

UNITED STATES OF AMERICA  
U.S. DEPARTMENT OF ENERGY  
BEFORE THE  
BONNEVILLE POWER ADMINISTRATION

2020 RATE PROCEEDING                    )  
  ) Docket No. BP-20  
  )

CROSS-EXAMINATION

TAKEN BEFORE HEARING OFFICER SