) as posed.

3 HEARING EXAMINER SEILHAMER: Can you  
4 divide the question?

5 MR. CHERNICK: I think the best thing  
6 to do would just be to leave this here. I  
7 think we've probably gotten as far as we  
8 can. Okay.

9 BY MR. CHERNICK:

10 **Q. In Set 1, Question 14, Part C --**

11 MS. MERCADO: I'm sorry to interject,  
12 Mister Chernick.

13 MR. CHERNICK: Sure.

14 MS. MERCADO: I would like to request  
15 that the latter comment by Mister Chernick  
16 be stricken from the record, that we  
17 have -- when he said, "We have gotten as  
18 far as we can." I think that was a remark  
19 that shouldn't be on the record. It wasn't  
20 a question.

21 HEARING EXAMINER SEILHAMER: That's  
22 fine. It's irrelevant.

23 Go ahead.

24 MR. CHERNICK: Okay.

25 ///



1 BY MR. CHERNICK:

2 Q. In the response to Question 14, Part C,  
3 you mentioned that in many jurisdictions with  
4 significant renewals and distributed resources  
5 capacity needs are driven more by ramping  
6 capabilities. And that sounds like it would be  
7 something that would be relevant to Puerto Rico  
8 in coming years given the bureau's expressed  
9 intention to increase renewable penetrations.  
10 Can you give us an example or two of those  
11 jurisdictions that you're talking about?

12 A. So I'm on Question 14, but which subpart  
13 are you?

14 Q. Part C, I believe.

15 A. So the question was: "Are all generation  
16 capacity investment costs are incurred to meet  
17 system coincident peak loads? If so, please  
18 explain whether and why PREPA would ever expend  
19 additional investment costs for capacity." And  
20 I said -- my answer was: "Generally, and yes.  
21 As a region adopts more renewal resources" -- as  
22 you pointed out, expected to happen in Puerto  
23 Rico -- "there must run DERs. The fact that  
24 generation capacity may occur in system..."

25 I believe, what the question was, was, "Can

1           you incur costs that are not related to  
2           coincident peak?" And the answer is, "In places  
3           where we see a fair amount of generation that  
4           behaves like negative load, the answer to that  
5           changes." So what happens in jurisdictions --  
6           and I will tell you that these -- you asked for  
7           examples of those jurisdictions; they would be  
8           Hawaii, California, Arizona, to name a few --  
9           where you have a significant amount of  
10          generation occurring that is -- as we talked  
11          about earlier, I'll use the term as generated --  
12          that basically a renewable -- a generation  
13          resource that appears and cannot be curtailed or  
14          dispatched, it appears and -- so load could be  
15          happening, customer consumption could be  
16          happening during times when the transmission  
17          system is peaking, but generation is not  
18          necessarily dispatching at that same -- to that  
19          same curve.

20           And, in fact, as you start to have more and  
21           more of these types of resources on a grid, you  
22           get what is commonly referred to as the duck  
23           curve, which means that what you used to have a  
24           fairly gradual incline over the course of the  
25           day, it peaks in the afternoon, and then it

1 slowly declines. With all this renewable  
2 resource that sort of happens in the middle of  
3 the day, we now see a peak happening in the  
4 morning, a quick decline happening as solar  
5 energy is available, and then a very steep  
6 incline to accommodate the transition of  
7 generation that is renewable and running as  
8 needed versus a dispatch. And so that's what  
9 I'm referring to, is that that's not necessarily  
10 coincident peak oriented, it's responding to the  
11 system that is absorbing all these renewables in  
12 order to make sure of reliability.

13 Q. Okay.

14 What I'm trying to do here is just find out  
15 how you see that affecting the capacity  
16 allocator which would affect the cost allocation  
17 and possibly also allocation of any capacity  
18 credits that are allowed. So, if you wind up in  
19 a situation where ramping is driving the need  
20 for capacity, how do you see that affecting  
21 capacity allocators? Is that something that the  
22 bureau should be thinking about in setting rates  
23 at this point, and specifically the wheeling  
24 rate?

25 A. So, in response to item C -- there was a

1 sub-question I asking what would Guidehouse's  
2 approach be and how would you change the  
3 classification generation costs. And there we  
4 made the recommendation that you ultimately  
5 should be thinking about cost allocation based  
6 off of net load. And what net load is you take  
7 the total system load, and you subtract all of  
8 this load that I've been describing. So you  
9 subtract out renewables. Some jurisdictions,  
10 they even subtract out nuclear. And that is the  
11 curve that plants are dispatched against. And  
12 so, therefore, that is the curve that dictates  
13 what marginal energy costs are.

14 And what we're talking about here is  
15 allocation of marginal energy costs. So we  
16 would recommend that, over time, when this sort  
17 of information is available, when it becomes  
18 problematic for Puerto Rico as well -- there's  
19 not a ton of solar right now that really drives  
20 the need for this; but in other jurisdictions  
21 they're well past that point. So we would  
22 recommend that you start thinking about using  
23 net load as your driver of cost. Every cost-of-  
24 service study, you have a cost, and you have a  
25 driver of the cost. We would recommend moving

1 to net load to address this issue once, of  
2 course, you can calculate it on hourly basis.

3 And we do recognize the need that cost-of-  
4 service studies do need to be thinking about  
5 ramping. And so, to the extent that a customer  
6 is self-supplying, for example, they are  
7 creating the need for ramping because they're  
8 self-supplying with a renewable resource, they  
9 are reducing that net load, and then they're  
10 requiring the system to accommodate them when  
11 their generation unit isn't operating. So we  
12 recognize that -- and this is fairly new. I'm  
13 not sure of a jurisdiction as actually  
14 explicitly calculating marginal ramping costs.

15 In my opinion, and this was a question about  
16 Guidehouse's opinion, cost-of-service studies  
17 need to evolve to that. But, again, I don't  
18 think it's immediately an issue. So we did not  
19 do that calculation here. And typically, things  
20 like the cost of storage would be one option  
21 that one could consider to adapt to that.

22 Q. Okay.

23 So, if I could summarize, you are suggesting  
24 that this is something that the bureau should  
25 have on its longer-term agenda, but that it

1 doesn't really need to be dealt with in  
2 unbundling or wheeling rates at this time?

3 A. Yes. I think it's a further unbundling  
4 of the generation's side. And it could result  
5 in additional avoided costs, or it could result  
6 in additional charges to certain types of  
7 customers. If the customer is creating that  
8 cost and creating that need for ramping, then  
9 that customer should pay for it.

10 Q. Okay.

11 I'd like to switch to a different subject at  
12 this point. And that is, in a couple of places,  
13 your responses indicate that you requested data  
14 from PREPA related to the IRP and did not  
15 receive them. It was not available, or you  
16 didn't get a response. Do you understand what  
17 happened there, whether PREPA has lost the data  
18 and methodologies from the IRP and just can't  
19 access them, or whether they just weren't  
20 cooperating with you, or what the underlying  
21 problem was? Because it seems like there may be  
22 something the bureau needs to address here.

23 MS. MERCADO: This is Attorney Mercado  
24 for LUMA. In order for -- in order to know  
25 the relevance of this line of questions, I

1 would ask that the question be directly  
2 specifically -- directed to whatever data  
3 particularly Mister Chernick is referring  
4 to and allowing the witness to review  
5 whatever comment was made about data. And  
6 then I would reserve the right to object  
7 the relevance when it arrives.

8 MR. CHERNICK: Okay.

9 HEARING EXAMINER SEILHAMER: Mister  
10 Chernick, can you comply with the request?

11 MR. CHERNICK: Sure.

12 BY MR. CHERNICK:

13 Q. You could look at Set 2, Question 5, the  
14 second paragraph says: "Guidehouse did request  
15 plant data from the Aurora model, but it was not  
16 available." And in Set 3 --

17 A. I'm sorry, Mister Chernick. Set 2 being  
18 your Set 2, or --

19 Q. Yes.

20 A. Okay.

21 Q. Our Set 2. I'm sorry.

22 A. And I'm sorry. I was -- I wasn't keeping  
23 up with you.

24 Q. Yes.

25 A. Set 2 --

1 Q. The numbering system is complicated here.

2 A. Yes. Which question again, please?

3 Q. Question 5. The first sentence of the  
4 second paragraph in the response.

5 A. Okay. Okay. Yes.

6 Q. And then in our Set 3, which would be Set  
7 4 overall --

8 MS. MERCADO: Excuse me. I'm sorry to  
9 interrupt. If we could deal with that  
10 first before we move to a second one, for  
11 the record to be clear. I'm sorry.  
12 Thanks.

13 HEARING EXAMINER SEILHAMER: Sure. No  
14 problem.

15 Can you answer the question, Miss  
16 Everett?

17 THE WITNESS: Yes. So yes, we did  
18 request the plant data. It was not  
19 available. My understanding, it certainly  
20 was not because PREPA was uncooperative. I  
21 believe the Aurora run was run by a  
22 consultant, and the consultant, through  
23 practice or otherwise, doesn't provide that  
24 detail dispatch information. And that's  
25 not altogether uncommon because sometimes



1 the models that these consultants use are  
2 proprietary.

3 So that's why you don't get -- what we  
4 did get was all of the hourly marginal  
5 costs, I believe, for four years, which is  
6 included in our worktable. So this was, I  
7 believe, an issue with the contractual  
8 agreements going on between PREPA and the  
9 consultant that provided the Aurora model,  
10 which, for the record, was not Guidehouse.

11 BY MR. CHERNICK:

12 Q. Yes.

13 And then in our Set 3, which is Set 4 overall,  
14 Question 15: "Guidehouse requested load data,  
15 but did not receive the reference source file  
16 from PREPA."

17 A. Question 15 you said?

18 Q. Yes.

19 A. Correct. What we received was the table  
20 that we've included in the workpapers. But we  
21 never did receive the detail behind the IRP. I  
22 don't know if that data is available in the IRP.  
23 So we did not receive that data, yes. That's  
24 correct.

25 Q. Okay.

1           So is the issue there that you asked for data,  
2           and you got a certain level of data, and you  
3           didn't ask for the backup and that's why you  
4           didn't see it? Is that what you're saying?

5           A. We asked for the load data, we asked  
6           to -- we actually asked specifically for hourly  
7           load data by class, but we don't -- it does not  
8           appear that PREPA has that data. Honestly, not  
9           a lot of utilities do, unless they are full AMI  
10          implemented.

11          And I want to be clear about where this data  
12          is used and why it's relevant. So the data that  
13          we're talking about here is the load data that  
14          is used to compute a peak and non-coincident  
15          peak estimate by customer class. So what we  
16          had, we actually felt was sufficient to meet the  
17          needs of determining what the coincident and  
18          non-coincident demands were. So what we did was  
19          we had the system peak, and we have factors that  
20          tell us whether or not a customer class  
21          corresponds with that system peak. And that's  
22          the data that we used. And we had a similar  
23          number for non-coincident peak.

24          So we were able to use the table that we  
25          mentioned here to compute coincident and non-

1 coincident peaks that are then applicable to the  
2 cost-of-service. So we didn't make anything up.  
3 We didn't shortcut anything. We just used the  
4 data that we had. It was a reasonable way of  
5 coming up with those coincident and non-  
6 coincident peaks that we used for allocation  
7 purposes.

8 Q. Yes. Okay.

9 I understand what you're saying there, and I  
10 was just trying to understand what the data  
11 flow -- or breakdown in the data flow was. And  
12 it sounds like you're saying that you asked for  
13 some data, and you saw that what you got back  
14 was good enough for your purposes, sufficiently  
15 detailed, and you didn't press the issue of  
16 whether there was more detail behind that. Is  
17 that correct? It just didn't matter to you?

18 A. It was not relevant for the cost-of-  
19 service.

20 Q. Right.

21 A. I will tell you that, as a rate designer,  
22 if I was actually designing distribution level  
23 rates, for example, which we did not do for this  
24 study, I would've pushed harder to get at least  
25 the sampling of data, hourly data. But that

1           wasn't -- but for the cost-of-service study, it  
2           was not needed. What we got was sufficient for  
3           the cost-of-service study.

4           Q.    Thank you.

5           And I had, I think, just one more short line  
6           of questions. And that is from our Set 3, which  
7           would be Set 4 overall, Question 4. You say  
8           something about marginal generation units that  
9           confused me a little bit, and I think maybe  
10          there's some terminology that I'm not following.  
11          You say that, "The generator that is curtailed  
12          maybe a lower cost generator than the marginal  
13          unit because the marginal unit cannot be  
14          curtailed. This is true with certain plant  
15          types that are difficult to cycle or ramp."

16          And what I'm wondering, is what marginal unit  
17          means to you in that context if it's not the  
18          unit that would be turn up or down in response  
19          to load or to the generation available from  
20          other units?

21                MS. MERCADO: This is Attorney Mercado  
22                for the record. I just want to clarify  
23                which question you're referencing to. I  
24                haven't been able to identify it.

25                MR. CHERNICK: This is in our Set 3,

1 Set 4 overall, Question -- I believe it's  
2 Question 4. Let me see if I wrote that  
3 down right.

4 MR. LEBEL: I think it's Question 13.

5 MR. CHERNICK: It's entirely possible.  
6 There're a lot of numbers in all of these  
7 headings, and I sometimes wrote down the  
8 wrong one. Yes, it's Question 13.

9 MS. MERCADO: Thank you.

10 MR. CHERNICK: Thank you, Mark.

11 THE WITNESS: Okay.

12 BY MR. CHERNICK:

13 Q. So it's Set 4, Question 13.

14 A. Yes. Thank you. I'm there now.

15 Q. Okay.

16 So, if you see the language about the unit  
17 that's curtailed may be lower cost than the  
18 marginal unit -- and my question was, what do  
19 you mean by marginal unit? Is the marginal unit  
20 the unit that would be turned up or down?

21 A. So what we're trying to describe here is  
22 the situation typically referred to as  
23 overgeneration, where there is a significant  
24 amount of generation that is needed or --  
25 there's a certain amount of generation that's

1 needed to follow load, but load is not as great  
2 as the amount of generation available. And so  
3 you end up backing down a unit that is farther  
4 down the stack because it's the only one that  
5 you actually can curtail or control.

6 The opposite can happen as well. So remember,  
7 as we were talking about the ramping. Sometimes  
8 when there's an abundance of renewal power, you  
9 have a situation where you actually have to  
10 curtail renewable power because other plants  
11 need to run for operational purposes. And so  
12 there's a lot of complexities in dispatching,  
13 particularly when you get on that margin  
14 where -- of low loads. So it's really easy when  
15 plants -- when you're dispatching on the high  
16 end of the supply curve and your units are  
17 incrementally dispatching and turning on and off  
18 to respond to load.

19 When you get lower into that supply stack  
20 where you have resources that are must run,  
21 maybe you can't curtail. Coal plants, a lot of  
22 times you can only back them down so much  
23 without turning them off. A lot of plants don't  
24 like being ramped up and down. And so what you  
25 do is you might ramp down something farther down

1 the supply stack. So if you have a hydroplant,  
2 for example, that can be dispatched, you might  
3 back that hydroplant down even though it's  
4 economic to dispatch because you have to keep a  
5 coal plant running. So those are the types of  
6 dynamics that you have to consider at those low  
7 load periods or in times of excess supply.

8 And the reason it's relevant, is because when  
9 an ESP is providing even more electricity than  
10 the customer is consuming, that ESP is  
11 contributing to that phenomenon, that that  
12 supply is coming in to the POLR's system, into  
13 LUMA's system, and they're having to respond to  
14 that extra generation. They don't get to  
15 control that generator. They don't get to say,  
16 "Sorry, we don't want your energy." And so  
17 that's why you end up with a problem there.

18 Q. Okay.

19 So the problem can arise, among other things,  
20 because you have a take-or-pay contract in which  
21 you don't have the right to curtail a generator  
22 that's actually expensive to run. Is that --

23 A. Correct. Or you would even have a  
24 situation where, because it's take-or-pay, you  
25 still pay. Even if you are able to curtail the

1 kilowatt hour, you still pay for the kilowatt  
2 hour. And that cost of that kilowatt hour could  
3 be fairly high in the resource stack relative to  
4 the cost of the resources you're running.

5 Q. Okay.

6 That sounds like a useful caution about take-  
7 or-pay contracts for units with marginal  
8 operating costs.

9 Actually, I did find one more question that I  
10 wanted to ask about. And that was in Set 2,  
11 Question 7. And this is something you talked to  
12 Mister LeBel about at some length, but -- this  
13 is a question you talk to him about. But my  
14 question is actually from a different part of  
15 your response. And that is from the first  
16 paragraph, where you say that you had a problem  
17 with using, or you have concerns about using  
18 perhaps, the FCA Quarterly Filings because the  
19 data is quarterly and not annual. Could that  
20 concern be resolved by just using four quarterly  
21 FCA filings? Would that be -- would that give  
22 you the annual data that you're looking for?

23 A. I think -- yes, what we're cautioning  
24 about -- and remember that the numbers that are  
25 provided in these tables are indicative because



1 we're basically demonstrating how you would do  
2 the calculation given what the FCA and the PPCA  
3 are. And don't want people to think that a 10  
4 cent a kilowatt hour cost in fiscal year quarter  
5 one 2022 is necessarily representative of what  
6 that cost would be year-round. So we tried to  
7 do that by looking at 2017.

8 I think ideally what you would want to do is  
9 you would want to update the supply credit in  
10 tandem with the FCA and the PPCA. But if you  
11 wanted a hypothetical, you certainly could look  
12 at the past four quarters, I suppose, of -- but,  
13 again, that's more -- it's an indicative rate.  
14 So it was just more to be cautionary, that  
15 people shouldn't expect it to always be 10  
16 cents. It could be 7. And particularly because  
17 generation costs are different times a year --  
18 average costs are different by season or by  
19 quarter.

20 Q. Right.

21 They can vary by quarter. They can vary from  
22 year to year as well.

23 A. Correct.

24 Q. Right.

25 Are you aware of whether there're any

1       projections for an entire fiscal year in the  
2       fuel and purchase power adjustment filings,  
3       whether any of those have --

4       A.   My understanding is that they are a  
5       quarter -- when that filing is done, it's a  
6       quarter ahead look.

7       Q.   Okay. All right.

8       I think that completes my questions. Thank  
9       you very much.

10      A.   May I ask a clarifying question? You  
11      made a statement about caution on take-or-pay  
12      contracts. Is that something that's on the  
13      record or -- and if so, can I respond? Or how  
14      does that work?

15      Q.   Well, I'd be happy to have you clarify my  
16      assumption about what you were saying.

17      A.   Okay. So, I believe what you stated was  
18      that take-or-pay contracts are problematic  
19      because of the situation we just -- we were  
20      walking through. Take-or-pay contracts are an  
21      overall structured contract and eliminating  
22      take-or-pay may result in other costs being  
23      incurred in different ways. So I just wanted to  
24      make that point, that take-or-pay contracts  
25      aren't bad. They are a way of managing costs.

1 So it's a whole -- I just didn't want to leave  
2 the impression that take-or-pay -- that we were  
3 not saying that take-or-pay contracts are bad.

4 Q. Okay.

5 No, I certainly understood that you were just  
6 saying that take-or-pay contracts can produce  
7 that kind of effect. And it seems like the  
8 implication would be that it's something that  
9 the bureau should think about in reviewing take-  
10 or-pay contracts. But yes, it certainly --  
11 there're lots of situations in life where we  
12 have to accept something that isn't ideal  
13 because it's part of a package that is the best  
14 alternative. Thank you very much.

15 MS. MERCADO: Attorney Mercado for the  
16 record. I'll appreciate the last exchange  
17 just to leave it like a Mister Chernick  
18 issued statement that Miss Everett didn't  
19 verbalize an answer to the last -- the  
20 latter exchange.

21 HEARING EXAMINER SEILHAMER: Before we  
22 proceed, does any of the commissioners have  
23 any questions?

24 MS. UGARTE: Not from my part.

25 MR. RIVERA: Not from my part.

1 HEARING EXAMINER SEILHAMER: Okay.

2 In terms of the intervenors, the  
3 Independent Consumer Protection Office and  
4 Cooperativa Hidroeléctrica de la Montaña,  
5 do you guys have questions for the witness?

6 MR. NIEVES: Yes. We have. Ramón  
7 Luis Nieves for the record for Cooperativa  
8 Hidroeléctrica de la Montaña.

9 HEARING EXAMINER SEILHAMER: Okay.

10 MR. NIEVES: I guess my camera is --  
11 oh, here we are.

12 HEARING EXAMINER SEILHAMER: Yes.  
13 You're good.

14 What about the Independent Consumer  
15 Protection Office?

16 MR. VÁZQUEZ: Yes. This is Attorney  
17 Pedro Vázquez on behalf of the ICPO. We do  
18 have some questions to make to the witness.

19 HEARING EXAMINER SEILHAMER: Okay.

20 I'm going to ask the parties -- since  
21 it's going to be close to 11:30 in the  
22 morning, I don't want to cut into the  
23 questions from either intervenor. So do  
24 you think it's appropriate to recess and be  
25 back at 1:00? And also, the witness has

1           been there for a little bit over two hours  
2           now. So how do you guys prefer to proceed?  
3           Because we have a scheduled recess at noon.  
4           So I would like to know the extent of your  
5           questions, how long you think you're going  
6           to take, in order to make this decision.

7           MR. VÁZQUEZ: This is Attorney Pedro  
8           Vázquez on behalf of the ICPO. From our  
9           part, there are not a lot of questions to  
10          be made. Still, we have no problem to  
11          leave to after the noon break. So whatever  
12          the examiner determines is best suited for  
13          the proceedings.

14          HEARING EXAMINER SEILHAMER: Mister  
15          Nieves?

16          MR. NIEVES: Regarding the questions  
17          of Cooperativa Hidroeléctrica de la  
18          Montaña, we're in the same position. We  
19          have several questions. But, if you decide  
20          to take a break right now and we can come  
21          back...

22          HEARING EXAMINER SEILHAMER: Okay.

23          Well, I'm going to defer to the  
24          witness who's the one who has to answer the  
25          questions and has been answering for the

1 past two and a half hours. What's your  
2 preference, Miss Everett?

3 THE WITNESS: I'm fine recessing now  
4 and taking up at 1:00.

5 HEARING EXAMINER SEILHAMER: One  
6 o'clock? Okay.

7 Then we'll recess until 1:00 in the  
8 afternoon. And then we'll give the  
9 opportunity to both intervenors and also to  
10 PREPA or LUMA if they have questions to  
11 their own witness. So we'll be back then  
12 at 1:00 in the afternoon.

13 MR. NIEVES: Thank you.

14 MS. MERCADO: Thank you.

15 MS. UGARTE: Thank you.

16 MS. MERCADO: Have a good lunch.

17 (Whereupon, at 11:30 AM a recess for  
18 lunch transpires.)  
19  
20  
21  
22  
23  
24  
25

1 (AFTERNOON SESSION)

2 HEARING EXAMINER SEILHAMER: Hi. Good  
3 afternoon. Ms. Everett, are you available?

4 THE WITNESS: Yes, I am.

5 HEARING EXAMINER SEILHAMER: Attorney  
6 Vazquez.

7 MR. VAZQUEZ: Yes, we are here.

8 HEARING EXAMINER SEILHAMER: Attorney  
9 Nieves.

10 Attorney Nieves, I see him now.

11 MR. NIEVES: Yes.

12 HEARING EXAMINER SEILHAMER: We are  
13 going to resume this evidentiary hearing  
14 for case number NEPR-AP-2018-0004. We're  
15 going to allow Mr. Vazquez to start his  
16 line of questions to Ms. Everett.

17 So, Mr. Vazquez, you can go ahead and  
18 start.

19 MR VAZQUEZ: Thank you very much.

20 EXAMINATION

21 BY MR. VAZQUEZ:

22 Q. Good afternoon, Ms. Everett.

23 A. Good afternoon.

24 Q. For the question I'm going to make, we're  
25 going to address our request of information. I

1 will start with our question number one. Do you  
2 have it with you?

3 A. I do.

4 Q. Okay. Perfect.

5 Our first question, basically, we want to know  
6 what was or what is the criteria in order to  
7 determine whether a generating source or a unit  
8 is considerable -- is considered to be  
9 dispatchable or non-dispatchable.

10 A. Certainly. So, dispatchable plants are  
11 those plants that can be signaled to turn up or  
12 turn down their electricity generation at any  
13 moment in time. Typically, those plants are  
14 plants that run with natural gas or fuel oil or  
15 hydroplants, but I'm not sure exactly how  
16 dispatchable some of the hydroplants are.

17 And so those plants tend to be in the thermal  
18 category of the peaking units, which is why we  
19 categorize them as dispatchable. Baseload units  
20 typically are not dispatched or ramped up and  
21 down within the day, to respond to load. These  
22 plants typically will have a fair amount of  
23 rigidity in their ability to be able to flex  
24 their generation amount within the day. And  
25 those are in the baseload.



1           And then, as we mentioned earlier in my  
2           testimony today, that the renewable, as  
3           generated, are basically units that are running  
4           when the fuel is available, such as sun and  
5           water.

6           **Q.    Can a baseload unit could be partially**  
7           **dispatchable?**

8           A.    Some base units can adjust. I don't know  
9           exactly how flexible PREPA's individual baseload  
10          units are. But some can be -- it's very  
11          difficult though, and particularly, you also  
12          have to combine this with the fact that some of  
13          these plants are under purchase power  
14          agreements. And sometimes, purchase power  
15          agreements are -- the dispatchability of those  
16          plants may not be in the control of the buyer,  
17          but rather in control of the seller. So it's  
18          unusual to see baseloads of a plant ramping to  
19          meet load. And therefore, that's why we deem  
20          them non-dispatchable.

21          **Q.    Thank you.**

22          **Considering the coming up renewable generation**  
23          **sources specified by PREPA in the first and**  
24          **second request for proposal terms, are they**  
25          **considered non-dispatchable or dispatchable?**

1           A. Renewables are typically considered non-  
2 dispatchable, unless a contract specifically  
3 allows for curtailment. A lot of times, again,  
4 there's the connectivity between whether or not  
5 the plant can physically be turned on and off,  
6 versus the plant financially is turned on and  
7 off. And renewable contracts are typically  
8 either per kilowatt hour or a per kilowatt hour  
9 with a demand charge.

10           So renewables can be curtailed. You have to  
11 specifically, you know, put in instrumentation  
12 to allow a plant to be curtailed. So it's not  
13 so much dispatchable as curtailable, meaning  
14 that you can turn it off, but you can't  
15 necessarily use it to meet load and to follow  
16 load. And therefore, renewables are not also on  
17 the margin, meaning that they are not the plant  
18 that the system operator is relying on,  
19 typically, to load follow.

20           And, so, the flexibility of a plant is more  
21 challenging that way. And I believe, you know,  
22 as part of the tranches that are being  
23 considered, there's also some storage tranches  
24 that are being included in the procurement plan,  
25 precisely for the ability to be able to store

1 and then have resources that can respond to load  
2 and load follow.

3 Q. Basically, my follow-up question was  
4 regarding, what about when they have varied  
5 storage or energy storage?

6 A. When there's energy storage, you're  
7 basically taking that energy that you would  
8 normally either just curtail or back down some  
9 other units instead of the renewable, you take  
10 that energy and you store it, and then you use  
11 it for -- at later times. And the batteries are  
12 usually fairly responsive, and therefore, can do  
13 some forms of load following.

14 Q. Regarding our line of questioning about  
15 the dispatchable or non-dispatchable, as part of  
16 our first request of information, the supply  
17 stack was redo -- was redone, and the numbers  
18 changed. And it also affected at the end -- I  
19 believe so -- the numbers, the calculations that  
20 are made. Is there still more work to be done  
21 to supply stack? Can still it -- can it  
22 change -- still change?

23 A. Excuse me.

24 Yes, supply stack can change as --  
25 particularly as renewables are brought into the

1 portfolio through these bidding mechanisms. So  
2 the supply stack could change over time.

3 Q. So -- how important or how much is going  
4 to -- that supply stack changes will affect the  
5 values in order to determine an unbundling rate?

6 A. So what will typically happen, especially  
7 as there's plans to bring in more and more  
8 renewable, that renewable section, the supply  
9 stack increases, pushing out some of those  
10 higher cost units farther and farther. So it  
11 generally tends to happen on a marginal energy  
12 cost basis, with the implementation of  
13 renewables, its marginal energy costs come down,  
14 because you're using these higher cost resources  
15 less and less often to create that kilowatt hour  
16 over the course of the year.

17 That doesn't mean that cost will  
18 necessarily -- total cost come down, but  
19 marginal energy costs can come down as a result  
20 of that. Because those renewables have,  
21 basically, from a true-cost perspective, they  
22 have zero cost. But they may not have zero cost  
23 to the purchaser because they are paying  
24 whatever that PPA might be.

25 Q. Thank you.

1 I'm going back on your answer. I don't know  
2 if you covered that, regarding the battery  
3 energy storage. If a resource unit -- a  
4 generating resource or a unit has battery  
5 storage, will that change to be dispatchable or  
6 non-dispatchable?

7 A. Technically, what happens is the  
8 renewable asset is not the dispatchable asset.  
9 The storage asset becomes the dispatchable  
10 asset, because the storage is able to absorb the  
11 electricity where you need it and discharge it  
12 where you need it. So it's control of the  
13 battery that helps you do that. Because you can  
14 tell the battery when to charge and you can tell  
15 the battery when to discharge. And you still  
16 run the renewable as you run it. So the storage  
17 becomes dispatchable.

18 Q. Have you considered that to the supply  
19 stack that was provided?

20 A. I think eventually, it would be in the  
21 supply stack. It's difficult to say exactly  
22 where it would line up, because fuel for the  
23 battery is electricity, so it tends to want to  
24 be charged at times when prices are low. So  
25 it's actually a load in some hours, and it's

1 energy in other hours. So it's going to be hard  
2 to say exactly where it ends up in the supply  
3 stack, because it's a very interesting resource  
4 from that perspective.

5 It typically will end on the lower end of that  
6 supply stack, though, because the electricity  
7 that's in it, and that's been stored,  
8 effectively has been stored at really low  
9 prices, and therefore, has a low cost from a  
10 fuel perspective.

11 Q. Thank you very much.

12 Besides the marginal cost, the avoidable cost,  
13 in your opinion, is there any other element to  
14 be considered in order to determine a fair  
15 unbundle rate, tariff?

16 A. I'm sorry. Could you repeat that  
17 question?

18 Q. Besides the marginal cost, the  
19 consideration of the marginal cost and avoidable  
20 cost, in your opinion, is there any scenarios  
21 that should be considered in order to determine  
22 the unbundle rate?

23 A. Right. So, I think I mentioned a little  
24 bit -- we talked about this a little bit earlier  
25 today, but there's a difference between marginal

1 cost and avoided cost. So what we're talking  
2 about here is what is that marginal cost, what  
3 is it, that actual number. But, then, there's  
4 the added question of, if load goes away, does  
5 that marginal cost go away, and that's avoided  
6 cost. And not all marginal costs go away.

7 And that's why, when I talk about marginal  
8 capacity cost, I'm very concerned about the idea  
9 that we're going to be -- that the potential of  
10 including a credit in a supply -- unbundle  
11 tariff for customers who depart, that has a  
12 component of capacity if that customer has the  
13 option of coming back. And there's other  
14 concerns as well in that same vein. Which is,  
15 customers who depart, if they haven't departed  
16 permanently, can create costs that are not  
17 avoidable. And so the cost isn't avoidable in  
18 those instances.

19 **Q. And for this case, do you think that**  
20 **something else happened? Is there anything else**  
21 **that needs to be considered besides the marginal**  
22 **cost?**

23 A. I do. I think that there's a fair number  
24 of --

25 MS. MERCADO: Sorry to interrupt.

1 Attorney Mercado for the record. I think  
2 the question was broad and may call for a  
3 narrative answer. Could you precise -- you  
4 say what -- "anything else needs to be  
5 changed," and there's many -- there's three  
6 proposals on consideration. So could you  
7 specify what you mean by "anything else  
8 needing changing"?

9 MR. VAZQUEZ: Actually, I didn't have  
10 anything specific, just her opinion  
11 regarding what she thinks about -- what  
12 needs to be considered besides the marginal  
13 cost.

14 MS. MERCADO: Okay.

15 HEARING EXAMINER SEILHAMER: Proceed  
16 with the answer.

17 THE WITNESS: Okay.

18 So I think that there has to be  
19 considerations and clarity in setting rules  
20 around performance of energy service  
21 providers. The treatment of renewables and  
22 obligation to achieve renewable power  
23 goals, those are other considerations that  
24 come into mind that are outside of  
25 considerations related to marginal costs.



1           So, again, the obligation to serve  
2           renewable load; if a customer leaves the  
3           POLR provider, is the POLR provider in any  
4           way responsible still for making sure that  
5           all of Puerto Rico meets our PS targets, or  
6           will the individual ESPs be required to  
7           meet those targets. What happens if they  
8           don't meet those targets. Those are some  
9           considerations that I would want to  
10          clarify, particularly if at the end of the  
11          day the POLR provider is responsible for  
12          meeting those targets.

13          And the other thing would be, besides  
14          marginal costs, is really make sure that  
15          there's a tight correlation between the  
16          services being provided by the ESP and the  
17          services being required by the customer.  
18          And that comes into play when we start --  
19          so we're talking about the marginal energy  
20          costs, but there's costs associated with  
21          following the customer's load and meeting  
22          the customer's requirements when the ESP  
23          does not.

24          And, again, that falls more into some  
25          of the other aspects of this, and the rules

1 around that, and how imbalance rates, for  
2 example, will be set. So those would be  
3 some other things that I think are in the  
4 same bucket as cost associated with  
5 marginal energy costs, because imbalance  
6 rates basically are -- should be set based  
7 off of marginal energy cost as well.

8 So you would want to make sure that  
9 that's all clear. It's not just about the  
10 credit that you give the customer; it's  
11 also about how everything clears in the  
12 marketplace, and how -- who provides that  
13 service to who. And I talk a lot about  
14 ancillary services in my testimony, so  
15 that's an example. Imbalance is a form of  
16 ancillary services. So those would be  
17 other considerations that have to be  
18 really, kind of, sorted through, the rules  
19 straightened out, so that you make sure  
20 that whatever you're creating that supply  
21 credit, it truly is representative of what  
22 the service that the ESP is providing  
23 versus the POLR.

24 So there's a direct tie in that, the  
25 POLR is not providing this; the ESP is.

1 And here's the cost of providing it if the  
2 POLR is still providing some services to  
3 the customer in the form of, say, load  
4 following those and other ancillary  
5 services that should also be in  
6 consideration when thinking through. So I  
7 hope that answers your question.

8 MR. VAZQUEZ: It does. Thank you very  
9 much.

10 We have no further questions for  
11 Ms. Everett.

12 BY MR. VAZQUEZ:

13 Q. Hold on. Sorry. One last question.  
14 Regarding your response to the request of  
15 information, our number one question, especially  
16 the part of policy transition, how does that  
17 compare or align with your response to the  
18 PREP's ICPO -- I'm sorry -- to the -- let me  
19 start again.

20 Our question was number six, and the PREP's  
21 question was number one. So how does that  
22 align, your answer to our question, with the --  
23 especially, the policy transition, to the answer  
24 given to the PREP?

25 A. Okay. So, yes. So the question I think

1           you're referring to is, you know, justify  
2           marginal costs of service study. Around --  
3           let's see. I'm just reading the question here.  
4           You're talking about number six?

5           **Q.    Our number six, right?**

6           A.    Yeah. Which is number -- I think,  
7           technically, number two, right?

8           **Q.    Yeah.**

9           A.    Okay.

10          **Q.    Compared to the answer given to the**  
11          **question number one of set one, also.**

12          A.    Okay. So let me just go there real quick  
13          and look at that question.

14          So the question you're referring to there is  
15          the question on, due to declining load marginal  
16          capacity costs, there's zero for the foreseeable  
17          future? Are there any circumstances in which  
18          marginal capacity cost can be non-zero if load  
19          is declined? Is that the one that you're  
20          comparing?

21          **Q.    Yeah. Right.**

22          A.    I'm sorry, I'm a little slow here. So  
23          what you're trying to do is, you want to -- and  
24          then there's a response to question six from  
25          you, um, asking about congestion. Is that

1 right?

2 Q. Right.

3 A. So is it fair to say that the question is  
4 about how does congestion?

5 Q. Not only congestion among other things,  
6 but it especially go to the part of the policy  
7 transition answer on the PREP's number one  
8 question or ROI.

9 A. Question one about policy transition?

10 Q. Yeah.

11 A. Oh, where I wrote -- okay, my response  
12 with respect to the policy, okay.

13 I am now tracking -- so now please repeat the  
14 question. I apologize.

15 Q. Basically, it's how your answer given to  
16 our -- because of the information, compares to  
17 align to the PREP's answer given in that part  
18 that you already indicated the policy  
19 transition.

20 A. Okay. And this is predominantly -- what  
21 the policy response to question one, set one,  
22 was costs associated with transitioning from the  
23 current portfolio to a renewable rich portfolio,  
24 which is planned to -- so you know, the RPS  
25 target is planned to be 40 percent by 2025, and

1 LUMA is already actively procuring for that.

2 So there is the potential that there's going  
3 to be incremental costs related to procuring  
4 renewable power that could result in additional  
5 costs to all customers. You see this commonly  
6 in any market that is trying to transition. You  
7 know, California comes to mind, where they had  
8 aggressive 35 percent targets. Now it's closer  
9 to 50 percent.

10 And the startup of those costs did create a  
11 significant amount of additional costs that are  
12 related to building renewable energy. So what  
13 happens when you transition to renewable energy  
14 is you have a capacity rich cost structure,  
15 meaning that you're paying to build the plants.  
16 And once the plants are built, the energy that's  
17 being produced is fairly low cost, but the  
18 capital costs to build them are high.

19 Now, how you structure that is also important  
20 to remember. Because these are purchase power  
21 agreements, we have to be very careful about how  
22 we think about how that energy shows up for  
23 LUMA. So basically, what we're talking about  
24 here is this idea that LUMA has to procure this  
25 renewable power to meet this obligation.

1           There's going to be a cost structure to that,  
2           and how that impacts the supply stack, at this  
3           point is not known because those contracts  
4           haven't been signed, and the structure of those  
5           contracts will matter as well, because sometimes  
6           those structures are on a per-kilowatt-hour  
7           basis or capacity. So all those things have to  
8           be considered when thinking about that avoidable  
9           cost. So, again, is the cost avoidable? It's  
10          avoidable if when the kilowatt hour isn't  
11          consumed, LUMA does not incur those costs.

12          **Q.    Okay.   Thank you.**

13               MR. VAZQUEZ: At this time, we have no  
14               further questions for you, Ms. Everett. We  
15               appreciate to answer the ICPO's questions  
16               this afternoon, so thank you very much.

17               MS. MERCADO: Attorney Seilhamer, I  
18               think you're on mute. Sorry, Margarita  
19               Mercado for the record. We couldn't hear  
20               you.

21               MR. SEILHAMER: Sorry about that.  
22               Thank you for the questions to the  
23               Independent Consumer Protection Office.

24               We are going to proceed with Attorney  
25               Ramon Luis Nieves, representing Cooperativa

1 Hidroelectrica de la Montaña.

2 You can go ahead, Mr. Nieves.

3 I think now Mr. Nieves is on mute.

4 MR. NIEVES: Now I'm on mute. Okay.

5 Thank you.

6 Good afternoon to all.

7 EXAMINATION

8 BY MR. NIEVES:

9 Q. Ms. Everett, thank you for your testimony  
10 and responding to the questions of almost  
11 everybody here. Cooperativa Hidroelectrica de  
12 la Montaña, my client, is an intervenor in this  
13 process. We would like to -- we have some  
14 questions for you.

15 First of all, in the unbundled rates for  
16 Wheeling Presentation, particularly in page 9,  
17 where you discuss the challenges and  
18 considerations on cost-of-service, you stated,  
19 and I quote, in the report, "Data availability  
20 and capture systems are not set up to collect  
21 data necessary for detailed costs-of-services  
22 studied. Further forecasts are highly sensitive  
23 to assumptions that are highly uncertain, such  
24 as low growth, peak capacity needs and duration  
25 of operations."



1           Our question, first of all, Ms. Everett, is --

2           MS. MERCADO: Sorry to interrupt,  
3           Attorney Nieves. Could you clarify the  
4           source? Is it a presentation or the cost-  
5           of-service study, page 9? I just want to  
6           make sure we have the reference.

7           MR. NIEVES: Yes. It's the -- the  
8           slide presentation of the cost-of-service,  
9           page 9.

10          MS. MERCADO: Could you give us the  
11          date? Because I think there were several  
12          presentations with the Bureau. So  
13          Ms. Everett can (unintelligible).

14          MR. NIEVES: May 18, 2021. I'm sorry.

15          MS. MERCADO: I just want to give her  
16          a chance to locate the document.

17          BY MR. NIEVES:

18           Q.    Ms. Everett, my question is stated in the  
19           report and study, that there was a problem with  
20           the availability of data. First of all, can you  
21           explain a little bit of your challenge or your  
22           challenges while trying to get data from PREPA  
23           or LUMA regarding this?

24           A.    So you're referring to slide 9,  
25           Challenges and Considerations and Specific Data

1 Availability. So, um, where our greatest  
2 concern lied with respect to data availability  
3 was in -- and it was really in ensuring that we  
4 had appropriate marginal energy costs.

5 So as noted earlier when asked about data with  
6 respect to the coincident and non-coincident  
7 peaks, we have -- we had data that we could use  
8 for that and we felt that it was sufficient.  
9 What becomes challenging though is that, when  
10 you start getting into marginal energy costs,  
11 you really have to -- you would like to be able  
12 to calibrate back to energy costs associated  
13 with -- looking at some historical costs to kind  
14 of compare and contrast what you're seeing with  
15 forecasted costs, so that data was limited.

16 The other thing that's challenging here, and  
17 it's not so much that the data was unavailable  
18 from PREPA's perspective, but that some of the  
19 data can be unreliable for forecasting going  
20 forward. So one of the bigger challenges we  
21 have in doing a cost-of-service in Puerto Rico  
22 right now, is that the last five years have been  
23 very challenging for the region. And so you had  
24 several hurricanes, an earthquake and then a  
25 pandemic, the reliability to things like load

1 forecast or the ability to look at historical  
2 data to compare and calibrate what you're seeing  
3 going forward becomes challenging.

4 So we -- a lot of times what you do in a cost-  
5 of-service study, you might combine a short  
6 backward amount of data, like maybe the past  
7 three years, with a forward looking data, and  
8 you just can't do that in this case. We had to  
9 rely exclusively on forward looking data. And  
10 there's -- and so what we're highlighting here  
11 isn't that we don't have faith in our  
12 calculations, but that there's inherent  
13 challenges in doing this right now because of  
14 the transition that Puerto Rico is going  
15 through.

16 And I will note that you're probably going to  
17 continue to have these challenges for the next  
18 several years, because things are changing quite  
19 a bit in your region. And one of the major  
20 tools that cost-of-service experts use are  
21 historical data, because they believe that that  
22 data is representative of the future, and that's  
23 going to be a challenge in this region because  
24 of what's happened in the last five years, but  
25 also the significant transition, going to

1 renewables and things like that. So that's  
2 really what that's getting at.

3 Q. Ms. Everett, could you describe the kind  
4 of forward-looking data that you may have used  
5 or tried to collect or tried to explain in order  
6 to do your study? And, obviously, I agree with  
7 you with the challenges of the past decade,  
8 maybe, on trying to look at historical data. We  
9 have had the two hurricanes, problems with  
10 demand, what happened in 2006 -- after 2006 with  
11 the manufacturing sector, particularly. So  
12 there are -- and, obviously, the regulatory  
13 changes since 2014. But how was forward-looking  
14 data? What did you consider?

15 A. So one of the biggest pieces of forward-  
16 looking data that really drives a lot of what  
17 you're seeing in our analytics is the load  
18 forecast. And there is an expectation that load  
19 is actually declining over the next several  
20 years, through the 10-year period. And that is  
21 a little unusual. It's not something that you  
22 see very often. What you see a lot today is,  
23 you see load maybe being flat, that new load is  
24 offset by other efficiency gains. So it's  
25 unusual to see that load decline.

1           So I would say, you know, the perspective of  
2           forecasting may change over the next few years  
3           with respect to load. And as -- I was not -- I  
4           did not look into any methodology or things like  
5           that, that they did, to come up with the load  
6           forecast. But I'm certain that those techniques  
7           would be reviewed from transition from PREPA to  
8           LUMA, for example. So load forecasting is one  
9           of those issues that I think will become  
10          something that you'll be starting to see,  
11          potentially, some differences in that forward  
12          look.

13          The second is -- one of the challenges that we  
14          had is that the renewable costs were not really  
15          incorporated into the forecast that we've seen,  
16          and so that becomes a big unknown. And similar  
17          to that are costs around retirement. So those  
18          are the types of things that will ultimately  
19          impact revenue requirement, but potentially  
20          could impact cost-of-service.

21          And I distinguish that by saying the cost-of-  
22          service takes revenue requirement and allocates  
23          it, right? So as your revenue requirement is  
24          changing, your allocations may also change, and  
25          your marginal cost may actually change as you

1 start getting better and better at the  
2 forecasting of what these costs will be, some of  
3 those of which I gave you examples. It's not  
4 all of them, probably, but those are examples.

5 Q. Ms. Everett, in your forward-looking  
6 data, and you just mentioned renewables and the  
7 uncertain -- several uncertainties for the  
8 future, but did you consider the current RPS in  
9 your forward-looking data, that in 2025, which  
10 will be at 40 percent, obviously to the 100  
11 percent goal of 2050? Obviously, we are right  
12 now, I guess, at 2.5, which is tragic. But did  
13 you consider the RPS in your analysis?

14 MS. MERCADO: You might -- Margarita  
15 Mercado for LUMA -- just to rephrase the  
16 question on the argument on "tragic." I  
17 appreciate the question and the witness can  
18 answer, but, yes, I would ask that the  
19 opinion or comment be stricken.

20 MR. NIEVES: It's my opinion. No  
21 problem, Ms. Everett.

22 MR. SIELHAMER: And that's stricken,  
23 his opinion, from the record.

24 MR. NIEVES: All right. Yes.

25 BY MR. NIEVES:

1           Q.   Basically, Ms. Everett, when you were  
2           performing your study, were the milestones or the  
3           goals of the RPS factored in in your forward-  
4           looking data, under the assumption that Puerto  
5           Rico will meet those goals?

6           A.   So a couple of things on that.  Firstly,  
7           if those renewable costs are actually  
8           incorporated into the IRP, they would, by  
9           necessity, come into our study.  But the way to  
10          think about -- the way that we thought about the  
11          renewable cost was that these costs are going to  
12          be incurred.  They are to meet the RPS  
13          requirement with respect to the load forecast.

14          In the event that there may be some load  
15          departures that accelerate -- that lower the  
16          requirement for RPS, it would not necessarily  
17          slow the procurement of renewables because the  
18          targets are so aggressive.  You would need a  
19          fair amount of ESP penetration and departing  
20          load to actually see an impact on that, and it  
21          would happen towards the tail end of that four-  
22          year cycle where they're procuring.

23          So I think that for purposes of this cost-of-  
24          service and for purposes of establishing a  
25          supply credit in the next year or two, it would

1 not impact the cost-of-service. It may start  
2 impacting the cost-of-service out several years  
3 from now when there actually is clarity -- when  
4 there actually is -- the fact that this load has  
5 departed and that the renewable costs are indeed  
6 not needed, and, in fact, the tranches that LUMA  
7 is responsible for going after are curtailed  
8 back. So until that happens, I think that it's  
9 challenging.

10 But the other piece that I want to reemphasize  
11 here though, is that, again, we have to make  
12 sure that we are clear on the rules around  
13 renewables as well. So that's yet another  
14 reason why we didn't include them here, because  
15 we don't really know yet exactly how renewable  
16 targets will be met, whether or not the ESPs  
17 will be required to meet them, what are the  
18 ramifications if they don't, and how will the  
19 rules and regulation work for that. So there's  
20 still some work to be done to straighten out  
21 exactly how that renewable credit -- excuse  
22 me -- that renewable goal is being met, and  
23 who is responsible for meeting it.

24 There are instances where, for example,  
25 utilities who deliver electricity sometimes are



1 responsible for the carbon or renewable. It  
2 depends on how the rules are set up, so that,  
3 too, is an ambiguous point.

4 And then -- sorry, one last thing. And then  
5 you layer into that what we talked about earlier  
6 today, that if the customer can return, and now  
7 the POLR provider has that obligation. So  
8 there's a pretty significant risk that at some  
9 point that renewable obligation that LUMA or the  
10 POLR provider does not save cost because of --  
11 related to renewal targets.

12 **Q. Okay. Just to end that line of**  
13 **questioning. Would it be fair to say that the**  
14 **story that we're discussing did not factor in or**  
15 **did not -- the assumption that we will meet the**  
16 **RPS goals?**

17 A. There are no costs associated with the  
18 RPS goals in our study, but there are also no  
19 costs in the revenue requirement. So that's  
20 very important to remember. What we're doing  
21 here is we're creating a credit to offset costs  
22 that the customer would otherwise pay if they  
23 stayed with the POLR provider. Until those  
24 costs are actually in the revenue requirement,  
25 you don't want to give them credit for avoiding

1           them.

2           Q.    Okay.

3           Just moving on. Ms. Everett, in page 21 or  
4           slide 21 of the presentation --

5           MR. NIEVES: Attorney Mercado, while  
6           we are discussing the story that we  
7           referred earlier, under title of Uniform  
8           Services Agreement.

9           THE WITNESS: Okay.

10          BY MR. NIEVES:

11          Q.    It is stated in the report, and I quote,  
12          "Given the significant challenges associated  
13          with the implementation of the tariff and the  
14          Uniform Services Agreement, PREPA respectfully  
15          requests that PREP delay any decisions on the  
16          topic until the market rules are understood and  
17          PREPA can track the ancillary tools and compute  
18          on a cost-basis the necessary fees included in  
19          the proposed agreement, and until several policy  
20          issues are resolved."

21          Ms. Everett, is the story recommending that  
22          the -- what is -- what I just read, can you  
23          please clarify what you're requesting?

24          A.    Certainly. With respect to the Uniform  
25          Services Agreement, there are still some open

1 items regarding the responsibilities of the ESP  
2 versus to serve the customers' load. One of  
3 those I've already mentioned as an example, the  
4 RPS requirements. The second, where the  
5 regulation appears to be silent is on what  
6 happens when a customer returns and are there  
7 any costs that might be incurred there. And  
8 there is some uncertainty around how the  
9 sector -- so the sector is going through many  
10 different transitions, not the least of which is  
11 the RPS, but there's also a transition of  
12 responsibility and operations of the existing  
13 generation fleet and how that might translate.

14 So all of those things are very important to  
15 remember as you're structuring a Uniform  
16 Services Agreement. And so -- and, in fact,  
17 when we were in the process of preparing our  
18 report for the Uniform Services Agreement, there  
19 was a draft or a redline proposal to change some  
20 of the rules of the -- related to the wheeling.

21 So we really need to make sure that we've  
22 got -- you know, we have a final set of rules,  
23 we understand exactly what requirements are --  
24 what responsibilities are whose, and then we can  
25 finalize a services agreement.

1 I also want to caution that ramping up and  
2 actually implementing something like this does  
3 take time. There are back-office systems, and  
4 what I mean by back-office systems, I'm talking  
5 anything from billing and cost tracking, making  
6 sure that the customers' communications and  
7 protections are all in place. All those things  
8 also need to be sorted through and -- so -- and  
9 they're not trivial. I mean, actually  
10 creating -- making sure your billing system is  
11 accurately charging customers, who's charging  
12 the customer, who's billing the customer, all  
13 those things still need to be resolved, that  
14 will then result in creating what would be the  
15 plan for implementation and the Uniform Services  
16 Agreement is part of that.

17 Q. Ms. Everett, since you are -- since the  
18 story is recommending that PREP and regulator  
19 delays implementation of the unbundled tariff,  
20 that -- will that imply that we are also going  
21 to be delaying the -- a proposal for a wheeling  
22 rate?

23 A. So I think that one of the first major  
24 steps that one needs -- that Puerto Rico needs  
25 to take is to unbundle rates. So I think, you

1 know, looking at rates, unbundling them and  
2 actually getting customers used to the concept,  
3 even, of unbundling rates, is an important first  
4 step.

5 And so I would advocate that you continue to  
6 support and move forward with unbundling rates,  
7 but whether or not you take the next step of  
8 creating a Uniform Services Agreement, allowing  
9 certain customers to depart and receive supply,  
10 needs to be planned for. Because there have  
11 been so many instances where there had -- where  
12 jurisdictions have moved forward without sorting  
13 a lot of that out, and it has resulted in some  
14 pretty unfortunate situations, you know,  
15 bankrupt utilities, customer bills going through  
16 the roof.

17 So you really want to make sure that you get  
18 the rules right and that you've structured  
19 everything to meet those rules to avoid such  
20 calamities as we saw in California and most  
21 recently in Texas, with direct access.

22 Q. And, finally, Ms. Everett, and I thank  
23 you for your testimony and your answers to our  
24 questions, in your story and the preparation of  
25 the data, the facts where you base your story

1 and conclusions, amongst the generation  
2 resources that you will have factored in, or  
3 studied, did you consider in these cost-of-  
4 service study the role of the hydroelectric  
5 generation resources that we have in Puerto Rico  
6 right now?

7 A. So, the role of the hydroelectric  
8 resources in Puerto Rico would have implications  
9 on the integrated resources planning. And  
10 basically, what the availability of those plans  
11 are, how they would perform, all gets put into  
12 the IRP, and then that tells us, you know, what  
13 cost we think -- tells us what we think the  
14 revenue requirement is going to be, and then the  
15 cost-of-service then reviews that. So they're  
16 indirectly in there.

17 Whether or not the use of the hydroelectric  
18 system will change over the next couple years,  
19 it's something that I think -- it's not a cost-  
20 of-service issue. It's really more of a  
21 resource planning and operation. So, for  
22 example, how you operate the hydro system may  
23 impact what the real-time markets prices are,  
24 so -- in balance charges, for example. So  
25 there's connectivity here, but it's not

1 necessarily integral to a cost-of-service study.

2 Q. Okay.

3 Thank you, Ms. Everett. That's all for now.

4 Thank you. Thank you for your testimony.

5 HEARING EXAMINER SEILHAMER: Thank you  
6 very much, Counselor.

7 MR. VAZQUEZ: Attorney Seilhamer, this  
8 is Attorney Pedro Vazquez from the ICPO.  
9 Could we address the witness for one  
10 additional question?

11 HEARING EXAMINER SEILHAMER: Sure. No  
12 problem. Go ahead.

13 MR. VAZQUEZ: Hi, Ms. Everett, again.

14 Regarding the unbundled tariff, should  
15 different unbundled tariffs be considered  
16 two different customer classes?

17 THE WITNESS: So, right now the way  
18 the unbundled tariff is structured. It  
19 does account for -- if there were capacity  
20 costs, marginal capacity costs, you would  
21 end up with a different tariff for  
22 different customer classes, because you're  
23 looking at the contribution of that  
24 customer class to your peak load.

25 So what I mean by that is, capacity

1 costs, as we've structured them, are driven  
2 by peak load. And so what you want is  
3 customers who drive peak load to pay a  
4 greater percentage of those costs, than a  
5 customer group that doesn't contribute to  
6 that peak load. Now, technically, all  
7 customer classes do contribute to that peak  
8 load, but that's -- so you want to make  
9 sure that you're allocating capacity to  
10 customer classes based off of how that  
11 customer class drives you to need that  
12 capacity.

13 When it comes to marginal energy  
14 costs, there should be no difference  
15 between customer classes, because a  
16 kilowatt hour is a kilowatt hour, whether  
17 it's consumed in a home or in a factory.  
18 So right now what you're seeing is the same  
19 price for all customer classes for the  
20 marginal cost, because it's all being  
21 driven by that marginal energy, because the  
22 capacity cost is zero. If at such time the  
23 capacity costs are non-zero, then you might  
24 start to see some differentiation among the  
25 customer classes.



1 MR. VAZQUEZ: Thank you very much.

2 HEARING EXAMINER SEILHAMER: Thank  
3 you.

4 We're going to proceed with Attorney  
5 Mercado.

6 Do you have any questions for your  
7 witness?

8 MS. MERCADO: Yes. Margarita Mercado  
9 for LUMA. Yes, I have a few questions,  
10 with lead from the Bureau.

11 HEARING EXAMINER SEILHAMER: Go ahead.

12 EXAMINATION

13 BY MS. MERCADO:

14 Q. Good afternoon, Ms. Everett. I'm going  
15 to start with a few questions that I have,  
16 drawing from the questioning that you have  
17 received in this afternoon.

18 Attorney Nieves from Cooperativa  
19 Hidroelectrica de la Montaña asked you questions  
20 about challenges on data availability, and you  
21 mentioned that you were -- you explained to him  
22 the challenges, and in my notes I have that you  
23 mentioned that you were confident in the  
24 calculations included in a cost-of-service  
25 study. Could you explain your remark about the

1 confidence in the calculations?

2 I think you're on mute, Ms. Everett.

3 A. Thank you. Sorry about that.

4 So, yes. I mean, I think that what we were  
5 noting here is that there are challenges, but  
6 that doesn't mean that there should be doubt in  
7 the cost-of-service study that we provided.  
8 This cost-of-service approach that we took, we  
9 used a methodology that requires looking at a  
10 forecast of load relative to a forecast of  
11 capital additions.

12 And that analysis we were able to complete.  
13 We completed it completely, and it's transparent  
14 in our work papers, how we went about it. So  
15 our approach, our methodology and the data that  
16 we used in that were not impacted. The only  
17 proxy that we used in that -- you know, we are  
18 transparent about the proxys that we used, and  
19 the one that was noted earlier, which was the  
20 load data from the IRP that talks about when the  
21 contribution of coincident -- what coincident  
22 peak and non-coincident peak was. So, what I  
23 meant by that is that I still -- I support our  
24 submission even though there are some challenges  
25 with the data.

1 Q. Thank you.

2 Throughout the day, in the questioning there  
3 have been questions on the interrelation between  
4 the IRP and the cost-of-service study. And this  
5 morning you received questions from Mr. Chernick  
6 on hypotheticals, on changes on the IRP plant  
7 retirements. Could you explain to the Bureau  
8 what is the interrelation between the IRP and  
9 the cost-of-service study?

10 A. Yes. The IRP is designed to create the  
11 forecast of what will be needed to serve load  
12 going out several years. So the IRP focuses on,  
13 "Given my load forecast, what resources we'll be  
14 dispatching, what resources may I incrementally  
15 need," and comes up with the plan that will  
16 drive the -- ultimately drive the revenue  
17 requirement that is expected to serve load. So  
18 the IRP focuses on the generation side  
19 predominantly, and it's designed to generate  
20 that forecast of revenue requirement.

21 A cost-of-service study is used to then  
22 understand the drivers of those costs that are  
23 coming in from the IRP and the costs that are in  
24 the ultimate revenue requirement that customers  
25 pay. And, so, a cost-of-service study is

1 designed to understand what's driving cost, so  
2 that when you ultimately get to the rate design  
3 phase of things, you're designing rates at --  
4 you're first allocating cost to customers by how  
5 those costs are being driven and therefore,  
6 being incurred. And then you're also trying to  
7 design rates that send price signals.

8 So cost-of-service studies are -- the IRP is  
9 an input into the cost-of-service study. You  
10 don't usually challenge -- you don't challenge  
11 what the IRP tells you in a cost-of-service  
12 study because that's a different process. So  
13 it's all upstream. And that's why I kept making  
14 that distinction, because a lot of the questions  
15 about what may or may not happen with  
16 retirements is actually an input into the cost-  
17 of-service, not part of the cost-of-service  
18 study.

19 Q. And regarding those hypothetical  
20 questions that Mr. Chernick posed to you on what  
21 may or may not happen with IRP, planned  
22 retirements and resources, do any of those  
23 hypotheticals change in any manner your  
24 conclusions and recommendations on the cost-of-  
25 service study?

1 A. No, they do not.

2 Q. During the afternoon, Attorney Rivera, if  
3 I'm not mistaken. I'm sorry if I -- for the  
4 OIPC, Mr. Rivera -- drew your attention to the  
5 revised supply stack that was presented in  
6 response to question one from the OIPC.

7 A. Yes.

8 Q. And you explained -- to his questioning,  
9 you also explained that there may be potential  
10 changes to the supply stack. Those potential  
11 changes, how do they -- in any way, do they  
12 change your conclusions and recommendations on  
13 the cost-of-service study?

14 A. No, because those potential changes in  
15 the supply stack are still -- are some time in  
16 the future. So his question was what would  
17 happen, or if/or when these things happen.  
18 Because, again, the cost-of-service study is a  
19 service study done at a moment in time. It has  
20 to take into account a particular forecast. So  
21 our forecast -- because the forecast would not  
22 change, our cost-of-service study would not  
23 change either.

24 I'm sorry. I think you're on mute.

25 HEARING EXAMINER SEILHAMER: Counselor

1 Mercado, you're on mute right now.

2 MS. MERCADO: Are you able to hear me?  
3 I'm sorry. We had a connection issue.

4 THE WITNESS: Yes.

5 MS. MERCADO: So, I was asking,  
6 Attorney Seilhamer, I would like to move to  
7 admit as Exhibit B for this proceeding for  
8 LUMA, the revised supply stack. I'm able  
9 to show it in the screen if you wish to  
10 identify the exhibits, or we can also offer  
11 to make a filing later identifying the  
12 exhibit on page 3 of the (inaudible) to the  
13 OIPC request for information.

14 HEARING EXAMINER SEILHAMER: First I'm  
15 going to ask, is there any objections to  
16 marking Exhibit B?

17 MS. MERCADO: I'm very sorry. I  
18 couldn't hear you. I'm sorry.

19 HEARING EXAMINER SEILHAMER: No, I'm  
20 just asking if there's any objections to  
21 your request.

22 If there are no objections, then we're  
23 going to mark Exhibit B.

24 MS. MERCADO: Thank you. It would be  
25 revised figure 4-2, (unintelligible).

1 Thank you for that.

2 BY MS. MERCADO:

3 Q. Ms. Everett, I'm going to draw your  
4 attention to the revised tables, the response 7  
5 that was marked as Exhibit A earlier this  
6 morning. It's response 7 to the Bureau's second  
7 request for information, which is the third  
8 request overall. That's the revised table 2-10,  
9 2-12 and were admitted, and the updated 2-12.  
10 Are you able to identify those?

11 A. Yes, that's page 9 and 10; is that  
12 correct?

13 Q. 9 through 11 of this --

14 A. 9 through 11.

15 Q. -- to that request.

16 A. Yes.

17 Q. It is Exhibit A of this proceeding. And  
18 I'm going to draw your attention to the revised  
19 table 2-10 at page 9.

20 A. Okay.

21 Q. And then, this morning you received  
22 questioning on this table, and you indicated  
23 that the tables include indicative rates. Could  
24 you explain what you meant by indicative rates?

25 A. These rates are -- so, an indicative rate

1 is an estimate of what the rate will be given  
2 what current revenue requirement is the  
3 current -- or the costs that were used in the  
4 analysis of coming up with the rate. So it  
5 means that the rate may not be what is shown in  
6 this table, because whenever you put a rate  
7 actually into place, you want to make sure that  
8 that rate is representative of the rates that  
9 are currently facing these customers.

10 So because we've made the recommendation of  
11 tying the supply credit to the FCAA and the  
12 PPCA, you would want to make sure that when you  
13 actually implement the rates, that the rate is  
14 reflective of the FCAA and the PPCA at the time  
15 that that rate is going in, and then that rate  
16 gets regularly updated.

17 Q. Thank you.

18 I'm going to move to another topic that has  
19 been discussed, also, throughout the hearing,  
20 and that Mr. Chernick also posed questions to  
21 you in the morning. Given our notes, it was  
22 around 10:34 in the morning, discussing the  
23 impact of a customer leaving the system and then  
24 returning to the POLR provider.

25 And questioning revolved around whether there



1 would be real savings to LUMA or the POLR  
2 provider when the customer returns. Could you  
3 explain? And I have in my notes that you  
4 explained that it is your opinion that they  
5 would not be real savings. Could you explain  
6 your statement?

7 A. Right. When a customer -- because what  
8 we're talking about is avoid -- with respect to  
9 some of the marginal costs, what you're stating  
10 is you're avoiding are capital expenditures that  
11 you -- that LUMA no longer needs to make to  
12 procure energy to serve that customer. So  
13 capital expenditures, marginal capacity costs,  
14 are directly tied to a capital expense that the  
15 utility is making to meet that incremental load.

16 So if that load is not permanently removed,  
17 it's doubtful that those costs are actually  
18 saved. And, as I mentioned, you know, there was  
19 some discussion about whether or not there's any  
20 value to delaying it. That's a different  
21 question. So specifically when it comes to  
22 cost-of-service study and marginal capacity  
23 costs, you know, we have that estimate, and then  
24 we take that estimate and we turn it into an  
25 avoided cost because we are able to justify that

1           that cost is permanently avoided.

2           If a customer leaves and comes back, that cost  
3           is not avoided. And, in fact, can, you know,  
4           create a lot of challenges, particularly when  
5           you have your POLR obligator also trying to  
6           balance compliance requirements with respect to  
7           RPS. So that's what I was emphasizing, is that  
8           these costs are not -- if the customer doesn't  
9           go away permanently, the costs don't go away  
10          permanently. It's different than saying, "I'm  
11          going to look at avoided costs because I made an  
12          investment in an energy efficient air  
13          conditioner." It's not the same thing.

14          **Q. On this same topic, were questions posed**  
15          **to you as to whether a hypothetical, that a**  
16          **customer would come back in five years. First**  
17          **of all, do you agree with me that that line of**  
18          **questioning from Mr. Chernick involved**  
19          **hypothetical scenarios not now present in Puerto**  
20          **Rico?**

21          A. Yes. A lot of the discussions were  
22          hypotheticals, what I would call, potentially,  
23          scenarios even. But, yes. Having a customer  
24          leave and come back five years from now, or two  
25          or three, that doesn't really exist today in

1 this jurisdiction.

2 Q. And tell me if you agree with me that  
3 those hypothetical scenarios by Mr. Chernick,  
4 did they involve or could they involve a utility  
5 with excess capacity?

6 A. Right now there is not -- hypothetical of  
7 customer -- I'm sorry. Could you repeat the  
8 question? I lost a little bit of the train  
9 there.

10 Q. Would you say that the current scenario  
11 in Puerto Rico that we are evaluating is one  
12 where the utility has excess capacity?

13 A. Oh, no. I don't believe that there's a  
14 lot -- especially when it comes to load  
15 following, there's still some capacity needs  
16 that are required to serve existing customers.  
17 So it's not like you're sitting in a capacity  
18 rich marketplace where -- and, secondly, I think  
19 what's really important here is the process for  
20 allowing -- for bringing that generator in.

21 So that was part of the struggle I was having  
22 with the hypothetical, is that there was this  
23 implication that, well, the customer stopped  
24 being served by this generator, therefore, that  
25 generator is now available to LUMA to serve the

1 customer. So, firstly, yes, I think that  
2 there's capacity market. As indicated, it's not  
3 in excess. And secondly, I would say that just  
4 because a customer returns doesn't mean that  
5 their supply can be woven into LUMA's portfolio  
6 either.

7 Q. Regarding that hypothetical scenario of a  
8 customer returning within five years, which is  
9 what was discussed this morning, and it was  
10 posed to you, the question, whether there would  
11 be a benefit to the POLR provider after those  
12 five years, would that benefit be tied in some  
13 way to the provider having excess or adequate  
14 capacity?

15 A. You're talking about the POLR provider?

16 Q. Yes.

17 A. No. I don't -- the customer returning  
18 does not create a benefit to the POLR provider.

19 Q. There's also been some questioning on the  
20 RPS targets. It was mentioned this morning and  
21 this afternoon, the fact that there's an RPS  
22 target for which procurement is being conducted  
23 as we speak. Are the costs of replacing current  
24 energy with the renewable to meet the target  
25 avoidable at this time?

1           A.    No.  The renewable plan, which is, I  
2           understand it, there's a current plan per  
3           thousand megawatts right now, and then there  
4           will be an additional set of tranches of 500  
5           every six months over the next four years.  
6           That's a lot of energy to procure, and that  
7           target is based off of the forecast of what load  
8           is.

9           So even if a handful of customers depart, it's  
10          not going to have a significant impact,  
11          particularly, since the goal doesn't just end in  
12          2025.  There's a target that that continues to  
13          grow over time.  So the procurement of that  
14          renewable power would not necessarily be slowed  
15          down if there was departed load.  So I would be  
16          cynical that that would slow that process down.

17         **Q.    Thank you.**

18               MS. MERCADO:  I would like for the  
19               Bureau -- this is maybe a -- for  
20               Mr. Seilhamer.  We have been -- regarding  
21               Exhibit A, we could ask questions to  
22               Ms. Everett, but Exhibit A, which amends  
23               several of the tables of the cost-of-  
24               service study, also impacts the executive  
25               summary of the cost-of-service study.  We

1 want to -- the witness may confirm if you  
2 want. We just want to pose that, that I  
3 guess this morning Mr. LeBel also -- I  
4 think that at E-1, Table E-1, that should  
5 be amended. It doesn't include E-2 and  
6 E-3. We would file those amended tables  
7 for completion, if the Bureau so allows.

8 THE WITNESS: I confirm that we should  
9 update those tables. Thank you.

10 HEARING EXAMINER SEILHAMER: And, yes,  
11 if there are no objections from the  
12 commission, yes.

13 MS. MERCADO: Thank you. We would  
14 submit that separate.

15 And my final housekeeping matter would  
16 be, in response to request 17 of PREP's  
17 Third Request for Information, and with  
18 that answer, guide house, we provided  
19 amended work -- or revised work papers.  
20 They were submitted to the Bureau via email.  
21 And they haven't been formally placed for  
22 the record.

23 So with permission from the Bureau, I  
24 would like to mark those, the amended work  
25 papers. That's (unintelligible). The

1 reference to what I said is response 17 to  
2 the Third Request for Information for the  
3 Bureau.

4 HEARING EXAMINER SEILHAMER: Is there  
5 any objections?

6 UNIDENTIFIED FEMALE VOICE: None from  
7 me.

8 HEARING EXAMINER SEILHAMER: If there  
9 are no objection, we can go ahead and mark  
10 them.

11 MS. MERCADO: Thank you. As Exhibit  
12 C. Thank you very much.

13 If I could have just -- I don't have  
14 many more questions, but if I could confirm  
15 with my clients and come back, I don't  
16 think we have more questions. But if you  
17 give me just two minutes.

18 HEARING EXAMINER SEILHAMER: Brief  
19 pause. Take a five-minute break and then  
20 we'll go from there.

21 MS. MERCADO: Thank you.

22 (Whereupon, a brief recess  
23 transpires.)

24 HEARING EXAMINER SEILHAMER: Did you  
25 talk to your client?

1 MS. MERCADO: Yes, we just have one  
2 final question. Attorney Mercado for LUMA.  
3 A question for Ms. Everett.

4 HEARING EXAMINER SEILHAMER: Yes, go  
5 ahead.

6 BY MS. MERCADO:

7 Q. Ms. Everett, particularly to questions of  
8 Attorney Nieves for Cooperativa Hidroelectrica,  
9 you answered that the unbundling of rates is an  
10 important first step, that you recommend that  
11 the Bureau -- that it be adopted in Puerto Rico  
12 by the Bureau. Could you explain what other --  
13 in the order of things and operations, what  
14 other next step or milestones should be reached  
15 before reaching the implantation phase of the  
16 tariff, to avoid cost shifting?

17 A. Certainly. So, certainly, the first step  
18 is being able to unbundle rates and show how  
19 they -- show the different cost components on a  
20 regular basis. The second is ensuring that data  
21 of around actual cost per kilowatt hour can be  
22 tracked, captured and managed for purposes of  
23 creating an appropriate imbalance charge.

24 So you need to make sure that you have a  
25 system that is put in place, that can capture



1           this data, that is accurate and auditable.  
2           Because ultimately, this is a rate that the POLR  
3           provider will be charging to the ESP, and the  
4           ESP should have visibility into how that rate is  
5           being generated. So there needs to be a fairly  
6           robust structure around capturing that, a  
7           process for capturing that, and the ability to  
8           audit that. So that's another.

9           A third is making sure that we understand  
10          exactly what the roles and responsibilities are  
11          for each of the entities, be it the ESP or LUMA.  
12          And these include, but aren't limited to, who is  
13          billing for these customers, will LUMA be just  
14          billing for their services and the ESP charging  
15          for theirs, how are we going to actually display  
16          these supply credits on the bill, what does it  
17          take to actually make sure that customers can  
18          track their supply credit on the bill. So  
19          billing issues also have to be resolved, and the  
20          ability to be actually able to bill customers  
21          needs to be put in place.

22          And then there's the details of the Uniform  
23          Services Agreement, that we outlined several  
24          areas where we thought some additional detail  
25          needs to be added to, in particular, making sure

1           that your imbalance rate eliminates any  
2           opportunity for parties to game the system and  
3           use LUMA or the POLR provider as the providing  
4           services to their customers, that the ESP should  
5           be providing.

6           And then things like credit, handling, all of  
7           those issues still, in our view, need some  
8           further refinement and clarity to make sure that  
9           roles and responsibilities in the actual charges  
10          and fees are clear. And that the underlying  
11          processes and systems that need to support these  
12          activities are in place, operational and tested.

13          **Q.    Thank you.**

14          **I'm going to break my promise and use another**  
15          **question. Hearing your answer, Ms. Everett, is**  
16          **it fair to say that these steps that you have**  
17          **outlined require a phased approach prior to**  
18          **final implementation of a tariff?**

19          A.    Yes. I think that's the best way to do  
20          this because with a phased approach, you  
21          don't -- you have an opportunity to catch where  
22          they may be some issues that could swell into  
23          greater issues if it were not done in a phased  
24          approach. So testing the systems and the  
25          processes, being able to get the bills rolling

1 out, all of those things are best done,  
2 initially, in small increments such that you're  
3 confident that all of those processes and  
4 systems and data collection activities that I  
5 mentioned before, are in place, operational and  
6 appropriate.

7 MS. MERCADO: Thank you, Ms. Everett,  
8 and thank you, Attorney Seilhamer. I don't  
9 have further questions at this moment.

10 HEARING EXAMINER SEILHAMER: I'm going  
11 to ask Mr. Chernick or LeBel, Mr. LeBel, if  
12 they have any questions regarding the  
13 redirect that just went on. Exclusively  
14 about the redirect.

15 MR. LEBEL: No, I do not.

16 MR. CHERNICK: And neither do I.  
17 Thank you.

18 HEARING EXAMINER SEILHAMER: Same  
19 question for Attorney Nieves and Attorney  
20 Vazquez.

21 MR. VAZQUEZ: No question from our  
22 part.

23 MR. NIEVES: No additional questions  
24 regarding the redirect.

25 HEARING EXAMINER SEILHAMER: So --

1 MR. RIVERA: Mr. Seilhamer, this is  
2 Commissioner Rivera. I'm sorry.

3 EXAMINATION

4 BY MR. RIVERA:

5 Q. Ms. Everett, you said in your redirect  
6 that the Energy Bureau should take a phased  
7 approach. Does that mean that your  
8 recommendation is for the Energy Bureau not to  
9 implement -- not to complete the unbundling and  
10 not to implement the weekly rate?

11 THE WITNESS: I could recommend that you  
12 implement the unbundling, and then further  
13 clarification -- and have further an opportunity  
14 to discuss further clarification around the  
15 Uniform Services Agreement to ensure that the  
16 actual unbundled rate or "the supply credit," as  
17 we call it, and the offering of customers being  
18 able to take service from ESPs would -- the  
19 rules around that need to be clarified, and the  
20 systems to make sure that that gets  
21 appropriately done are some of the concerns that  
22 I have. But I do recommend that you adopt the  
23 framework that we proposed with respect to how  
24 to unbundle rates, and that we continue to move  
25 forward with unbundling rates, but you don't

1 necessarily take the next step, which is to  
2 actually have full selection of supply services  
3 until the Uniform Services Agreement is nailed  
4 down and these rules and processes are put in  
5 place, and it is clear that the utility that the  
6 POLR provider and the ESPs can meet the  
7 requirements of the law.

8 Q. Okay.

9 You mentioned on several occasions that there  
10 will be no savings in a client leaves and then  
11 returns. And there is, like, some concerns  
12 regarding that type of action. What's the  
13 solution?

14 A. So, in my opinion, the solution is --  
15 there are two opportunities. One is to rely  
16 solely on an energy credit, and energy-related  
17 credit. The other is, if a customer returns,  
18 that they perhaps end up on a separate rate than  
19 they would have. So if they were on a standard  
20 rate offering and they left and the came back,  
21 they would not be on that standard offering.  
22 They would be on a separate rate that's  
23 reflective of the incremental costs that are  
24 being incurred to serve them.

25 But one of the things -- again, a caution that

1 with all of these types of markets, is making  
2 sure that there's planning going on such that  
3 you don't end up in the situation that we saw in  
4 some of these other jurisdictions, where supply  
5 was problematic, is making sure that there --  
6 that the responsibility for planning and  
7 ensuring the reliability of power for Puerto  
8 Rico is uniformly shared between the POLR and  
9 the ESPs or there are mechanisms put in place  
10 that, if the POLR is responsible for ensuring  
11 reliability, that those charges go to the ESP.  
12 So that's another consideration. We need to  
13 make sure that -- my biggest concern when you go  
14 to deregulation is the lack of regulation over  
15 reliability.

16 Q. Yeah, but here we're not going to  
17 deregulation, right? It's going to be a heavily  
18 regulated mechanism from the Bureau.

19 A. So the ESPs are going to be regulated?

20 Q. I'm asking.

21 A. Oh. Yes. That's what I meant by making  
22 sure that the roles and responsibilities are  
23 clear. That's what I mean. And, so, if the --  
24 so I agree with you. If it remains heavily  
25 regulated and you're ensuring -- and reliability

1 is one of the core responsibilities of the  
2 regulator, how you structure it is subject for  
3 discussion, but you want to make sure that there  
4 is that regulation of reliability. Either  
5 you're asking the POLR to provide it or you're  
6 requiring the collective supply community to  
7 require it, is where I'm getting at.

8 Q. Okay. Thank you.

9 A. Um-hum.

10 HEARING EXAMINER SEILHAMER: If there  
11 are no more questions, then we are going to  
12 pause the hearing until tomorrow at 1:30 in  
13 the afternoon. At that time we'll resume  
14 the evidentiary hearing. Is there anything  
15 else that someone wants to bring up before  
16 we close today?

17 If not, then thank you very much for  
18 your patience today and we'll see you  
19 tomorrow.

20 (Whereupon, the hearing is adjourned.)

## REPORTER'S CERTIFICATE

I, RAQUEL LEÓN, E.R. Reporter, do hereby certify that the following transcript is a full, true and correct record transcribed by me.

I further certify that I am not interested in the outcome of the case named in said caption.

*Raquel León*

RAQUEL LEÓN



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*Exhibit 2*  
(Transcript of July 20, 2021).



*In the Matter Of:*

*RE: UNBUNDLING OF ASSETS OF PUERTO RICO ELECTRIC POWER AUTHORITY*

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*JULY 20, 2021*

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GOVERNMENT OF PUERTO RICO  
PUBLIC SERVICE REGULATORY BOARD  
PUERTO RICO ENERGY BUREAU

IN RE:	* CASE NO.:
	* NEPR-AP-2018-0004
IN RE: THE UNBUNDLING OF THE	*
ASSETS OF THE PUERTO RICO	* SUBJECT:
ELECTRIC POWER AUTHORITY	* EVIDENCIARY HEARING
	*
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The evidentiary hearing, held on Tuesday, July 20, 2021,  
via videoconference, in the afternoon.

I-N-D-E-X

THE WITNESS:  
GERARDO COSME NÚÑEZ

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## VIDEOCONFERENCE

TUESDAY, JULY 20, 2021

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

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HEARING EXAMINER SEILHAMER: Hi. Good afternoon.

MR. SMITH: "Buenas tardes."

HEARING EXAMINER SEILHAMER: Attorney for Luma is present on the call?

MS. MERCADO: Yes.

Good afternoon to the Energy Bureau. Margarita Mercado Echegaray on behalf of Luma. I'm accompanied by Ashley Engbloom Director Regulatory (inaudible).

HEARING EXAMINER SEILHAMER: For the record, we're going to resume the Evidentiary Hearing for Case Number NEPR-AP-2018-0004. Today's agenda includes the testimony of Gerardo Cosme Núñez from the Independent Consumer Protection Office, and Yandia Pérez from the Puerto Rico Manufacturers Association.

Is Mr. Cosme and Ms. Pérez present on the conference call?

MR. VÁZQUEZ: Good afternoon,

1 everybody. This is Attorney Pedro Vázquez,  
2 on behalf of the ICPO. Here with me is  
3 "ingeniero" Cosme for his testimony today,  
4 and our director, "la licenciada" Hannia  
5 Rivera.

6 HEARING EXAMINER SEILHAMER: Good  
7 afternoon.

8 MR. COSME: Good afternoon to  
9 everyone.

10 HEARING EXAMINER SEILHAMER: What  
11 about Ms. Pérez from the Puerto Rico  
12 Manufacturers Association?

13 MR. FERNÁNDEZ: For the record, Manuel  
14 Fernández, Puerto Rico Manufacturers  
15 Association. Ms. Pérez is -- she's on  
16 standby. I can call her so she can be  
17 present, since the first witness will be  
18 addressing the Bureau first. We will be  
19 contacting her as soon as it's time for her  
20 testimony.

21 HEARING EXAMINER SEILHAMER: That's  
22 good. Perfect.

23 We have several motions that were  
24 submitted in the last 24 hours. Most of  
25 them in the last couple of hours. So we're

1 going to go over them. The first one is an  
2 urgent request of admissibility of  
3 testimony of Ms. Yandia Pérez, filed on  
4 behalf of the Puerto Rico Manufacturers  
5 Association. Luma filed that motion, I  
6 believe, either early this morning or late  
7 last night.

8 Is that correct?

9 MS. MERCADO: Yes. Margarita Mercado,  
10 representing Luma. You are correct,  
11 Attorney Seilhamer. It was filed early  
12 this morning. Right.

13 HEARING EXAMINER SEILHAMER: In regard  
14 to that motion, the Energy Bureau is going  
15 to deny the motion based on the fact that,  
16 first, the motion doesn't explicitly tell  
17 us where is the opinion that you guys  
18 state, but, most importantly, you're going  
19 to have the opportunity to cross-examine  
20 the witness this afternoon. So if you see  
21 fit to ask questions regarding any matter  
22 that you think is the opinion of the  
23 witness, you're going to have the  
24 opportunity to do so at that time.

25 In regard to the other motion

1           that -- and sorry, we're having electricity  
2           problems in my office. We have a  
3           motion -- there was a motion filed by the  
4           Puerto Rico Manufacturers Association, a  
5           motion to amend direct testimony of the  
6           Puerto Rico Manufacturers Association by  
7           Ms. Yandia Pérez, vice president. We are  
8           going to grant the motion. However, only  
9           to strike from the testimony what it talks  
10          about Illinois, for example, the  
11          residential average. That paragraph that  
12          you guys filed in the motion on July 19 at  
13          4:10 PM.

14                 We received another motion, a  
15           couple -- maybe an hour ago, which amended  
16           other parts of the direct testimony, and  
17           those parts are not going to be stricken  
18           from the record. We're going to grant your  
19           motion filed yesterday, and we're going to  
20           strike from the record exactly the parts  
21           you requested, which is, "On point 3, the  
22           reference testimony reads." Those two  
23           paragraphs will be stricken.

24                 The rest of the testimony is going to  
25           stand on the record because it wasn't

1 requested to be amended when you filed the  
2 motion. And today, when we received the  
3 amended testimony, there were other parts  
4 that were amended that weren't requested.  
5 So that's the ruling of the Bureau.

6 Are we clear with the ruling?

7 MS. MERCADO: Attorney Seilhamer,  
8 Margarita Mercado, for the record. I would  
9 address first the latter ruling on the  
10 amended testimony of the PRMA. Just to be  
11 sure, the ruling of the Bureau is to allow  
12 the striking from the record the reference  
13 to Illinois rates, but the Bureau is not  
14 allowing the second amended testimony that  
15 was requested and filed this morning adding  
16 testimony.

17 HEARING EXAMINER SEILHAMER: Correct.

18 MS. MERCADO: Yes. Just to be sure.

19 I do have a -- I would request leave  
20 for a brief reconsideration or explanation  
21 on a motion that was filed early this  
22 morning on July 20, 2021, if I'm allowed to  
23 do so, briefly, and when  
24 you're --

25 HEARING EXAMINER SEILHAMER: Sure.



1 MS. MERCADO: Early this morning, Luma  
2 filed a request for the Bureau, within its  
3 discretion, over proceedings under Sections  
4 9.03 -- 543, 2.01 (inaudible).

5 MR. FERNÁNDEZ: I'm sorry, Your Honor.  
6 I cannot hear Attorney Mercado. I  
7 apologize. So I cannot respond later on if  
8 I cannot -- I'm not able to hear her words.

9 HEARING EXAMINER SEILHAMER: We're  
10 having trouble with the connection.

11 MR. SMITH: If I can just help,  
12 "licenciado Seilhamer." I can help with  
13 one thing. If everybody goes on mute,  
14 we'll be able to hear "licenciada" Mercado.  
15 What's happening is that when you get  
16 feedback in Teams, it activates your  
17 microphone and it cuts her volume down. So  
18 everybody who's not speaking should go on  
19 mute and then we'll be able to hear her  
20 clearly. Thank you.

21 MS. MERCADO: Thank you.

22 Does the Bureau and the  
23 participants -- are you able to hear me  
24 now?

25 MR. SMITH: Yes.

1 MS. MERCADO: So I was stating the  
2 basis for the request for the Bureau to  
3 make an initial determination on the  
4 sufficiency admissibility of the  
5 pre-filed testimony filed by the PRMA by  
6 voice of Ms. Yania Pérez on July 9, that  
7 was amended on July 19. The basis of our  
8 request is not to preclude the PRMA's  
9 request of intervention and to provide  
10 testimony, it's just for the Bureau to  
11 determine if it's sufficient to be admitted  
12 as direct testimony.

13 Luma, per the procedural calendar in  
14 this case, discovery was not allowed on  
15 intervenor's testimony. So this is the  
16 first opportunity that Luma had to comment  
17 on the admissibility of pre-filed  
18 testimonies and to pursue the sufficiency  
19 of the same. Luma filed its request  
20 knowing that it's within the discretion of  
21 the Bureau to apply supplementally rules  
22 and principles of evidence to gauge the  
23 admissibility of this testimony. That is  
24 the basis of our request.

25 We do believe that there is testimony

1 and opinion on the competitiveness of the  
2 tariff or the supply credit that has been  
3 in discussion in this proceeding that is  
4 not sufficiently grounded or explained in  
5 connection with the witness herself, and  
6 how the testimony was presented. So we  
7 respectively request to apply Rule 109A of  
8 Evidence, and for the Bureau to determine  
9 the sufficiency of the evidence.

10 We do agree that we have a chance to  
11 cross-examine, but, given the nature of the  
12 testimony and the technical opinion on  
13 complex issues that have been included in a  
14 lengthy proceeding by which the Bureau has  
15 issued several orders, directives,  
16 comprehensive -- three comprehensive  
17 filings were filed, it is important that  
18 intervenor's testimony goes through an  
19 initial review of its admissibility before  
20 it is admitted as pre-filed testimony.

21 That will be our request within the  
22 discretion of the Bureau, knowing that it's  
23 a supplemental application of the Rules of  
24 Evidence in Puerto Rico under  
25 administrative procedures and the

1 regulation of the Bureau. So we would  
2 request reconsideration before the witness  
3 goes into cross-examination.

4 HEARING EXAMINER SEILHAMER: The  
5 Bureau is going to sustain its previous  
6 determination. Luma has had this  
7 documentation for 10 days. So to bring it  
8 a couple of hours prior to the hearing, I  
9 think it's not the best practice. And once  
10 again, we believe that Attorney Mercado  
11 will have the opportunity to  
12 cross-examine the witness, and any point  
13 that she believes the witness is making an  
14 opinion that she doesn't have the  
15 expertise, she might do so during the  
16 cross-examination.

17 Are there any other matters that we  
18 need to address prior to the beginning of  
19 the evidentiary hearing?

20 MR. FERNÁNDEZ: Yes, Your Honor. I  
21 would like to -- since Ms. Yandía Pérez has  
22 joined, for her benefit, just to mention  
23 again your previous ruling. The motion by  
24 Luma to strike down the entire testimony  
25 has been denied. Nevertheless, you will be

1 subject only to the original testimony, not  
2 the amended one, the original testimony,  
3 less the paragraphs related to the Illinois  
4 rates.

5 HEARING EXAMINER SEILHAMER: Correct.  
6 That's the ruling of the Bureau.

7 MS. PÉREZ: Thank you. Understood.

8 HEARING EXAMINER SEILHAMER: We're  
9 going to proceed to take the oaths of the  
10 witnesses that are going to appear before  
11 the Bureau today.

12 This is for Mr. Cosme and Ms. Pérez.  
13 Do you affirm that the testimony that you  
14 will provide today is true, correct, and  
15 based on your own and personal knowledge,  
16 and that, of the best of your  
17 understanding, none of the information you  
18 will provide today is misleading or  
19 untruthful?

20 MR. COSME: I do.

21 MS. PÉREZ: I do.

22 HEARING EXAMINER SEILHAMER: Let the  
23 record reflect that the witnesses answered  
24 in the affirmative.

25 So what we are going to do is we're

1 going to start with Mr. Cosme, and we are  
2 going to allow first Mr. Chernick and  
3 Mr. LeBel to ask the questions on behalf of  
4 the Energy Bureau.

5 MR. LEBEL: Thank you.

6 I believe Mr. Chernick is leading  
7 today. He was just on, so hopefully he --

8 MR. CHERNICK: He is still on. He  
9 just had his microphone and camera off.  
10 Thank you very much and good morning to  
11 everybody.

12 Whereupon,

13 -----  
14 GERARDO COSME NÚÑEZ,  
15 -----

16 having been duly sworn, was examined, and  
17 declared as follows:

18 EXAMINATION

19 BY MR. CHERNICK:

20 **Q. Is the witness on camera?**

21 A. Yes. Right here.

22 HEARING EXAMINER SEILHAMER: Mr. Cosme  
23 is on camera under Hannia.

24 MR. CHERNICK: Thank you. Too many  
25 windows open. All right.

1 BY MR. CHERNICK:

2 Q. On page 2 of your testimony, you express  
3 the concern that present conditions of the  
4 Puerto Rico electrical grid and PREPA's  
5 generation fleet may not be suitable to host or  
6 implement wheeling arrangements with retail  
7 energy suppliers. Do you see that part of your  
8 testimony?

9 A. Page 2? Yes?

10 Q. Yes.

11 A. Yes.

12 Q. So what are the conditions of the Puerto  
13 Rico electrical grid that may not be suitable to  
14 host or implement wheeling agreements?

15 A. Well, to start with the generation, we  
16 are running since some time ago in an emergency  
17 mode as established by other stakeholders and  
18 even PREPA personnel that we don't have  
19 enough -- sometimes, we don't have enough  
20 generation to comply with the load. And that  
21 makes a situation that we have to run like  
22 a -- in that emergency situation, all the plants  
23 have to be most of the time online, more of the  
24 time than they are supposed to be. And to do an  
25 economic dispatch between baseload and peak

1 units, and all that kind of situation, is not as  
2 clear or convenient as it's supposed to be in  
3 another situation. That's regarding generation.

4 In transmission we are in little better shape  
5 after the first tranche of money that came from  
6 FEMA to repair the transmission lines. But  
7 still we have a lot to do in the distribution  
8 side. And, even though it's in better condition  
9 today than right after the hurricane, still we  
10 have a lot of situations with the distribution  
11 lines regarding the hosting capacity to allow  
12 all the new generation, the distribution side,  
13 and may be -- might be the same situation to  
14 reach the new retail energy supply -- to reach  
15 to those customers too in a case like that,  
16 solar community or a micro grid, or any other  
17 kind of situation like that. That's one of the  
18 things that...

19 Also, it's the combination of the measuring  
20 system too. The utility or the electric grid  
21 doesn't have, at my understanding, enough  
22 intelligence to manage a lot of transactions,  
23 that it's going to have a lot of complexity on  
24 it from measuring how much you are producing on  
25 one side, how much you are consuming at the



1 other side, and how it's going to be handling  
2 all the situation of re-stability, starting from  
3 transient to even steady state conditions.

4 Q. Let's go through those concerns of yours  
5 in detail to see if we can fill out a little bit  
6 more about your concerns. Your first concern  
7 was about the generation capacity.

8 If Puerto Rico is short on generation  
9 capacity, would it be helpful or problematic for  
10 a retail energy supplier to add generation to  
11 the system?

12 A. It will be helpful. It will be helpful  
13 under the right circumstances.

14 Q. And then, as for the transmission  
15 concern, if the same transmission line would  
16 carry power from a PREPA generator to customers  
17 as from a supplier generator to customers, the  
18 condition of the transmission system, is that an  
19 issue or is it the same level of problems  
20 regardless of where the power is coming from?

21 A. Well, I think that it would be more or  
22 less the same level of problems.

23 Q. And then the metering, as I understand  
24 what you just said, you are concerned that PREPA  
25 or Luma would not be able to monitor the

1           **generation level from a supplier's generator?**

2           A.    I think it would a challenge. I don't  
3           have all the details, but as far as I've been  
4           seeing through all those -- through many other  
5           processes that the Energy Bureau is thinking of  
6           regarding distribution, planning, and  
7           transmission planning, system remediation  
8           plan -- all these things that they are working  
9           on, from that information -- at least the public  
10          one that I have access -- I see that it could be  
11          a challenge.

12          **Q.    Do you think that PREPA, and I guess it's**  
13          **now Luma, has any difficulty determining how**  
14          **much power it's getting out of the existing,**  
15          **say, wind farms and keeping track of that?**

16          A.    Well, exactly from the wind farms, I  
17          don't think so. They are under PPOAs, and they  
18          are very restrictive, or at least PREPA had been  
19          very restrictive on the rules for metering  
20          procedures. But, for example, Legacy  
21          Fleet -- PREPA Legacy Fleet is  
22          another -- different story.

23          **Q.    So you're saying that you think at this**  
24          **point PREPA is not able to determine how much a**  
25          **particular wind farm or solar farm is putting**

1 out at any given time.

2 A. No.

3 What I'm saying is that maybe they got -- they  
4 could get the information from that wind farm  
5 without any problem because the regulations are  
6 very strict regarding that on the PPOA contract.  
7 But I'm talking about the PREPA fleet itself,  
8 the plants that are running, that they don't  
9 have the same quality of information. And also,  
10 we have to add the customer information too that  
11 is not in place right now.

12 Q. Let's just talk about the generators  
13 because there's already enough moving pieces  
14 here to make it confusing.

15 So you're saying that it's your understanding  
16 that PREPA can keep track of the generation from  
17 the PPOAs, but not necessarily from its own  
18 generators.

19 A. Yes. That's what I state.

20 Q. So basically, are you saying that the  
21 solution there would be to require the same kind  
22 of metering for the supplier's generation as is  
23 used for the PPOAs now?

24 A. Well, that could be one good suggestion  
25 from your part. I'm not sure that that will be

1 enough, but it could be a starting point. But  
2 I'm not sure if that approach is enough.

3 Q. Let me just ask whether -- there aren't  
4 any problems though with the metering of the  
5 PPOAs today?

6 A. (Unintelligible).

7 Q. But you're not sure that the same kind of  
8 metering on new generation would be sufficient.

9 A. No.

10 But as you say, I know that today there have  
11 been conflicts in accounting or measuring the  
12 generation from the PPOAs. PREPA had that  
13 experience before.

14 Q. Where they have had problems with meters.

15 A. Yes.

16 Q. Are you saying that the metering is  
17 usually adequate, but sometimes the meter  
18 malfunctions, or PREPA doesn't read it properly,  
19 or something else happens?

20 A. There have been conflicts or  
21 discrepancies regarding that. But how much, how  
22 frequently it is, I don't have that kind of  
23 information.

24 Q. I suspect that you're right, that anytime  
25 you have independent power producers selling to

1 utility that there will be some disagreements  
2 about whether the meter was properly calibrated  
3 and read, and so on.

4 And then you're concerned about the customer  
5 side metering.

6 MS. MERCADO: Sorry to interrupt you,  
7 Mr. Chernick. Just for the record, I would  
8 like for your last request -- respectfully,  
9 that the last (unintelligible) be seen as a  
10 statement, it wasn't a question. For the  
11 record to be clear. That there  
12 (inaudible).

13 MR. CHERNICK: I was assuring the  
14 witness that I understood his point.  
15 That's all.

16 BY MR. CHERNICK:

17 Q. On the customer metering side, can you  
18 explain what your concern is there?

19 A. Yes. That's a whole new game that we are  
20 entering there. We don't have experience in  
21 that part.

22 Q. So are you saying that there are no  
23 customers currently with metering that would be  
24 sufficient to support wheeling?

25 A. No.

1           What I'm saying is that we don't have  
2           experience to have a customer having a  
3           measurement of energy coming from an independent  
4           supplier and couplet or being supplemented by  
5           the last resort energy supplier.

6           **Q.    So you're saying that, if I understand**  
7           **you, the metering is okay at the customer**  
8           **location, or it can be. Maybe not every meter**  
9           **is like that, but you can put on a meter that**  
10          **would keep track of the hourly use by a**  
11          **customer. But is it your concern then that Luma**  
12          **may not know whether the energy is coming from**  
13          **the generator or from the last resort supplier?**

14          **A.    Let me make a clarification first. It**  
15          **might help. When you made the question, I was**  
16          **thinking in industrial customers, big industrial**  
17          **customers. Usually, their metering systems are**  
18          **very reliable, are in good condition**  
19          **because, of course, there's a lot of energy**  
20          **running through them and it's a big deal**  
21          **regarding economics.**

22          **As we go down the transmission distribution**  
23          **line, my concern grows bigger because it's a**  
24          **general knowledge here on the island. We know**  
25          **that metering is an issue as we go down to the**

1 transmission's system's lower voltage. And when  
2 we go to the distribution side, it's even worse.  
3 We don't have enough visibility, and we have a  
4 lot of problems with measuring equipment also  
5 too. As is normal in other utility as well, but  
6 we have the problem in bigger terms  
7 because of the lack of maintenance and  
8 investments that have been done on that.

9 Q. So I think you're saying that the  
10 existing meter on a customer may not be adequate  
11 for wheeling, but that the technology exists and  
12 Luma could install a meter for a wheeling  
13 customer that would give a reasonable reading on  
14 the load? Is that what you're --

15 A. The technology exists. It's not in place  
16 today, at least in many places. And of course,  
17 if you have the money and the interest to do it,  
18 you can do it.

19 Q. So obviously -- well, I guess you would  
20 agree that if no one has the money or interest  
21 to implement wheeling, then the independent  
22 generators won't be built and the meters won't  
23 be installed, and then none of this that we're  
24 talking about would actually go anywhere. But  
25 assuming that there was some interest from a

1 supplier who was willing to invest in it, then  
2 you think that the metering could be adequate?

3 A. Yes. Saying again, I'm assuming that  
4 they have the interest. Yes.

5 Q. Okay. All right. Thank you.

6 On the next page, on page 3, you say that  
7 energy and capacity tracking for billing  
8 purposes is complex as well. And I'm wondering  
9 what you're thinking about in terms of the  
10 complexity of tracking capacity. What sort of  
11 capacity needs to be tracked and built?

12 A. Well, I'm talking -- this is very related  
13 to what we were talking previously. This is  
14 maybe more specific regarding how you are going  
15 to be selecting the power plants that are going  
16 to come along or substitute any situation  
17 that -- if you have problems with the supplier,  
18 or to have stability on the system. So it's a  
19 specific situation of what we were talking  
20 previously.

21 Q. Okay. All right.

22 So when you talked about tracking capacity  
23 there, do you mean keeping track of generation  
24 from the independent generator so that the  
25 provider of the last resort or the generation



1 operator, whoever's doing the balancing, knows  
2 what plants it needs to ramp up or down? Is  
3 that the kind of problem you're addressing?

4 A. Yes. It's the same as is today. The  
5 difference is that you have more suppliers, and  
6 those suppliers are supposed to supply energy,  
7 as redundant as this sounds, to a specific  
8 customers as a first choice. If it doesn't  
9 work -- if that doesn't work, then they have to  
10 have alternative routes or plans or -- to  
11 overcome that kind of situation.

12 Q. Also on page 3, when you're talking about  
13 the tracking for billing purposes, you suggest  
14 that that tracking needs to take into account  
15 factors related to generation, grid conditions,  
16 line losses, congestion, time of operation,  
17 energy generation mix, among others.

18 A. Yes.

19 Q. Are you suggesting that that's more  
20 complicated than just keeping track of the  
21 generation by the RES's generator by hour, or  
22 maybe less than that, and the customer's usage  
23 by hour?

24 A. Yes. The thing is that, as I see it, I  
25 see the complexity in this system because it's

1 not a -- these suppliers are not working as a  
2 silo. This is an integrated grid system, and  
3 that's my experience as an electrical engineer  
4 for about 30 years in this. So there are many  
5 things that you have to be attentive related to,  
6 and many of those you don't have really much  
7 time to make decisions to put it in place. And  
8 if the grid system is not as good as could be,  
9 it makes more difficult this task.

10 Q. Right.

11 And would you agree that we have all of these  
12 issues to deal with in Puerto Rico now, line  
13 losses, congestion, changing energy mix?

14 A. Yes. That's the usual business every  
15 day. It's just going to be more complicated if  
16 we have more players on the grid.

17 Q. Can you explain what gets more  
18 complicated, if instead of having another wind  
19 farm selling under a PPOA to PREPA, you have a  
20 wind farm that's producing energy to be wheeled  
21 to customers?

22 A. Well, it's the same as I could put in  
23 very simple terms. It's easier to have a music  
24 band of 5 musicians than a symphony orchestra or  
25 100,000 -- 100 musicians. So you have to take

1 more coordination on that.

2 And in the electrical system, it will be that.  
3 It's going to be the same kind of situation.  
4 It's going to be -- the difference is that it's  
5 going to be more players on it. And  
6 communication and control has to be more robust  
7 to make -- to ensure that PREPA or Luma will  
8 still have control of it.

9 Q. So then is your concern that -- let's say  
10 it's Luma so we don't have to keep saying PREPA  
11 or Luma. Your concern then is that Luma should  
12 know how much is being generated at each plant,  
13 should get warning if the generator operator is  
14 planning on reducing power or increasing power  
15 at a plant, basically, everything they would  
16 know about a PREPA owned generator or a  
17 generator that's under contract under a PPOA?

18 A. Yes. I would say the same as before. It  
19 does get more complex, and at this time we don't  
20 have -- or I consider, in my opinion, we don't  
21 have enough intelligence on the grid to manage  
22 more players that -- in an independent form or  
23 coming from different situation, feeding  
24 independent -- let's say independent or specific  
25 customers. It's a more complex business or

1 business model. Just that.

2 I'm not saying that it's not possible to do  
3 it. It just has to be -- somethings have to be  
4 done -- or, I guess, I'm thinking that that  
5 something has to be done before to make ready  
6 the grid to allow to have a healthy open market  
7 of wheeling in Puerto Rico.

8 Q. Also on page 3 you talk about the  
9 emergency mode that PREPA's generation system is  
10 operating under, and that the majority of the  
11 generation units are considered "must run."  
12 What do you mean by a "must run" generation?

13 A. It's that a range or bandwidth of  
14 selection of different power plants is limited.  
15 It's not a -- we don't have a generation fleet  
16 that you can select, as ideally as it's supposed  
17 to be, which plants are the best or more  
18 economic to run first. And then you combine  
19 with the -- combine the generation with the  
20 peaking units and you left the "expensier" ones,  
21 the most expensive to run, at the last in the  
22 process.

23 And you have to have a conservation program,  
24 that you retire units for repairs. And as I saw  
25 as a part of taking workshops and other

1 activities, I have seen, I have watched, I have  
2 read a lot of reports from PREPA, now Luma,  
3 regarding this kind of situation, that they have  
4 to run plants longer than the maintenance  
5 required for more time. Even though they are  
6 expensive to run, because they need that  
7 generation at that time.

8 Q. So when you say that the majority of the  
9 generation units are considered "must run"  
10 units, does that mean that all of the steam  
11 units have to be -- if they're available at all,  
12 they're kept online in case they're needed? Or  
13 is it only some of those steam fired units, or  
14 does it include some of the combined cycle  
15 units? Or can you be any more specific about  
16 what units are required to be "must run?"

17 A. Well, usually the baseloads are "must  
18 run" because they take a lot of time taking off  
19 the system. So, like the steam unit could take  
20 14 -- 18 hours to make it available. So usually  
21 you think a lot before you take out one of those  
22 units for service, for instance.

23 Q. Sure.

24 A. And combiner cycle, you have to -- if you  
25 want to have the combined cycle working, you

1           need to produce the steam too. So you usually  
2           keep those plants as a baseload. The only thing  
3           is that you modulate them. You make a little  
4           ramp up, ramp down, as long as you can on the  
5           safe mode or what the plants allow to it.

6           When -- the thing is that I'm comparing the  
7           system as if we have to have even the smaller  
8           units, that they are not steam or they are not  
9           combiner cycle -- I'm talking about peaking  
10          units, small unit that have to be run all the  
11          time on diesel, that is a very expensive fuel,  
12          and that those plants are not supposed to be  
13          running all the time, I -- just for peaking  
14          purposes. It's just that the peaking situation  
15          in Puerto Rico is longer than we wish to have at  
16          this time.

17          Q. I guess there are a couple of things that  
18          I'd like to understand a little better about  
19          what you said. The first is when you said  
20          "baseload." Do you mean the steam units whether  
21          they're -- there's Ecoeléctrica, there's the AES  
22          Coal Plant, there are residual oil-fired plants,  
23          and I think you still have one steam plant  
24          that's fired by gas. So are those what you mean  
25          by baseload, all of the steam plants and

1           **Ecoeléctrica?**

2           A.    Yes.  And even those, you have an order  
3           in it at least.  For example, AES usually is the  
4           first one because it's a baseload made of coal,  
5           and then you go with a -- in a more economic  
6           dispatch, maybe with Ecoeléctrica, and the other  
7           one would be Costa Sur that is natural gas fired  
8           too.  And then you go with the other sources.

9           In residual oil, now you -- that you mentioned  
10          that, we have the limitation of environmental  
11          compliance.  So they're limited in the use that  
12          you can use that plant.  So it makes the  
13          generation problem bigger than -- in that terms  
14          too.

15          **Q.    And I'm just getting clear, it's your**  
16          **testimony that all of those steam units are kept**  
17          **hot and online and generating some power at all**  
18          **times because they have to be spinning,**  
19          **basically, in case some other plant goes down?**  
20          **Is that it?**

21          A.    Yes.  Exactly.  That's the information  
22          that I could understand is public -- available.

23          **Q.    And then you also said something about**  
24          **the combustion turbines burning diesel, that**  
25          **those are kept running -- kept operating,**

1 continued burning fuel, all of the time even if  
2 the energy is not needed? Is that --

3 A. Yes. Well, I don't know exactly if that  
4 happens all the time. But I'm guessing, for  
5 example, this coming August and September, I bet  
6 they are going to be running a lot of the time  
7 to keep the demand -- to satisfy the demand that  
8 we are going to have on summertime.

9 Q. Oh, okay. Yes. I understand that at  
10 high demand times you'll be running a lot of the  
11 gas turbines.

12 You mentioned further down on that page,  
13 around line 15, something about smarter grid  
14 management being required for keeping reliable  
15 metering and control of the island-wide  
16 electrical network. I'm wondering whether this  
17 is a problem with the existing system, and  
18 whether the need for that greater -- smarter  
19 grid management increases or decreases with the  
20 addition of more generation to serve wheeling  
21 customers.

22 A. Well, as I stated in the testimony, this  
23 is my concern. This is not my professional  
24 opinion of the situation of the grid. In base  
25 of that, I haven't seen information or good



1 information enough that can assure me that those  
2 conditions are going to be good enough to have  
3 all those retail energy suppliers be measured  
4 all of the time, and the customer as well.

5 Q. And then towards the bottom of that page,  
6 on line 26, you talk about more reliable  
7 information becoming available in the near  
8 future. What kind of information do you expect  
9 to be available that would be helpful in  
10 designing a wheeling rate?

11 A. Well, for example, the supply stack. At  
12 the beginning, the first version of that one, it  
13 had a lot of errors or -- errors. They were  
14 having -- the correct organization order of  
15 plants wasn't there, and even this second  
16 version it was -- it's much better, but still it  
17 has room to improve in how it was done. And, if  
18 some information as basic as that one is not  
19 correct, it made me think that it could happen  
20 that we have other gaps of information in other  
21 important situations related to this.

22 It's just that. If you don't have the good  
23 information or the basic information, the  
24 calculations you are going to do at the end of  
25 that, they're going to be wrong. So you have to

1 be correct on your -- when you are starting a  
2 study about this. Just that.

3 Q. And when you say that this reliable  
4 information -- more reliable information would  
5 become available in the near future, what do you  
6 mean by the near future? Are you talking about  
7 six weeks, six months, or six years?

8 A. No.

9 I know that this kind of information is not  
10 easily available as fast as I would like it to  
11 be, or the island. And also because it's  
12 historical information, some of this will be  
13 needing at least a year or maybe two years to  
14 having then -- to having then a trend of  
15 historical information that we can say, "Okay,  
16 this is good enough information. We have good  
17 tracking of what is going on. Now we can project  
18 to the future what is going to be the challenge  
19 that we are going to face with this."

20 Q. And what sort of historical information  
21 would become available over the next year or two  
22 that would, in your opinion, make the setting of  
23 wheeling rates more efficient or accurate?

24 A. Well, a good record of measuring from the  
25 existing power plants. Maybe by that time we

1 have a more organized generation fleet, because  
2 as we're talking today, there are RFP process  
3 toward the generation fleet of PREPA. So  
4 it -- I guess the intention is to get  
5 better -- in better shape that generation fleet.

6 And also to have a -- it's not only the  
7 condition of the situation, it's the bad luck we  
8 had with the hurricane and the earthquake, all  
9 those recent events that make it also hard to  
10 have like a reliable database of what is the  
11 behavior of the energy consumption and  
12 generation in Puerto Rico.

13 **Q. In terms of the generation fleet, are you**  
14 **concerned that the production costing models,**  
15 **like PROMOD and AURORA, don't do a good enough**  
16 **job of modeling the PREPA fleet as it exists?**

17 **A.** Well, it depends on a few things. I  
18 think that in the future that will be  
19 also -- have to be maybe revised as more -- the  
20 newer generation come along, that makes it more  
21 difficult to use traditional tools to do this  
22 modeling as we have today.

23 **Q. So you're saying that as renewables and**  
24 **maybe storage are added to the system, that may**  
25 **make the production cost modeling more**

1 complicated?

2 A. Um-hum.

3 Q. On page 4, you quote Ms. Everett as  
4 supporting a true-up that socializes EG shares  
5 variances across wheeling and non-wheeling  
6 customers to provide for correction in the  
7 differences between actual and predicated. And  
8 I just wanted to get clarified. You have some  
9 long quotes from her and I'm not always sure  
10 what part you're endorsing. But, do you agree  
11 with her that there should be a true-up in the  
12 wheeling rate?

13 A. Yes. Regarding the true-up, what I agree  
14 on -- the section that I agree on it is the  
15 section that talks about a way to balance or to  
16 equalize the different costs or different  
17 aspects of costs that could harm non-wheeling  
18 customers.

19 I'm not endorsing specifically the socializing  
20 part because that part will be necessary  
21 specifically if you don't have the  
22 intelligent -- the smart grid or intelligence  
23 enough in the grid to segregate or separate  
24 those costs that then have to be socialized.  
25 That's a very specific question. I'm glad that

1           you asked me that. And to make clear,  
2           it's -- I'm talking more regarding that, yes, a  
3           mechanism has to be in place to refine those  
4           tariff costs regarding some hiding costs that  
5           you have to fix up. But, not really I was  
6           talking about the socializing part.

7           **Q. Thank you for that.**

8           **So are you thinking that this true-up would**  
9           **set rates for the future -- for future months**  
10          **based on what has learned about the operation**  
11          **system in previous months? Or are you thinking**  
12          **that you would actually go back three months or**  
13          **a year and say, "Oh, you actually owe us more**  
14          **money, or we owe you more money?"**

15          A. Well, I see that -- something very  
16          similar to how is the riders of energy purchases  
17          and fuel purchased riders. It's something very  
18          similar that you have to recover future costs  
19          ahead from an estimation that you do or what you  
20          spent before, so more or less that kind of  
21          situation.

22          **Q. So you would go back and correct the**  
23          **billing for the actual conditions as opposed to**  
24          **what was expected.**

25          A. Yes. That would be an alternative. Yes.

1 I'm not the Bureau, so I just --

2 Q. No.

3 But you're suggesting that the Bureau set up a  
4 system in which Luma, I suppose, would be doing  
5 those.

6 A. Exactly. Yes.

7 Q. I do tend to use the term "you" to mean  
8 whoever is doing this thing, and I know that can  
9 be a little bit confusing.

10 I think I just have a couple more things that  
11 I wanted to go into here, maybe four more. You  
12 expressed some concern about ancillary service  
13 costs not being overlooked. That's at pages 4  
14 to 5 of your testimony. And are you suggesting  
15 there that there are some kinds of ancillary  
16 services that wheeling customers require that  
17 non-wheeling customers do not?

18 A. Well, the thing is that ancillary  
19 services are in place already. It's  
20 just -- it's not a market for that, but it's a  
21 requirement in the electric grid to have it. So  
22 you have to have a balance on the grid. You  
23 have to supply the reactive power that you need  
24 to keep the grid running. You have  
25 to -- many times the utility has to do a

1 power -- load shifting, all these kinds of  
2 situations that is related to ancillary services  
3 because they have to do -- to keep the system  
4 running.

5 I think that here I looked more as an  
6 opportunity to make even the market better for  
7 those retail energy suppliers if that ancillary  
8 service is opened up to this new business to be  
9 allowed to participate in it. Because, for  
10 example, for the PPOAs, some of them have to  
11 participate in this -- with ancillary service as  
12 a requirement to be part of the grid. So I  
13 think that that would be better to see it more  
14 than a requirement, see it as an opportunity to  
15 have more participation of those retail energy  
16 suppliers.

17 Q. So whether that's a customer providing  
18 some ancillary services or an independent  
19 generator providing services --

20 A. Yes.

21 Q. -- you'd like to see a market for all of  
22 those things.

23 A. Yes. Yes.

24 Q. And that would be true with whether you  
25 have wheeling or whether all the power flows

1 through the provider of last resort, or is it  
2 particularly related to wheeling?

3 A. No.

4 It will be related to even what we have today.  
5 And, for example, with virtual power plants,  
6 it's something related to that too. So they  
7 cannot -- they could do in the future, not only  
8 provide kilowatt-hours, they could provide the  
9 supporting or ancillary service to the system as  
10 well.

11 Q. Am I correct in thinking that the  
12 ancillary services that you're talking about are  
13 divided out from energy in many places in the  
14 ISOs and RTOs in North America, for example?

15 A. It could be something similar to that.  
16 Yes.

17 Q. Do you have any idea how ancillary  
18 services tend to relate to the energy cost?  
19 That is, are they about the same magnitude as  
20 the energy cost, or are they a tenth as large or  
21 1 percent as large? Do you have any idea?

22 A. Well, not exactly. Because that depends  
23 on the health of the grid itself. If a lot of  
24 necessity or requirement for some type of  
25 ancillary service, they -- it could be even more



1 important than energy service itself. But that  
2 depends on the specific situation of each grid.

3 Q. Thank you.

4 On page 6, you talk about distribution and  
5 transmission systems perhaps needing capital  
6 investment not due to an increase in load  
7 demand, but to enable the retail energy  
8 suppliers to reach their customers. You see  
9 that?

10 A. Yes.

11 Q. How would a retail energy supplier  
12 increase distribution congestion?

13 A. Well, it's not exactly the retail energy  
14 supplier, but maybe to reach those clients that  
15 are inside of those distribution  
16 lines -- distribution systems. It could be  
17 difficult if there are a lot of, for example,  
18 distributor generation inside those distribution  
19 lines. So it's not the retail energy supply the  
20 problem, it's the retail energy supply to reach  
21 those clients inside a congested distribution  
22 system.

23 Q. So if you had a wind farm on the east  
24 coast of the island and it's serving customers  
25 around San Juan, is the -- does distribution

1           congestion have anything to do with whether it's  
2           harder to serve those customers from that RES  
3           wind farm than from a set of PREPA owned  
4           generation?

5           A.   Well, if the retail energy supplier  
6           doesn't have an alternative to supply or inject  
7           that power to the system, it could be a  
8           situation. As an example, I've been -- I guess  
9           there has been a layout in previous technical  
10          conferences regarding this. It's something that  
11          could happen. It's not that it's going to be a  
12          common issue, but it's something else that we  
13          have to work on that.

14          If there's a -- if we have a distribution  
15          system that we have to invest a lot to increase  
16          the hosting capacity to even have  
17          self-generation on the premises of the service,  
18          I'm thinking that it'll have to be expanded so  
19          we have enough capacity on those distribution  
20          lines so we can have a healthy transmission of  
21          delivery of energy in that distribution system  
22          coming from the retail energy suppliers.

23          Q.   But do you need more distribution  
24          capacity to get power from a wind farm to a  
25          customer on the distribution system than you

1 would need to get power from Ecoeléctrica, for  
2 example, to that same customer?

3 A. It would be the same, but I think that  
4 with more players you would need more enhanced  
5 distribution systems (inaudible) enhanced.

6 Q. So we're back -- we're talking about  
7 information systems?

8 A. Yes.

9 Q. You've mentioned a number of times a  
10 concern about self-generation by wheeling  
11 customers, which you mentioned down on page 7 as  
12 well. And I'm wondering if perhaps  
13 self-generation by customers -- non-wheeling  
14 customers today you can have problems with  
15 overloading a distribution line, I suppose.  
16 That's what you suggest. Is that right?

17 A. Well, this is more related to metering.  
18 What it's more related. Because you have a  
19 self-generation facility with wheeling too, so  
20 you have to measure what their own generates,  
21 you have to measure what they export that is not  
22 related with that self-generation, what they  
23 import from the retail energy supplier, and what  
24 they import from Luma, if that is the case.

25 Q. So would that be just a matter of

1 combining the wheeling tariff with the existing  
2 net energy metering tariff?

3 A. Sounds as simple, but as you combine more  
4 things, more complex things become.

5 Q. But it's not exactly a new problem, it's  
6 just taking the existing problem of dealing with  
7 self-generation and combining it with keeping  
8 track of the wheeling transactions. Is that  
9 what you're saying?

10 A. Yes. That's exactly what is -- it has  
11 been done in many places, I guess, in the US.  
12 The difference is that it hadn't been done in  
13 Puerto Rico yet.

14 Q. And I think this is my last question. On  
15 pages 6 over on page 7, you quote a request that  
16 you sent to Luma and Ms. Everett's response  
17 regarding how the estimates of the marginal cost  
18 of energy may change in the future. And I'm  
19 wondering whether you think that's relevant to  
20 whether a reasonable wheeling rate can be  
21 established at this time. And if not, what has  
22 to change in terms of the estimates for the  
23 wheeling rate to be reasonable?

24 A. Yes. The thing is that when she is  
25 taking -- or setting to zero the capital cost of

1 generation, she's taking out what's going to  
2 be -- to happen in the future, if we have low  
3 growth -- even if we have low growth that we  
4 need to have more generation. And, because you  
5 take out -- or set to zero that capacity -- or  
6 imaginary generation capacity cost, you are also  
7 taking out the coincidental peak part of the  
8 formula that she used, and we don't have -- we  
9 will not have experience on how to handle that  
10 in the future.

11 I think that this study has to take into  
12 account those elements, even though the capacity  
13 investment is not being accounted because -- of  
14 course, we don't have the necessity to do that  
15 now. But to have the framework so when, if that  
16 happens, we can respond to that.

17 **Q. Okay. Well, thank you. I think that**  
18 **clears up my questions about your testimony and**  
19 **completes my questions.**

20 A. Thank you.

21 HEARING EXAMINER SEILHAMER: Mr. LeBel,  
22 do you have any questions?

23 MR. LEBEL: No. Thank you.

24 Mr. Chernick covered it for us today.

25 Thank you.

1 HEARING EXAMINER SEILHAMER: Thank you  
2 very much.

3 So then we are going to allow Luma's  
4 counselor to ask questions.

5 MS. MERCADO: Thank you.

6 Margarita Mercado, counselor for Luma.  
7 (Inaudible) I have a couple of questions.  
8 Mr. Chernick addressed some of what I had  
9 (inaudible) the first questioning.

10 CROSS-EXAMINATION

11 BY MS. MERCADO:

12 Q. I would like to begin with page 2 of  
13 your (inaudible). Line 24 through 30, where I'm  
14 going to read your testimony, "Therefore, I  
15 recommend feasibility studies or evaluations to  
16 be done on minimum grid and generation  
17 requirements that need to be in place before  
18 commencement of wheeling agreements."

19 Could you elaborate on what you mean or  
20 include when you recommend that feasibility  
21 studies or evaluations be done on grid  
22 conditions and generation requirements?

23 A. Yes. To start with, I'm not sure if  
24 those studies have been done or not. At least  
25 by my knowledge so far, I don't see they had

1           been done. It's just the -- to set up the  
2           groundwork of what will be needed to make sure  
3           that this kind of program is going to be a  
4           successful one.

5           I compare this wheeling with the distribution  
6           experience, for example, with net metering.  
7           That is something much more smaller still, but  
8           something similar. At the beginning, this  
9           program started as a very simple one or a  
10          generic. How do you call? "Silvestre." It was  
11          kind of a growing "silvestre." I don't know how  
12          you say that in English. The thing is that the  
13          development of that program wasn't that  
14          organized at the beginning, and we faced at the  
15          very early stage problems with the distribution  
16          system because of the amount of equipment that  
17          was put in place with the limitations of the  
18          situations of those feeders.

19          I will see that it could be advisable or  
20          correct to have that kind of -- having that kind  
21          of experience to take into account this kind of  
22          situation, that is similar -- that have  
23          production -- it's similar, but it's more  
24          complex because the generation is not on the  
25          customer side, it's faraway in another place.

1 And we have to measure generation in one side,  
2 consumption in the other side, and have all the  
3 measurement and control, and energy, and grid  
4 infrastructure necessary to keep stability of  
5 the system all the time, 24/7. It's just that.

6 **Q. Thank you for your answer.**

7 Do you have an estimate or idea of how much  
8 you think those studies that you have mentioned  
9 and described in your answer would -- the time  
10 they would take to be completed?

11 A. Honestly, no. But it could be something  
12 as short as a few weeks if the information is  
13 there. It just makes an assurance that we have  
14 enough information, and we have enough  
15 infrastructure to do so. And if we determine  
16 that we don't have it, then make a plan on how  
17 to get that grid system ready for a  
18 tariff -- unbundling tariff or wheeling tariff  
19 and start a plan to get there. And when you  
20 make the plan, then you could answer the  
21 question of how long it's going to take that.

22 **Q. Thank you.**

23 A. What I think that, at least for this  
24 time, it's just to make an assessment of what we  
25 have and what would we need for that to happen.



1 Maybe it's not much, maybe it's a lot. I don't  
2 know.

3 Q. Thank you.

4 You mentioned a plan, and I know you have  
5 experience before the Energy Bureau  
6 participating in different proceedings and  
7 technical workshops. Would you have a  
8 suggestion on how that plan you mentioned  
9 overall could be implemented or followed within  
10 the Bureau?

11 A. Well, it could be something similar to  
12 the proceeding that the -- has been happening in  
13 the Bureau with the planning of the distribution  
14 system. That could be like a good framework or  
15 an example of how to do it.

16 Q. Thank you.

17 Also on page 12 of your testimony, at line 28  
18 through 30, when you -- after describing the  
19 recommendation on the feasibility studies that  
20 we discussed, you mentioned, "This will ensure a  
21 sustainable open market of RES in Puerto Rico  
22 that will benefit wheeling customers and present  
23 no harm to non-wheeling customers." I would  
24 like to explore that portion of your testimony.

25 Could you explain what you mean by a

1           **sustainable open market?**

2           A.   Well, sustainable means that it will be  
3           on by itself. It will not be a subsidized one.  
4           It will have opportunity to different players,  
5           and that it will be allowed growth into the  
6           future. It's what sustainable word means, it's  
7           just that -- keep the wheel running is what I'm  
8           trying to say here.

9           **Q.   And you mentioned right now that it's a**  
10          **system that is not subsidized. Could you**  
11          **explain what you mean by that, what is your**  
12          **concern with subsidy?**

13          A.   Well, that cost that -- it could be  
14          avoided by wheeling customers. It could be  
15          shifted to non-customers as well. It's just  
16          that -- make sure that the correct costs are  
17          charged to the correct people or business model.  
18          It's -- not to overload wheeling customers or  
19          non-wheeling customers in this effort.

20          **Q.   I understand.**

21          **Have you identified what challenges, would you**  
22          **say, to achieve that state where there is no**  
23          **subsidization by non-wheeling customers and**  
24          **wheeling customers are likewise not affected?**

25          A.   Well, challenges are every day. The good

1           thing we have now is that we have a lot of  
2           finance sources from FEMA that are going to help  
3           a lot in this. So we are in a very good  
4           position. And I'm guessing that we -- indeed we  
5           are -- we have a good chance to have a healthy  
6           and sustainable wheeling market in Puerto Rico.  
7           It's just to make sure that we have enough  
8           infrastructure, especially regarding control and  
9           communication in place to make sure that this  
10          happens.

11          **Q.    Would you agree that to avoid the cost**  
12          **shifting, that we have just mentioned, periodic**  
13          **reevaluation of cost allocation should be done?**

14          A.    Yes. That's why I agreed with Guidehouse  
15          regarding true-up mechanism because it could  
16          help to ensure that -- a more justice share of  
17          the costs that are involved.

18          **Q.    I'm going to move now to page 3 of your**  
19          **testimony, lines 18 through 22, where you**  
20          **describe the process of developing unbundled**  
21          **tariffs based on marginal costs of service is**  
22          **fundamental to develop the wheeling tariff. And**  
23          **then you follow up that statement saying that**  
24          **"this study may also be helpful to review the**  
25          **current load retention rider, and net metering**

1 program as well as the energy efficiency  
2 programs, demand response programs, green mobile  
3 energy credits."

4 Could you elaborate on what's that connection  
5 between those programs and the unbundled  
6 tariffs, what's the relationship that you  
7 mentioned?

8 A. Well, it's part of our tariff system or  
9 different programs that are related to how  
10 customers pay their services, or how they are  
11 part of the electric service as is net metering.  
12 What I'm just suggesting here is that this  
13 experience is what I very well recognize is a  
14 good initiative by the Bureau to do this process  
15 of unbundling tariff and allow this marginal  
16 cost study to do -- to be done.

17 It will help all these processes related to  
18 rate case in the near future as well. Because  
19 as more we learn and know our electrical system  
20 and how economic the operation of this  
21 electrical system is, in better position we are  
22 going to be to distribute the cost and have  
23 better tariffs for everyone here.

24 Q. And along those lines and to questions  
25 from Mr. Chernick, you have mentioned the

1 importance of having better information, data,  
2 visibility in the system, and the  
3 infrastructure. And we have been discussing the  
4 need for the market to be ready for wheeling  
5 tariffs. Would you agree that additional market  
6 rules or regulations would be needed before  
7 implementing the unbundled tariffs and opening  
8 the markets?

9 A. Well, I think that we are working on that  
10 right now. This is the reason of this  
11 proceeding. It's more related to what I think  
12 more are technical aspects of this. Talking  
13 regarding regulations, I don't have much more to  
14 say. My testimony was more toward technical  
15 aspects of how to have wheeling service in  
16 place.

17 Q. Okay. I understand. And you're the  
18 technician, I'm not. But I try to answer some  
19 questions drawing from your -- benefiting from  
20 your knowledge.

21 To questions from Mr. Chernick, you were  
22 discussing the importance of metering  
23 information and having that infrastructure in  
24 place. If I understand correctly, is it your  
25 opinion or your recommendation to the Bureau

1           that before implementing the unbundled tariff, a  
2           real time information on metering would be  
3           advisable to have available?

4           A.    Say the last part of the question.  I  
5           didn't catch it that well.

6           Q.    Yes.

7           Per the metering information, that you have  
8           been discussing the need for that, if I  
9           understood correctly your testimony, is it your  
10          recommendation that that information should be  
11          available on real-time information on metering  
12          in order to implement an unbundled tariff?

13          A.    Well, once you have suppliers  
14          having -- or supplying energy to customers, you  
15          have to -- the grid has to be smart enough to  
16          have into account all the economic transactions  
17          that are happening.  At the same time, the  
18          technical transaction, if I put it that way,  
19          that keeps the grid in place and alive so that  
20          we don't have any electrical event that we have  
21          lost power or have problems with the lines.  So  
22          it's something complex that is more complex than  
23          net metering.

24          Wheeling is something that is more complex  
25          than net metering.  We had some challenge with

1 net metering. I'm guessing that we're going to  
2 have more difficulties or challenges to overcome  
3 with net metering to do it. I'm not  
4 doing -- I'm not saying that we are not capable  
5 to do it. We're capable to do it. I'm betting  
6 that we are going to be successful in this, but  
7 we have to be -- to learn from the experience  
8 that we had with other processes like net  
9 metering.

10 Q. You also answered questions claiming that  
11 when more players are included in the market, if  
12 I understood you correctly, you said that more  
13 communication was needed and control to have  
14 control over the system. If I understood  
15 correctly, that control and communication, are  
16 you referring to technical aspects or to  
17 something additional? I just want to pursue  
18 what you meant by more communication and more  
19 control.

20 A. They're technical aspects. It's just to  
21 keep the stability of the system. That's just  
22 technical aspects. Yes.

23 Q. Thank you.

24 Also, there was a line of questioning where  
25 you answered several questions through your

1 knowledge on the units, the supply stack that  
2 was submitted in this procedure and how those  
3 unit-to-units operate. I just wanted -- and you  
4 also mentioned that you have information on  
5 that -- regarding the operations of the units  
6 based on public information.

7 Could you explain what type of public  
8 information you referenced, or you used to give  
9 your testimony?

10 A. Well, the vast majority of that  
11 information is the public docket of the Energy  
12 Bureau.

13 Q. So if I understand correctly, you haven't  
14 done any independent study on the operations  
15 of the units (inaudible).

16 A. No.

17 Q. I think I don't have...

18 To questions from Mr. Chernick, you mentioned  
19 that you understood, in terms of rates, that  
20 something similar to the FCA and PPCA riders to  
21 recover future cost could be implemented or  
22 could be adopted. Could you explain how you  
23 reached that recommendation that you mentioned  
24 to him?

25 A. Say what part of my testimony you are



1           referring to.

2           Q.    Yes.

3           In your notes you said that you have -- that  
4           something similar to the riders of the  
5           FCA -- the riders for fuel consumption and  
6           purchase power could be considered in relation  
7           to future costs, for estimation costs, and  
8           setting the tariffs. If I understood correctly  
9           your testimony.

10          A.   Yes. That's part of it. It's just this  
11          is a dynamic situation. The generation fleet is  
12          going to change over time. We are going to have  
13          more renewable energy storage in place too. So  
14          the model that we are seeing today and the  
15          supply stack is going to change a lot in the  
16          future. So we have to take that into account  
17          when that happens, and if we are going to be in  
18          good track with this it's going to happen very  
19          soon.

20          Q.    There was also some discussion on  
21          ancillary service, and you mentioned that you  
22          saw it in good light. That for a better market,  
23          a player -- the market could open up for new  
24          players to provide ancillary services. I wanted  
25          to understand better the types of ancillary

1           **services that you were referencing in your**  
2           **testimony. Which would those be?**

3           A. Yes. It's just other services that  
4           suppliers can do to the electrical grid besides  
5           selling energy. For example, capacity is one of  
6           those. That you can ensure the utility -- that  
7           you have enough capacity for a given period of  
8           time or moment in the future as planned.

9           It could be shifting, load shifting too, or  
10          generation fleet shifting, depending on what we  
11          are talking about. That you can -- for example,  
12          if you have a solar generating capacity with  
13          energy storage, you can make an arrangement that  
14          instead of supplying energy during daytime  
15          hours, you supply that energy only at nighttime  
16          hours when you have the energy stored in your  
17          batteries that you charged during the day. You  
18          make that an energy shifting there. You  
19          translate what you generate at nighttime when  
20          it's needed.

21          Or another example is the reactive power.  
22          That is the power that is needed to keep the  
23          electric grid in balance -- respecting to the  
24          electrical behavior of the system. So that's  
25          something that you can supply to by independent

1 generation -- generator systems.

2 So there are many different options that could  
3 happen, and even more with the new renewable  
4 energy that is coming or the -- saying better,  
5 the larger scale or presentation -- penetration  
6 that we are going to have in renewables. Those  
7 ancillary services are becoming much more  
8 important in the grid because the grid is going  
9 to have less of what is called energy inertia or  
10 system inertia. It's going to have less than  
11 that. And those ancillary services are going to  
12 help a lot in those -- in that matter as well.

13 **Q. And when you mention opening up the**  
14 **market for retail energy suppliers to engage in**  
15 **those ancillary services, is it your opinion**  
16 **that those retail energy suppliers should bear**  
17 **the costs of those services? Who would pay for**  
18 **the costs?**

19 A. That depends on how we set it. If the  
20 supplier of energy, the independent power  
21 supplier of energy, they have the capacity to  
22 provide the ancillary service, that could be a  
23 credit to that facility and they are not going  
24 to pay. If they lack that kind of service, then  
25 it could be purchased from Luma or any other

1 supplier that can do that, that can supply that  
2 kind of service. So it's going to be -- I see  
3 it as well as -- for example, net metering  
4 is -- it's a bi-directional service, so it could  
5 be the same thing. It depends on who has the  
6 capabilities and the time that that facility has  
7 to do the work or have the capacity to do the  
8 work.

9 Q. I'm not trying to do an exam of  
10 regulations approved by the Bureau, but in  
11 connection with those services -- related to the  
12 ancillary services and the services that the  
13 POLR provider -- provider of last resort would  
14 have to provide, have you reviewed the Bureau  
15 Regulation 9138 on an electric energy wheeling?

16 A. Yes. I see those -- that one. Yes.

17 Q. Are you aware of who would, under that  
18 regulation, have the duty to provide those  
19 ancillary services under the wheeling mechanism?

20 A. Say the question again, please.

21 Q. Do you know who, under that Regulation  
22 9138, has the duty to provide those ancillary  
23 services for the --

24 A. Well, I don't recall right now which one  
25 it is. No.

1           Q.    I think basically my last question is,  
2           toward the end of your testimony with  
3           Mr. Chernick, you mentioned that the cost of  
4           service study should, in your opinion, consider  
5           load growth. Could you explain how you  
6           would -- what methodology you would recommend be  
7           implemented considering a future load growth?

8           A.    Well, that's something that is maybe out  
9           of my capacity or capability of knowledge to  
10          suggest this, but I think that Puerto Rico, as  
11          well as the rest of the world -- it could have a  
12          lot of changes in load demand, especially from  
13          the electrical cars, for example. Right now,  
14          it's forecasted that our load is going to be  
15          declining because we have a lot of renewable  
16          energy. It's common place even in the  
17          distribution system.

18          But it could happen that we will need more  
19          electricity than we are thinking today due to  
20          the electrical car market. And they -- if that  
21          happens, it's going to influx a lot of energy  
22          demand and capacity demand on the existing  
23          system that it will change the game regarding  
24          load growth in Puerto Rico.

25          Q.    I gather from your answer that when you

1 speak of possibility of load growth, you're  
2 speaking about a hypothetical future scenario,  
3 not currently present. Correct?

4 A. Well, when we are thinking about the  
5 future and forecast, everything is hypothetical  
6 because it's what you -- it's from your  
7 experience or information you got. Some are  
8 more hypothetical than others, but that's the  
9 intention.

10 Q. So my last question would be, have you  
11 reviewed any report or forecast that aligns with  
12 what you have testified about load -- future  
13 load growth in Puerto Rico?

14 A. Well, for example, the IRP didn't cover  
15 load growth due to electrical cars in that time.  
16 But, as far as I remember in the decision that  
17 the Energy Bureau did about that, it's that it's  
18 going to -- sure to be considered in the next  
19 IRP process or revision of that.

20 Q. Thank you.

21 I don't have additional questions at this  
22 time. Thank you for your time, Mr. Cosme.

23 A. Thank you.

24 HEARING EXAMINER SEILHAMER: Thank  
25 you, Counselor.

1           Before we go on a break, I would like  
2           to ask Attorney Fernández if he has  
3           questions for Mr. Cosme?

4           MR. FERNÁNDEZ: No, sir. No  
5           questions.

6           HEARING EXAMINER SEILHAMER: You  
7           don't. Okay.

8           And I wanted to make sure if  
9           Ecoeléctrica is present today in this  
10          hearing.

11          (No answer is given.)

12          HEARING EXAMINER SEILHAMER: What  
13          about Cooperativa Hidroeléctrica de la  
14          Montaña?

15          MR. SMITH: "Buenas tardes." La  
16          Cooperativa Hidroeléctrica de la Montaña is  
17          present.

18          HEARING EXAMINER SEILHAMER: And do  
19          you guys have questions for Mr. Cosme?

20          MR. SMITH: We have a couple of  
21          questions.

22          HEARING EXAMINER SEILHAMER: You do?  
23          Okay.

24          Well, then, I'm going to take a break.  
25          I just wanted to make sure. We're going to

1 give Mr. Cosme a break. He has been for an  
2 hour and half without a break. So we're  
3 going to take a 15-minute recess, and we'll  
4 be back at 3:25 to resume the questions  
5 from Cooperativa, and also if the  
6 Independent Consumer Protection Office has  
7 a right to direct, we're going to give them  
8 that opportunity at that time. So we'll be  
9 back in 15.

10 MS. RIVERA: Thank you.

11 MR. VÁZQUEZ: Thanks.

12 HEARING EXAMINER SEILHAMER: You're  
13 welcome.

14 (Whereupon, a brief recess  
15 transpires.)

16 HEARING EXAMINER SEILHAMER: We're  
17 going to resume with the evidentiary  
18 hearing.

19 Prior to the break, I asked  
20 Ecoeléctrica, who was not present, and I  
21 also asked Cooperativa Hidroeléctrica de la  
22 Montaña if they had questions. They told  
23 me they did, and also, I know Independent  
24 Consumer Protection Office has a redirect  
25 for their witness.



1 In terms of Cooperativa Hidroeléctrica  
2 de la Montaña, is Ramón Luis Nieves present  
3 today, Attorney Ramón Luis Nieves?

4 MR. SMITH: No. He's not available.

5 HEARING EXAMINER SEILHAMER: Can you  
6 identify yourself for the record?

7 MR. SMITH: Yes. I'm CP Smith. I'm  
8 the "director ejecutivo de la" Cooperativa  
9 Hidroeléctrica de la Montaña.

10 HEARING EXAMINER SEILHAMER: Mr. Smith,  
11 question, are you a licensed attorney in  
12 Puerto Rico?

13 MR. SMITH: No. I am not.

14 HEARING EXAMINER SEILHAMER: Anywhere  
15 in any jurisdiction?

16 MR. SMITH: No.

17 HEARING EXAMINER SEILHAMER: It has  
18 been the ruling of the Energy Bureau in  
19 past hearings that only attorneys can  
20 represent their clients. So this is not  
21 going to be anything different than before.  
22 So, unless Attorney Nieves is present  
23 today, we won't allow you to question the  
24 witness. Sorry about that, but it has been  
25 the rule for the last three or four years.

1 MR. SMITH: I understand.

2 But I do have a question. Can we then  
3 submit those questions in writing?

4 HEARING EXAMINER SEILHAMER: We'll do  
5 this. You can request in writing to get  
6 permission and then I'll let the  
7 commissioners decide that.

8 MR. SMITH: Okay.

9 HEARING EXAMINER SEILHAMER: So you  
10 can ask, you can file a motion or your  
11 attorney can file a motion, and then they  
12 could rule about that issue.

13 MR. SMITH: Okay. Thank you.

14 HEARING EXAMINER SEILHAMER: Then,  
15 Mr. Vázquez, are you going to redirect?

16 MR. VÁZQUEZ: No. We won't do a  
17 redirect to our witness. So, basically,  
18 we'll be submitting --

19 HEARING EXAMINER SEILHAMER: So then  
20 we can excuse Mr. Cosme?

21 MR. VÁZQUEZ: Right.

22 HEARING EXAMINER SEILHAMER: And  
23 before I do so, as I see Commissioner  
24 Rivera, and I know Commissioner Matos are  
25 online, do the commissioners have questions

1 for the witness?

2 MR. RIVERA: Not from my part.

3 MS. MATEO: Not from my part.

4 HEARING EXAMINER SEILHAMER: And it's  
5 Mateo, sorry. With all the -- I excuse  
6 myself.

7 MS. MATEO: No. I don't have any  
8 questions. Thank you.

9 HEARING EXAMINER SEILHAMER: Thank  
10 you.

11 Then, Mr. Cosme, you are excused.

12 THE WITNESS: Thank you.

13 HEARING EXAMINER SEILHAMER: So our  
14 next witness is going to be Ms. Yania  
15 Pérez. I'll remind Ms. Pérez that she's  
16 under oath.

17 And then we're going to allow,  
18 either/or, Mr. Chernick and/or Mr. Lebel to  
19 ask questions to the witness first.

20 MR. FERNÁNDEZ: Sir, I would ask your  
21 consent to make a very brief statement  
22 regarding the nature of the testimony  
23 today.

24 HEARING EXAMINER SEILHAMER: The rules  
25 that were established yesterday -- one of

1 the rules was that there were not going to  
2 be opening remarks. If at the end of the  
3 day we have time, I will allow attorneys to  
4 make closing statements or any statement  
5 related to the procedures. But at this  
6 precise moment, we're just going to go  
7 directly to the cross-examination.

8 MR. FERNÁNDEZ: Okay, Your Honor.

9 HEARING EXAMINER SEILHAMER: And this  
10 has been -- I think that Luma asked for an  
11 opening statement at some point, and it was  
12 the same ruling.

13 So Mr...

14 MS. MERCADO: This is Attorney Mercado  
15 for Luma. Just a point of clarification,  
16 in my recollection and notes the witness  
17 Pérez wasn't -- didn't join at the  
18 beginning of the hearing, and I'm not sure  
19 if she was sworn in the oath. I don't  
20 remember.

21 HEARING EXAMINER SEILHAMER: She did.  
22 She eventually joined prior to the oath, so  
23 she's under oath. She did.

24 So Mr. LeBel or Mr. Chernick, the  
25 floor is yours.

1 MR. LEBEL: Thank you.

2 I just have a couple of simple  
3 questions.

4 Whereupon,

5 -----

6 YANIA PÉREZ,

7 -----

8 having been duly sworn, was examined, and  
9 declared as follows:

10 EXAMINATION

11 BY MR. LEBEL:

12 Q. Thank you so much for being here today,  
13 Ms. Pérez. I am going to double check which  
14 parts were stricken from your testimony before I  
15 ask my questions though.

16 HEARING EXAMINER SEILHAMER: And I  
17 will refresh you. It's only the paragraph  
18 that compares -- that talks about the  
19 Illinois tariffs.

20 MR. LEBEL: Okay. Thank you.

21 Sorry. Let me open the correct file  
22 here. All right. Sorry for the delay.

23 BY MR. LEBEL:

24 Q. Again, thank you for being here and for  
25 your testimony, Ms. Pérez, this afternoon.

1           So just a couple of questions about the  
2           economic feasibility of alternative supply  
3           credits. So your testimony touches on  
4           transmission tariffs suggested by PREPA, and  
5           whether or not it's competitive. That spans  
6           pages 1 and 2 of your testimony. Does it not?

7           A. Yes.

8           Excuse me, can you repeat that?

9           Q. Sorry. Part of your testimony discusses  
10          what an economic competitive tariff for third  
11          party supply would be. Is that right?

12          A. Yes.

13          Q. Do you have any basis -- what is the  
14          basis for the statements regarding the  
15          competitiveness of these tariffs?

16          A. Based on the expectation that the  
17          association has expressed during the years,  
18          basically due to the concern of the high cost of  
19          energy in Puerto Rico versus other jurisdictions  
20          and the plan of transforming the energy system  
21          for Puerto Rico. One of the parameters was to  
22          move or transfer energy to renewable supplies.

23          Unfortunately, based on the tariffs that were  
24          presented in the study, the price of the  
25          wheeling is a lot higher than the expectation

1 based on the reality that it doesn't represent  
2 an attractiveness or promotes companies to  
3 either supply the energy with alternative  
4 sources, and for the consumers of the energy to  
5 have an accessible price if they were to  
6 implement their own renewable -- or their own  
7 energy supply systems.

8 Q. Thank you.

9 So there have been several different  
10 alternative calculations proposed for the amount  
11 of credit that could be approved in this  
12 proceeding. Are you familiar with some of  
13 those, the general range of alternatives that  
14 have been discussed in this proceeding?

15 A. During the proceeding today, yes. I  
16 heard some, and I read the study. But the  
17 reality is that our position is that not  
18 necessarily because the study -- we're not  
19 questioning the study. What we are challenging  
20 is that, if we want to have a competitive range  
21 or price for us to promote, the conversion to a  
22 different type of generation of energy in Puerto  
23 Rico, those prices are not accessible to -- for  
24 suppliers and for people to afford to move that.  
25 So our plan of converting Puerto Rico to

1 alternative energy provided by Law 17 are not  
2 going to be realistic, are not going to happen.  
3 So that's basically our argument.

4 Q. So there have been a range of alternative  
5 credits that have been put forward in various  
6 places in this proceeding, so let's pick one of  
7 the higher numbers. If the full PPCA and FCA  
8 were waived for wheeling customers, and that was  
9 a credit off of a bill of say 13 or 14 cents, is  
10 it your opinion that even that amount of a  
11 credit would be insufficient?

12 A. It would be a little bit far. The first  
13 thing is that we were targeting to have a  
14 regular price for -- by kilowatts by 15 cents,  
15 so the actual price is really high. So if you  
16 lower the bar and get to the target that is the  
17 15 cents, then the 12 cents are not going to be  
18 enough. So what we're saying is, "Okay, the 12.  
19 We're not there yet. We need to go lower." And  
20 that's why we suggested in the document nine  
21 cents, at least, to get closer to that target.

22 MR. RIVERA: Mr. LeBel, I'm sorry.

23 Sorry to interrupt at this point.

24 But, Ms. Pérez, rates right now in  
25 Puerto Rico are cost-based, and when you



1 say that it has to be lowered to 15 cents  
2 and then to 9 cents, what's the basis for  
3 that? How -- based on the current costs of  
4 providing service, how do you -- if rates  
5 were set at that point, there is going to  
6 be a deficiency in collections. So where  
7 is that deficiency going to be made up  
8 from?

9 THE WITNESS: It's not that  
10 we -- we're not saying that that should be  
11 the price now. That is the aspiration.

12 MR. RIVERA: No. I understand that  
13 you have an aspiration, but...

14 I'm sorry, Mr. LeBel.

15 MR. LEBEL: No. I think it might just  
16 be helpful to have a clarification on how  
17 these mechanisms might work.

18 BY MR. LEBEL:

19 Q. So, say the overall rate is 25 cents per  
20 kilowatt-hour -- this is a little bit more of a  
21 hypothetical than I would like it to be. But  
22 one of the proposals on the table is to waive  
23 the full PPCA and FCA, which would -- as a  
24 supply credit, which would mean that there will  
25 be a savings of approximately 14 cents to the

1 customer, just under the bill. And, I  
2 believe -- if you have a different  
3 understanding, please let me know, but I believe  
4 that the issue would then be not so much with  
5 what the remaining rate is, but whether you  
6 could develop generation for something lower  
7 than the credit of 14 cents. Am I confirming  
8 your understanding of how this would work?

9 A. Yes. Yes.

10 Q. And it's your opinion that even at 14  
11 cents per kilowatt-hour that is not sufficient  
12 to develop the generation?

13 A. Well, the price that we have visibility  
14 was of the 11 cents, not the 14 cents. That is  
15 the visibility that we had on the credit, 11  
16 cents, not 14.

17 Q. So there have been a range of credits  
18 discussed that have been on the table here.  
19 There's been calculations that are as low as,  
20 well, originally five cents and then eight  
21 cents. There's -- anything from 8 to 14 has  
22 been on the table, with many another wrinkles  
23 that I'm not -- and complications that I'm not  
24 appropriately representing at this time.

25 But just to get a first approximation of

1           whether there is an economic case here  
2           that -- if a customer is going to save money  
3           under this mechanism, they need to be paying  
4           less for their generation from the supplier and  
5           those -- covering the cost of the supplier than  
6           the bill credit that they're getting. So if the  
7           bill credit is 14 cents a kilowatt-hour, and the  
8           supplier can offer them 13 cents a  
9           kilowatt-hour, then there's an economic  
10          proposition here. Is that consistent with your  
11          understanding?

12           A.    Yes. It will be closer to the adequate  
13          price.

14           Q.    So -- then it's your -- based on the  
15          information you have, even the 14 cents of  
16          supply credit is currently insufficient.

17           A.    Well, I have to go back to my team  
18          because the visibility that we had was only 11  
19          cents, and there's some difference there. But  
20          at least it's closer to the nine cents that was  
21          our target.

22           Q.    This is difficult because we may be  
23          talking passed each other. But it's not so much  
24          the remaining cents per kilowatt-hour that you  
25          would need to pay PREPA and Luma under the

1 mechanism that's the economic comparison, but  
2 rather the amount that you're saving from the  
3 bill credit?

4 A. Exactly.

5 Q. So it is -- okay.

6 And the numbers that you and your team have  
7 calculated here, those were not presented in  
8 your testimony, correct?

9 A. No.

10 Q. All right.

11 A. We only presented the target number is  
12 the nine cents net.

13 MR. LEBEL: All right.

14 I'm happy to stop there. If  
15 Mr. Chernick has any further questions or  
16 the commissioners, now may be a good time.

17 MR. CHERNICK: This is Paul Chernick.

18 EXAMINATION

19 BY MR. CHERNICK:

20 Q. I did just want to follow up on that a  
21 little and make sure I understood what the  
22 numbers on top of your page 2 represent. You  
23 talk about 12 cents up at the top, and you're  
24 saying that that's about what the purchase power  
25 and fuel adjustment riders would be, so that

1 would be the supply credit. Is that what you  
2 mean there?

3 A. Yes.

4 Q. And you say, if a current industrial  
5 customer is paying 23 cents, and they get a 12  
6 cent credit, then wouldn't that mean that  
7 any -- that if they could purchase electricity  
8 at less than nine cents -- excuse me, at less  
9 than 11 cents, that they would save money?

10 A. Yes. The target would be -- the  
11 difference would be 11 cents.

12 Q. Right.

13 A. But the target that we think is more  
14 closer to what is reasonable would be around the  
15 nine cents.

16 Q. So you're saying, in order to encourage a  
17 large customer to shift from purchasing from  
18 PREPA to wheeling, then they would have to  
19 expect a savings of about two cents compared --

20 A. Additional. Uh-huh.

21 Q. All right. Thank you. That was the  
22 piece I was missing.

23 A. Okay.

24 Q. Now, I would also like to check -- when I  
25 went to the link that you have there for the EIA

1 data, I think that they were reporting that the  
2 23 cents was for a commercial customer, and that  
3 the industrial customer was something less, more  
4 like 17 cents. So are you saying that if a  
5 customer is now paying 17 cents, and they  
6 get -- well, let me put it this way. Do you  
7 think it matters what the existing full service  
8 rate is so long as the customer is getting an  
9 11 cents -- getting a 12 cent credit, then they  
10 should be able to accept a wheeling rate if they  
11 can get someone to sell to them at nine cents?

12 A. Well, if the current price of 23 cents  
13 average is the price that we have in the system,  
14 then in order for a company or somebody to be  
15 interested in moving toward their own creation  
16 of energy, the wheeling has to be attractive so  
17 much as -- it's not as staying connected. You  
18 know what I mean?

19 Q. Yes.

20 A. So there has to be a differential for  
21 them to see that it's attractive, and it's worth  
22 the investment that they have to put into all  
23 these systems.

24 Q. And you're saying that if they get a 12  
25 cent credit and they can get power from an RES

1 for 9 cents, then that would make it an  
2 attractive proposition?

3 A. It would be more attractive.

4 Q. So the question is, what kind of prices  
5 could an RES offer, and do you have any  
6 information about that?

7 A. No. I don't have the information at this  
8 moment.

9 Q. So the example that you lay out here  
10 might in fact be quite practical, that if the  
11 Bureau sets up an arrangement in which the  
12 credit were 12 cents, then customers would  
13 perhaps be able to contract for power at 8 or 9  
14 cents and adopt a wheeling approach.

15 A. You're asking me that?

16 Q. I'm asking you. Yes.

17 Is that what you're saying, that this might in  
18 fact work because --

19 A. It could be an option.

20 Q. Okay. All right. Thank you very much.  
21 That's all my questions.

22 HEARING EXAMINER SEILHAMER: Thank  
23 you.

24 Then we're going to give the  
25 opportunity to Luma to ask questions to the

1 witness.

2 MS. MERCADO: Yes. Thank you.

3 Margarita Mercado for Luma.

4 CROSS-EXAMINATION

5 BY MS. MERCADO:

6 Q. Good afternoon, Ms. Pérez.

7 A. Good afternoon.

8 Q. I'm going to begin by asking you some  
9 background questions. Mr. LeBel and Chernick,  
10 and in some degree Associate Commissioner  
11 Rivera, were asking you questions to better  
12 understand the basis for your testimony. So I  
13 would like to know a bit more about your  
14 preparation and the procedure for you to present  
15 your opinion.

16 So, do you have a formal education in  
17 Economics?

18 A. No.

19 My education is in Business.

20 Q. Since this is a proceeding related to  
21 tariffs and a supply credit for wheeling, I  
22 would like to know if you have experience in  
23 rate design for public utility.

24 MR. FERNÁNDEZ: Objection, Your Honor.

25 Objection. We object. As we stated in our



1 motion, this is not a testimony regarding  
2 technical matters of the rates study. It  
3 is a testimony establishing the position of  
4 an associate -- of a trade association  
5 exercising its consumer right to have its  
6 position be contemplated and be part of the  
7 record. Questions regarding the education  
8 or experience of the witness not being her  
9 an expert witness are irrelevant and should  
10 be excluded.

11 HEARING EXAMINER SEILHAMER: We're  
12 going to sustain the objection, and we're  
13 just going to --

14 Attorney Mercado, anything that is  
15 part of the direct testimony that the  
16 witness submitted to the Energy Bureau is  
17 fair game. So I would ask you to just  
18 concentrate on the direct testimony that  
19 she presented to the Bureau. And any  
20 questions you have from that direct  
21 testimony, you can ask directly to the  
22 witness. If it's outside the direct  
23 testimony, then there's no scope for it at  
24 this moment.

25 MS. MERCADO: I'm going to

1 respectfully request reconsideration. Our  
2 initial motion was denied on the basis that  
3 cross-examination would be allowed. The  
4 witness has provided direct testimony on  
5 matters regarding -- on questions about  
6 rates and --

7 HEARING EXAMINER SEILHAMER: Attorney  
8 Mercado, you're basically bypassing the  
9 decision that I made at the beginning of  
10 the hearing and are basically trying to  
11 establish that the witness is not an  
12 expert.

13 MS. MERCADO: No. That's not my --

14 HEARING EXAMINER SEILHAMER: Counselor  
15 for the Puerto Rico Manufacturers  
16 Association has established that the  
17 witness is not an expert. If there's  
18 something in her testimony that you  
19 understand is an opinion, you are welcome  
20 to question her regarding that aspect and  
21 ask her what she used to base her opinion,  
22 and I don't have a problem with that. But  
23 you need to be specific on what you are  
24 trying to point out.

25 MS. MERCADO: Okay.

1 BY MS. MERCADO:

2 Q. Drawing from the statement that the  
3 witness is not an expert in the field that we're  
4 discussing, I'm going to move forward with -- to  
5 understand better the documents that you  
6 reviewed in preparing your testimony and opinion  
7 on what would be a competitive tariff that you  
8 have mentioned in your testimony would meet the  
9 expectations of the association.

10 So I would like to know, did you review the  
11 resolution issued by the Energy Bureau in this  
12 proceeding on October 14, 2020, where the Bureau  
13 presented a proposed interim unbundled rate for  
14 wheeling?

15 A. That is the document titled Unbundling  
16 Testimony?

17 Q. No.

18 It's a resolution and order dated October 14,  
19 2020, by the Energy Bureau in this procedure  
20 where the proposed interim unbundled tariff was  
21 presented by the Energy Bureau itself.

22 MR. FERNÁNDEZ: We have an objection,  
23 Your Honor. That is a matter of law. The  
24 Bureau knows the contents of such  
25 documents. She's getting into items of law

1           that are --

2           HEARING EXAMINER SEILHAMER: Counselor,  
3           I'm going to allow -- if she based one of  
4           her answers in her direct testimony to a  
5           document that was presented in the case,  
6           that's a fair game to ask.

7           MR. FERNÁNDEZ: Okay.

8           THE WITNESS: Can I ask you again if  
9           the document is the NEPRAP-2018-004?

10          MS. MERCADO: That's the caption of  
11          this case.

12         BY MS. MERCADO:

13           Q.    I'm referencing a resolution and order  
14           issued under that case on October 14, 2020, by  
15           the Energy Bureau which proposed an interim  
16           unbundled tariff. Did you review the resolution  
17           and order, it's the resolution and order signed  
18           by the commissioners of the Energy Bureau?

19           A.    I cannot testify that I read that  
20           document because I'm not sure if that's one of  
21           the documents I used as a reference.

22           Q.    Could you tell me which documents you  
23           used as reference for your testimony?

24           A.    I used the one that I just mentioned,  
25           NEPRAP-2018-004.

1 Q. Could you tell us the title of that  
2 document, just the name of the --

3 A. The Unbundling of the Assets of the  
4 Puerto Rico Electric Power -- sorry, sorry.  
5 That is not the one. Let me just make sure that  
6 I'm looking at the right document. Sorry about  
7 that.

8 It's The Unbundling of the Assets of the  
9 Puerto Rico Electric Power.

10 Q. Does the document have a date in it?

11 A. I'm trying to find it because  
12 I'm -- sorry, I don't know if I closed it  
13 involuntarily.

14 Yes. I found it. It's the NEPRAP-2018-004.

15 Q. Yes.

16 But I asked if the document has a title in it  
17 and a date.

18 A. It is The Unbundling of the Assets of the  
19 Puerto Rico Electric Power Authority, Motion in  
20 Compliance with Resolution and Order entered on  
21 May 13, 2021.

22 Q. So you don't remember if you reviewed the  
23 resolution and order by the Energy Bureau of  
24 October 14, 2020?

25 A. I don't have that in my mind.

1 Q. Did you review or are you familiar with  
2 the interim resource plan approved by the Energy  
3 Bureau in Case CEPRAP-2018-0001? Did you review  
4 that document in preparing your testimony?

5 A. I have to be earnest about -- if I have  
6 to recall all the documents in my mind by  
7 number, I'm not going to be able to give you a  
8 correct answer.

9 Q. So then let's do a list of the documents  
10 if you could let us know.

11 In addition to the document that you -- the  
12 motion in compliance of May 13, 2021, that you  
13 testified, did you review any additional  
14 documents?

15 A. I would have to look back and make a list  
16 because I really don't have them right at the  
17 top of my head. I wasn't prepared for that.

18 Q. In preparing your testimony -- and I'm  
19 giving you another list of documents that have  
20 been discussed in here to see if you have  
21 reviewed it. Are you familiar with the Bureau  
22 Regulation 9138 for wheeling approved by the  
23 Energy Bureau on wheeling, the regulation on  
24 wheeling services?

25 A. Again, if you keep asking me numbers, I'm

1 not going to be able to answer your question  
2 because I'm not a lawyer. I don't recall a  
3 document by the number, so it's going to be very  
4 hard for me to answer those questions.

5 MS. MERCADO: With leave from the  
6 Bureau, I'm going to show the witness the  
7 document I'm referencing.

8 MR. RIVERA: Go ahead.

9 MS. MERCADO: Yes. I need to pull it  
10 up. It's not cooperating. I'm trying to  
11 open it.

12 BY MS. MERCADO:

13 Q. Ms. Pérez, this is the Regulation on  
14 Electric Energy Wheeling. If you see on the  
15 upper right corner, it says Number 9138, dated  
16 September 16, 2019. My question would be if you  
17 reviewed this regulation in preparing your  
18 testimony.

19 A. No. Personally, I didn't.

20 Q. And I'm showing you a separate document,  
21 it's a Report on Cost Allocation Methods and  
22 Unbundling Issues for Puerto Rico, dated April  
23 27, 2020. My question would be the same. Did  
24 you review this document in preparing your  
25 testimony?

1 A. No. I didn't.

2 Q. I'm showing a resolution and order by the  
3 Energy Bureau in the case in The Unbundling of  
4 the Assets of the Puerto Rico Electric Power  
5 Authority, Case NEPRAP-2018-004. I would ask  
6 you if you -- this is the resolution on the  
7 subject on Report on Cost Allocation Methods and  
8 Unbundling Requirements for Information and  
9 Production of Documents. Did you review this  
10 resolution and order in preparing your  
11 testimony?

12 A. I'm not sure about that one.

13 Q. Is there anything that could refresh your  
14 memory, if I give you the date of September 4,  
15 2020?

16 A. No. Not by the date. I don't think that  
17 would help.

18 Q. Did you review the current rate structure  
19 of the rates that are paid by customer classes  
20 of Puerto Rico as approved by the Energy Bureau?  
21 Did you review that in preparing for your  
22 testimony?

23 A. Not really.

24 Q. Are you familiar with the fact that the  
25 Energy Bureau has published an amendment to the



1 Regulation 9138 that I just showed you? The  
2 Bureau published proposed amendments. Are you  
3 familiar with those proposed amendments to the  
4 regulation?

5 A. No.

6 I -- may I --

7 Q. Did the Puerto Rico --

8 A. Can I say something?

9 Q. No. I think your attorney will have a  
10 chance to issue a redirect. I'm just asking you  
11 pointed questions.

12 Did you review -- did the Puerto Rico  
13 Manufacturers --

14 MR. RIVERA: Ms. Mercado, hold on one  
15 second.

16 You're on mute.

17 HEARING EXAMINER SEILHAMER: Sorry,  
18 Ms. Mercado. The witness is trying to  
19 answer a question, so we're going to let  
20 her finish and then you can go ahead with  
21 your next question.

22 Go ahead.

23 MS. MERCADO: I think she answered my  
24 question.

25

1 BY MS. MERCADO:

2 Q. But go ahead.

3 A. I was going to mention that you are  
4 asking me about these documents, and I want to  
5 make a comment here that most of the material  
6 that you are referring to is handled by the  
7 group of people that we have in our energy  
8 committee at the Asociación de Industriales of  
9 Puerto Rico. So most of these materials -- I  
10 have the support of that team to prepare, so I'm  
11 not necessarily the person that goes deep into  
12 all this information. So basically the purpose  
13 of my representation here was to bring the  
14 information that was stated in the document, and  
15 I have behind me the team that prepares the deep  
16 analysis and information about that.

17 Q. So is it your testimony that your  
18 pre-filed testimony, the whole of the analysis  
19 was not prepared by you individually?

20 A. I have a support team for that.

21 Q. Yes. I understood the part of the team.  
22 I'm just asking if it's correct to say that  
23 you did not prepare the full analysis included  
24 in the pre-filed testimony.

25 A. No. I didn't do it on my own.

1 I have a team of people.

2 Q. But those materials that the team may  
3 have compiled for the testimony were not  
4 referenced in your testimony that was filed on  
5 July 9 with the Bureau, correct?

6 A. I don't think so. No.

7 Q. Is it your first time providing testimony  
8 for the Energy Bureau, Ms. Pérez?

9 A. Yes.

10 Q. I'm going to ask you, the Bureau  
11 consultants, to their questions, you answered  
12 that there was an expectation of the price that  
13 should be paid in your opinion, and it's also  
14 included in your testimony. You mentioned  
15 adequate price, in my notes. What is for you an  
16 adequate price? What does that mean, a  
17 definition of that term, adequate price?

18 A. It should be competitive for the  
19 providers of the service so they can -- so that  
20 it's financially feasible for them to enter that  
21 market.

22 Q. And if I could pursue that further, how  
23 does the term "price" correlate with rates paid  
24 by customers as set by the Energy Bureau?  
25 What's the relationship between price and rates?

1 A. Can you repeat the question?

2 Q. Yes.

3 You're mentioning adequate prices, but costs  
4 for energy are paid on the basis of rates set by  
5 the Bureau. And I want to understand what you  
6 mean by "price" and how that compares with rates  
7 set by the Energy Bureau for energy. Are they  
8 the same, are rates the same as price? When you  
9 say "price," you're referring to --

10 A. No, no, no.

11 Well, in your language, I'm not sure if I'm  
12 understanding your question. But the consumer  
13 pays a rate, a fee, or the price of the energy,  
14 we have a credit with the wheeling, and then  
15 there's a bottom line net cost for the energy  
16 through the wheeling.

17 Q. I just want to understand. When you say  
18 "price," "a fair price," you're meaning a fair  
19 rate.

20 A. Uh-huh. It would be the same.

21 Q. When you in your testimony, on the second  
22 page of your testimony -- in my count, it's the  
23 sixth question, where you answer, "Is this the  
24 proposed supply credit" -- whether it would be a  
25 competitive tariff, you say in your answer the

1           nine cents that you have referenced in your  
2           testimony for the transaction to be financially  
3           feasible. And then you say that that price of  
4           nine cents is, and I'm quoting, "Virtually  
5           impossible in Puerto Rico." How did you reach  
6           that conclusion, that it is virtually impossible  
7           in Puerto Rico?

8           A. Well, right now based on the structure of  
9           the price that we have. And I understand  
10          Mr. Ángel questioned me on that, "How do you  
11          jump to that number?" Well, the reality is that  
12          the aspiration is that eventually, through the  
13          change in our system, our price structure is  
14          going to be more affordable. So, if we are  
15          directing our efforts toward that goal,  
16          eventually we could reach to that point where  
17          the tariffs are more competitive for everybody  
18          in Puerto Rico.

19          Q. And then to reach that aspiration for a  
20          more competitive tariff, what analysis did you  
21          conduct to reach that conclusion, that it should  
22          be a more competitive tariff than the one that's  
23          being discussed in this proceeding?

24          A. As I mentioned, this is something that we  
25          worked with our team and the people that have

1 the knowledge and the resources to help me get  
2 this information.

3 Q. And what type of information did you  
4 consider in presenting your proposal of what you  
5 consider should be the aspirational price or  
6 rate?

7 A. Based on the information that was  
8 analyzed by the committee.

9 Q. And who is that committee?

10 A. Excuse me?

11 Q. What do you mean by "committee?"

12 A. My energy committee in the association.

13 Q. And if I understood correctly, you didn't  
14 produce in your testimony underline work papers  
15 to support your proposal on a competitive  
16 tariff -- work papers?

17 A. What was the question?

18 Q. You did not produce work papers to  
19 support your conclusion on what would be a  
20 competitive tariff.

21 A. No.

22 Q. In preparing your testimony, did you  
23 analyze generation marginal energy cost in  
24 Puerto Rico, what they are?

25 MR. FERNÁNDEZ: Objection, Your Honor.

1 Obviously, it is outside the scope of the  
2 direct testimony, and obviously it is a  
3 question for an expert witness. The  
4 witness -- again, she is not an expert  
5 witness.

6 HEARING EXAMINER SEILHAMER: Well --

7 MS. MERCADO: I'm not asking -- if I  
8 may --

9 HEARING EXAMINER SEILHAMER: Counselor,  
10 if her answers are based -- if there's  
11 reference to a -- let me see how I can put  
12 this. The witness provided answers to  
13 questions. And at this point it's  
14 irrelevant if it's an expert or not. If she  
15 provides answers, counselor has the right to  
16 ask questions regarding those answers. And  
17 it's the witness's responsibility to provide  
18 the answers to counselor based on the  
19 answers she already gave.

20 MS. MERCADO: Yes.

21 And for context, maybe I can help.  
22 I'm willing -- the pre-filed testimony that  
23 has been read talks about a competitive  
24 tariff and then made some recommendations  
25 on studies that may be made based on real

1 cost factors. And I'm pursuing what  
2 information on real cost factors the  
3 witness reviewed to provide this opinion  
4 testimony and recommendations to the  
5 Bureau. So, if I may, I will proceed, and  
6 I can restate my question. I'm more than  
7 willing.

8 HEARING EXAMINER SEILHAMER: Go ahead,  
9 Counselor.

10 MS. MERCADO: Thank you.

11 BY MS. MERCADO:

12 Q. So, Ms. Pérez, my question was that, in  
13 presenting your testimony, did you analyze the  
14 generation marginal energy cost in Puerto Rico,  
15 what they are?

16 A. No.

17 Q. Did you review any -- cost of providing  
18 electric (inaudible).

19 MR. FERNÁNDEZ: Your Honor, I cannot  
20 hear.

21 MS. MERCADO: Attorney Fernández, I  
22 think you have to be on mute. I think it's  
23 your --

24 MR. FERNÁNDEZ: Well, if I'm on mute I  
25 cannot make a timely objection, Your Honor.



1 Please leave one or two seconds so I can  
2 make a timely --

3 MR. RIVERA: Ms. Mercado, you were  
4 breaking off on your last question.

5 HEARING EXAMINER SEILHAMER: And let's  
6 go over -- this happened earlier today and  
7 the technician told us that the best way  
8 would be that only one person at a time  
9 should be unmuted. If counselor has an  
10 objection, he can unmute and I will stop  
11 the proceeding right away and let you do  
12 the objection. But at this point only one  
13 person at a time can be -- well, two  
14 persons, counselor, and the witness.

15 BY MS. MERCADO:

16 Q. I think I'm unmuted. Are you able to  
17 hear me?

18 A. Now yes.

19 Can you repeat what you were saying, please?

20 Q. Yes. I will.

21 My question was generally, did you study the  
22 cost of providing electric power service in  
23 Puerto Rico, what those costs are?

24 A. No.

25 Q. In the testimony answering questions this

1           afternoon, you mentioned comparison of  
2           electricity rates in Puerto Rico with other  
3           jurisdictions, so I think you made a general  
4           comment. In preparing your testimony, did you  
5           review the cost of electric power services in  
6           other jurisdictions to compare them to Puerto  
7           Rico?

8           A. Personally, no.

9           Q. Did you review, in preparing your  
10          testimony and offering it to the Energy Bureau,  
11          any other wheeling tariff mechanisms in other  
12          jurisdictions?

13          A. Personally, no.

14          Q. Could you explain in your testimony the  
15          fifth question on first page? The question was,  
16          "What is the transmission tariff that PREPA is  
17          suggesting?" Do you have your testimony? "What  
18          transmission tariff does PREPA suggest is the  
19          full scope?" Could you explain what you mean by  
20          transmission tariff or what is a transmission  
21          tariff?

22                 MR. FERNÁNDEZ: Objection, Your Honor,  
23                 since that was a question, not an answer.  
24                 Since it is not an answer, it is outside of  
25                 the scope of her testimony.

1 MS. MERCADO: It's precisely the  
2 question. I can --

3 HEARING EXAMINER SEILHAMER: Counselor  
4 is asking straight up an answer from  
5 question 5 to explain what she meant.

6 MR. FERNÁNDEZ: But --

7 MS. MERCADO: But she was asked about  
8 a question that she was asked and replied.

9 MR. FERNÁNDEZ: But the objection is  
10 to the question, not the answer. She's  
11 objecting the manner in which the question  
12 was prepared, and that is outside of the  
13 scope of her testimony.

14 HEARING EXAMINER SEILHAMER: Can you  
15 ask the question again?

16 MS. MERCADO: Yes. I referenced the  
17 question for context of her answer.

18 BY MS. MERCADO:

19 Q. But then my question would be, Ms. Pérez,  
20 could you define what you understand is a  
21 transmission tariff?

22 A. The transmission tariff is the price that  
23 is charged by PREPA to the organization that is  
24 receiving the service.

25 Q. And what would be the transmission tariff

1 if the Bureau approves wheeling mechanism that  
2 is under consideration? What would that entail,  
3 the transmission tariff?

4 A. Well, it would be the tariff less the  
5 credit.

6 Q. And what services would be charged within  
7 the transmission tariff for wheeling services?

8 A. The charge specifically of the service  
9 without the rest of the cost.

10 Q. And when you say "cost," what do you mean  
11 by cost?

12 A. The cost of generating the electricity.

13 Q. And do you know what those costs are or  
14 would be?

15 A. It would be energy, transmission,  
16 generation capacity, and distribution capacity.

17 Q. And drawing from your list of the cost  
18 that would be included in the tariff, how did  
19 you consider those costs in your proposal of  
20 what the credit should be? How did you consider  
21 those costs?

22 A. Can you repeat the question?

23 Q. Yes.

24 You mentioned a series of costs that you  
25 understand would be included in transmission

1 cost and generation cost. How would those costs  
2 be covered by the energy credit that you are  
3 referencing that should be at least 14 cents?

4 A. I'm not sure I understand what you want  
5 me to answer.

6 Q. I'm trying to understand if I understood  
7 your testimony correctly. You're proposing that  
8 the energy credit be at least 14 cents, correct?

9 A. Uh-huh.

10 Q. I want to understand what costs will be  
11 covered -- how costs would be in those 14 cents  
12 that you are proposing. Which costs will be  
13 covered in the 14 cents?

14 A. I cannot explain that to you.

15 MR. FERNÁNDEZ: Your Honor, I have to  
16 make a general objection.

17 Counselor Mercado is running an  
18 extensively aggressive cross-examination on  
19 facts that are not adjudicative facts.  
20 Again, it is our opinion that this  
21 proceeding --

22 HEARING EXAMINER SEILHAMER: We're  
23 going to be moving on.

24 MR. FERNÁNDEZ: Our testimony is not a  
25 testimony against any particular theory or

1 study regarding wheeling rates. Our  
2 testimony is a testimony to provide the  
3 Bureau with the basic understanding of an  
4 association exercising its rights. It is  
5 an informative testimony, and it's being  
6 taken in an extremely adjudicative manner.

7 MS. MERCADO: I have to respectfully  
8 disagree with counsel. This is an  
9 adjudicative proceeding. Pre-filed  
10 testimony was filed with a specific  
11 opinion, proposal, and not only on the  
12 tariff, the credit that the Bureau should  
13 consider, but also on further steps on cost  
14 analysis that should be made. And I would  
15 really request -- kindly request that  
16 counsel does not argue the objections  
17 extensive --

18 HEARING EXAMINER SEILHAMER: The  
19 witness has to be able to back up the  
20 answers, Counselor. And it's Attorney  
21 Mercado's job to represent her client and  
22 ask the questions that are pertinent to the  
23 answers the witness gave. So as of now, I  
24 don't see anything out of line. If her way  
25 of asking questions looks aggressive,

1           that's her style. I cannot control that.  
2           In my opinion, she has been respectful to  
3           the witness.

4           I do ask Attorney Mercado to move  
5           things along. I think the point that  
6           you're trying to make has already been  
7           made. So if you have questions about other  
8           specific areas, please go ahead.

9           MS. MERCADO: Yes. I will do. Thank  
10          you, Attorney Seilhamer.

11         BY MS. MERCADO:

12           Q. I think you were this morning listening  
13           to the prior testimonies, and there was a  
14           testimony on cost shifting, the effect that cost  
15           shifting could -- the wheeling tariff could have  
16           in shifting costs from wheeling to non-wheeling  
17           customers. Does your association or yourself  
18           have any concerns with cost shifting?

19           MR. FERNÁNDEZ: Objection. Objection,  
20           Your Honor. Not part of the direct  
21           testimony.

22           HEARING EXAMINER SEILHAMER: Counselor,  
23           can you do any referencing in what part of  
24           the direct testimony you're basing your  
25           question?

1 MS. MERCADO: Well, the witness has  
2 generally testified as to the  
3 recommendation that the Bureau adopt their  
4 aspirations on a -- I think it's a fair  
5 rate, a fair tariff, so I think it  
6 represents a customer base. And I'm trying  
7 to pursue matters related to that  
8 testimony.

9 HEARING EXAMINER SEILHAMER: That's  
10 fine.

11 Witness, can you answer the question?

12 THE WITNESS: Well, the thing is that  
13 she's asking me on the testimony of  
14 somebody else.

15 BY MS. MERCADO:

16 Q. I gave that for reference, but then my  
17 question would be if within the framework that  
18 you propose of a fair tariff and a fair price  
19 for energy, are you -- does your association of  
20 PRMA have any concern with cost shifting when  
21 the Bureau implements an unbundled tariff for  
22 wheeling?

23 MR. FERNÁNDEZ: We have to restate an  
24 objection. That was not part of the  
25 direct. The rule is very simple. If it's



1           **part of the direct, it is within the scope.**  
2           **If it's not, it's not.**

3           MS. MERCADO: I object --

4           MR. RIVERA: Mr. Fernández, I'm sorry  
5           to intervene here, but cost shifting is a  
6           general used term when one tariff is unjust  
7           to other customers. Specifically what cost  
8           shifting does is that you provide a tariff  
9           to a specific class of customers and then  
10          other customers would have to pay more than  
11          they will have to pay because of that  
12          specially priced tariff. And in that  
13          context, the general context regarding the  
14          fair tariff that the PRMA is proposing, is  
15          within the scope of Ms. Mercado's question.

16          MR. FERNÁNDEZ: We request that my  
17          objection be noted.

18          HEARING EXAMINER SEILHAMER: It's  
19          noted.

20          BY MS. MERCADO:

21           **Q. Witness, can you answer the question,**  
22           **please?**

23           A. Can you repeat the question, please?

24           **Q. My question would be, within your**  
25           **proposal of a fair tariff or rate, is the**

1 PRMA -- has the PRMA considered whether the  
2 proposed tariff -- does the PRMA have a concern  
3 on cost shifting between wheeling and  
4 non-wheeling customers? Is that a concern for  
5 the PRMA?

6 A. I don't have a position right now on  
7 that.

8 Q. I don't have many more questions. I'm  
9 going to direct you to your final question. I  
10 think it's question 7 on the second page of your  
11 testimony where you are proposing that a study  
12 be conducted on real cost factors. Would you  
13 explain what methodology you are proposing that  
14 study entail or include to study real cost  
15 factors?

16 A. I don't have a proposal for that.

17 Q. And if I understood your testimony  
18 earlier this afternoon to Mr. LeBel, I think you  
19 mentioned that you don't have any objections to  
20 the cost of service study that was filed by  
21 Guidehouse, PREPA and LUMA in this proceeding.

22 MR. FERNÁNDEZ: Objection. that is  
23 not what is in the record. I object. We  
24 should go back to the record. That is not  
25 correct.

1 MS. MERCADO: I'm asking the  
2 witness --

3 THE WITNESS: Can you repeat the  
4 question, please?

5 BY MS. MERCADO:

6 Q. If I understood your testimony correctly  
7 earlier today, and you can correct me if I'm  
8 misrepresenting your testimony, I understood  
9 that to two questions of Mr. LeBel you stated  
10 that you are not objecting to the cost of  
11 service study that was filed in this proceeding  
12 by Guidehouse, PREPA, and LUMA.

13 MR. FERNÁNDEZ: Objection, Your Honor.  
14 I'm fully aware that that was not on the  
15 record at any time. Please let's go back  
16 to the record.

17 HEARING EXAMINER SEILHAMER: Counsel,  
18 I'm going to ask the witness if that was  
19 her answer earlier in her testimony. If  
20 it's not, it's not, and then we'll move on.

21 MS. MERCADO: You can answer. Yes.

22 HEARING EXAMINER SEILHAMER: Was that  
23 your answer?

24 THE WITNESS: I don't recall it that  
25 way.

1 HEARING EXAMINER SEILHAMER: That's  
2 fine. Next question.

3 BY MS. MERCADO:

4 Q. So do you have any objections to the  
5 methodology of the cost of service study that  
6 was presented in this proceeding to the Bureau  
7 on May 10, 2021, and amended on May 18, 2021?

8 A. At this time I don't have the criteria to  
9 answer.

10 Q. I need to really understand. What do you  
11 mean by "criteria?" Is it that you don't know  
12 or --

13 HEARING EXAMINER SEILHAMER: Asked and  
14 answered, counselor. She doesn't have the  
15 criteria. I think that was pretty  
16 straightforward.

17 MS. MERCADO: I don't have any  
18 additional questions at this time. Thank  
19 you for your time.

20 HEARING EXAMINER SEILHAMER: Thank  
21 you.

22 MR. RIVERA: I'm sorry, Mr. Seilhamer.

23 HEARING EXAMINER SEILHAMER: Yes.  
24  
25

## RE-EXAMINATION

BY MR. RIVERA:

Q. Ms. Pérez, this is Commissioner Rivera, good afternoon.

A. Hi.

Q. You have mentioned several times, and probably I've missed some of the answers, but the nine cents is the aspiration of what the goal should be. What do you base that number upon?

MR. FERNÁNDEZ: Objection. Your Honor, the nine cents was not a recommended tariff. It was the cost of wheeling plus the cost of the energy. And I should object that she never mentioned as a specific electric general tariff.

BY MR. RIVERA:

Q. What would the nine cents cover?

A. I cannot give you that answer.

Q. Okay. Thanks.

When you say aspirations, it's aspirations for the wheeling tariff.

A. Exactly.

Q. I misspoke on my question.

A. Okay.

1 Q. So you say that your aspirational  
2 wheeling tariff is nine cents.

3 A. Yes.

4 Q. What do you base the nine cents upon?

5 A. I don't have the data myself to really  
6 answer that. This is the consensus of my  
7 support team.

8 Q. I understand it's a consensus, but it has  
9 to be based upon something.

10 A. But I don't have the answer.

11 HEARING EXAMINER SEILHAMER: Do you  
12 have any more questions, Commissioner?

13 MR. RIVERA: (Nods.)

14 HEARING EXAMINER SEILHAMER: I'm going  
15 to ask the Independent Consumer Protection  
16 Office if they have any questions for the  
17 witness.

18 MR. VÁZQUEZ: No. We don't have any  
19 questions for this witness.

20 HEARING EXAMINER SEILHAMER: Thank  
21 you.

22 Ecoeléctrica, they're represented by  
23 counsel, do you have any questions for the  
24 witness?

25 (No answer is given.)

1 HEARING EXAMINER SEILHAMER:

2 Cooperativa Hidroeléctrica de la Montaña,  
3 if you're represented by counsel today, do  
4 you have any questions for the witness?

5 MR. SMITH: "Buenas tardes, de nuevo."  
6 We would have questions, but we have no  
7 representation, unfortunately.

8 HEARING EXAMINER SEILHAMER: That's  
9 fine. Thank you.

10 Then I'm going to give the opportunity  
11 to Counsel Fernández to do a redirect to  
12 this witness.

13 MR. FERNÁNDEZ: No questions.

14 HEARING EXAMINER SEILHAMER: You don't  
15 have any questions?

16 MR. FERNÁNDEZ: No.

17 HEARING EXAMINER SEILHAMER: So we're  
18 going to excuse the witness and thank her  
19 for her time today.

20 In terms of the agenda for the rest of  
21 these evidentiary hearings, we only have  
22 for tomorrow follow-up of residual topics.  
23 Is there anything that you guys need to  
24 discuss for tomorrow or is there anything  
25 else that you believe the Bureau should

1 consider for this evidentiary hearing?

2 MR. FERNÁNDEZ: Your Honor, you  
3 mentioned at the beginning of the hearing  
4 the possibility of a very short closing  
5 statement.

6 HEARING EXAMINER SEILHAMER: Yes.

7 MR. FERNÁNDEZ: It's (unintelligible)  
8 as possible.

9 HEARING EXAMINER SEILHAMER: Absolutely.  
10 I'm getting to that. I'm just trying to make  
11 sure if the agenda is going to extend to  
12 tomorrow or if we can finish it today. So  
13 that's where I'm at right now.

14 Yes, Mr. Smith. Do you have  
15 something?

16 MR. SMITH: I do have a question, and  
17 I hate to be the party pooper here. But  
18 Raúl Luis Nieves -- he is available  
19 tomorrow, but unfortunately, I guess, my  
20 question is, is there a window then to ask  
21 those questions?

22 HEARING EXAMINER SEILHAMER: For the  
23 witnesses today?

24 MR. SMITH: That's done.

25 HEARING EXAMINER SEILHAMER: No.



1           That window closed. That window just  
2 closed when I excused the witnesses.

3           MR. SMITH: Understood. So if it's  
4 procedural matter. Thank you very much.

5           HEARING EXAMINER SEILHAMER: Yes.

6           MR. SMITH: Thank you for answering my  
7 question.

8           HEARING EXAMINER SEILHAMER: Sure.

9           If there aren't any issues that we  
10 need to attend tomorrow, then I'm going to  
11 allow both parties to make brief closing  
12 statements. I don't know if you need a  
13 five-minute break to organize your thoughts  
14 or you're ready to do it right now. Your  
15 call, both counselors.

16           MS. MERCADO: Margarita Mercado for  
17 Luma. I would appreciate if proceedings  
18 concluded tomorrow. And with leave from  
19 the Bureau, I need to confirm with my  
20 client to see if we'll offer any rebuttal  
21 testimony tomorrow. We have not made that  
22 decision. But we'll apprise the Bureau  
23 expediently if we're going to exercise or  
24 present that request to the Bureau. And  
25 then it would be helpful, if closing

1 arguments are going to be heard, they would  
2 be brief, but it would be helpful to have  
3 them tomorrow.

4 HEARING EXAMINER SEILHAMER: I'm going  
5 to take a five-minute recess to confer and  
6 make a decision.

7 Mr. Fernández, I'm definitely going to  
8 allow you to make closing statements. I'm  
9 just trying to figure out what's going to  
10 be the process. So if we can take a  
11 five-minute recess and then we'll get back  
12 and I'll give you all the answers.

13 MR. RIVERA: Before we go, attorney  
14 Mercado, make good use of those five  
15 minutes.

16 MS. MERCADO: Okay. Thanks.

17 (Whereupon, a brief recess  
18 transpires.)

19 HEARING EXAMINER SEILHAMER: Attorney  
20 Mercado and Attorney Fernández?

21 MR. FERNÁNDEZ: Yes, Your Honor.

22 HEARING EXAMINER SEILHAMER: One quick  
23 second. One minute.

24 (Whereupon, a brief recess  
25 transpires.)

1 HEARING EXAMINER SEILHAMER: Luma?  
2 Attorney Mercado? Attorney Mercado? We're  
3 going to give her an extra minute or two.  
4 If she's not here, then we'll go on.

5 (Whereupon, a brief recess  
6 transpires.)

7 HEARING EXAMINER SEILHAMER: Attorney  
8 Mercado, has Luma made a decision regarding  
9 the rebuttal witness?

10 MS. MERCADO: Good afternoon.  
11 Margarita Mercado, counsel for Luma. Are  
12 you able to hear me?

13 HEARING EXAMINER SEILHAMER: Yes.

14 MS. MERCADO: Yes. We have confirmed,  
15 within the timeframe allotted by the  
16 Bureau, and we won't be presenting rebuttal  
17 witnesses tomorrow.

18 HEARING EXAMINER SEILHAMER: You  
19 won't.

20 MS. MERCADO: We will not offer a  
21 rebuttal witness.

22 The question would be if closing  
23 arguments will be heard tomorrow or today.

24 HEARING EXAMINER SEILHAMER: They will  
25 be heard today. They will be very briefly.

1 We're going to give five minutes to any  
2 intervener or counselor to make a closing  
3 statement. We're going to begin with  
4 Attorney Fernández. Then we're going to  
5 give the opportunity to Attorney Vázquez  
6 from the Independent Consumer Protection  
7 Agency, if they need it. It's not  
8 mandatory. It's just if there's something  
9 that needs to be on the record. And then  
10 finally we will give you five minutes,  
11 Counselor Mercado, for your closing  
12 remarks.

13 So, Attorney Fernández, you can go  
14 ahead with your five minutes, beginning  
15 right now.

16 MR. FERNÁNDEZ: Yes, Your Honor.  
17 Thank you for the time. In essence, we are  
18 aware of the fact that rate cases are  
19 adversary by tradition. However, rate  
20 cases do not limit themselves to  
21 mathematical formulas, rates, numbers.  
22 They have to go beyond that. They have to  
23 consider policy items, policy issues. They  
24 have to consider whatever rate is being  
25 determined by any mathematical method,

1 statistical method, or whomever expert  
2 witness comes. Whatever that number is  
3 determined to be mathematically correct, it  
4 also has to exist within the parameters of  
5 policy as established by the local  
6 government.

7 In this case, we have a very strong  
8 energy policy, we all know. The  
9 Manufacturers Association did not attempt  
10 to attack, underline or in any other way,  
11 present expert testimony regarding any of  
12 the possible formulas. We only had the  
13 intention of bringing the Bureau to be  
14 conscious of the marketing realities in  
15 life. And, of course, it is a very simple  
16 marketing and business reality.

17 Whatever the wheeling cost is finally  
18 determined to be, it must be taken into  
19 consideration the fact that if it is to  
20 enhance, if it is to encourage production  
21 of new energy by industries, by  
22 cooperatives, by individuals, if it is  
23 going to do that, fostering the exchange of  
24 energy from one point to the other, then  
25 from the consumer's point of view, the cost

1 of the wheeling plus the cost of the energy  
2 has to be less than the current cost. This  
3 is very simple. That's it. That's it.

4 That is the message that our testimony  
5 wanted to convey, that in order to  
6 encourage the production of more energy  
7 on-site by cooperatives, by microgrids, all  
8 of which are essential to the execution of  
9 the public policy existing in paper under  
10 Puerto Rican laws, a competitive,  
11 "competitive" -- and, again, when I say  
12 "competitive," the cost of the wheeling  
13 less the cost of producing whatever energy  
14 one uses to transmit has to be less than  
15 the current cost.

16 So that is essentially the message.  
17 We are ready to help the Commission in any  
18 way or manner we can. It was our intention  
19 to have that statement -- that practical  
20 statement on the impact of the rating  
21 process be known to the Commission and form  
22 part of the record. Thank you very much.

23 HEARING EXAMINER SEILHAMER: Thank  
24 you, Counselor Fernández.

25 Then we're going to give the

1 opportunity to the Independent Consumer  
2 Protection Office, if they have any  
3 remarks.

4 MR. VÁZQUEZ: Attorney Vázquez, the  
5 position of the ICPO will be stated in  
6 writing at the -- for the legal briefs that  
7 are due in August. So, essentially, no.  
8 That will be our position right now.

9 HEARING EXAMINER SEILHAMER: Thank you  
10 very much, counselor.

11 Attorney Mercado, the floor is yours.  
12 You have five minutes to give your closing  
13 arguments.

14 MS. MERCADO: Thank you, Attorney  
15 Seilhamer.

16 Margarita Mercado for Luma. We will  
17 also make brief comments for the record to  
18 close out the series of testimonies. On  
19 behalf of Luma, I thank the Puerto Rico  
20 Energy Bureau for hearing testimonies on  
21 this very important matter. And Luma  
22 supports the efforts of unbundling rates in  
23 Puerto Rico and is willing to work with the  
24 Bureau or help in conclusion of this  
25 proceeding.

1           Throughout the testimonies that have  
2           been presented yesterday and today, we  
3           understand that the groundwork was laid to  
4           place the Bureau in a position to determine  
5           that it is the time, it is proper and  
6           beneficial to unbundle rates at this  
7           juncture. But that a second step should be  
8           taken at a later time for creating the  
9           market for wheeling and for adopting the  
10          uniform service agreement for wheeling.  
11          That would be the main proposal.

12          Margot Everett testified to that  
13          extensively yesterday in addition to the  
14          filings that are admitted as evidence of  
15          the importance or the benefits of  
16          unbundling rates. But the next step should  
17          be taken with care, the implementation  
18          phase should not -- there are steps to be  
19          taken to adopt market and sector rules that  
20          are clearly defined to avoid cost shifting  
21          and affecting non-wheeling customers. So  
22          the request would be for the Bureau to  
23          adopt the proposed cost of service study  
24          and to adopt the unbundling framework that  
25          would serve as (inaudible) for when the



1 time is right for the market for wheeling  
2 to open up in a strong and considerate  
3 manner to avoid repercussions on the  
4 utility on customers that could do more  
5 harm than good.

6 I think the testimony by the ICPO,  
7 Mr. Cosme, the pre-filed testimony, and the  
8 testimony that he provided today to the  
9 Bureau, supports that conclusion of a  
10 phased approach before the unbundled tariff  
11 is implemented and the uniform service  
12 agreement is adopted. Consideration under  
13 characteristic of the information that is  
14 available, the grid itself, are  
15 still -- need to be further development in  
16 order to open up the market for wheeling.

17 But, again, Luma appreciates this  
18 effort, supports the filings that are on  
19 record. And the main request would be to  
20 allow for the rules to be adopted in a  
21 phased manner before implementation is made  
22 on retail wheeling in Puerto Rico. The  
23 amended regulation is under  
24 consideration -- the amendment to  
25 Regulation 9138 is under consideration.

1           There are parallel proceedings that are  
2           also related to wheeling and  
3           interconnection, and renewables. Luma  
4           respectfully submits that those proceedings  
5           should move forward and that the -- before  
6           implementation of wheeling in Puerto Rico  
7           is done.

8           We will also file in August 10 our  
9           legal brief summarizing also further the  
10          testimonies that were presented yesterday  
11          and today, as a final submission to the  
12          Energy Bureau. And we do appreciate the  
13          opportunity for that final filing.

14          HEARING EXAMINER SEILHAMER: Thank  
15          you, counselor.

16          I want to thank all the parties  
17          involved in the evidentiary hearing  
18          yesterday and today. If there's nothing  
19          else to consider, then we're going to  
20          conclude the evidentiary hearing for case  
21          number NEPR-AP-2018-00004. Thank you,  
22          again, for your participation. Have a good  
23          day.

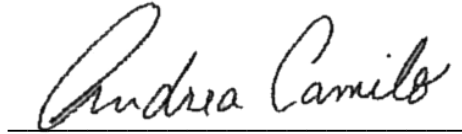
24          MS. MERCADO: Thank you and good  
25          afternoon.

1 MR. SMITH: "Buenas tardes."  
2 (Whereupon the evidentiary hearing  
3 concludes.)  
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## REPORTER'S CERTIFICATE

I, ANDREA CAMILO PASTRANA, E.R. Reporter, do hereby certify that the following transcript is a full, true, and correct record transcribed by me.

I further certify that I am not interested in the outcome of the case named in said caption.

A handwritten signature in cursive script, reading "Andrea Camilo", is written over a horizontal line.

ANDREA CAMILO PASTRANA

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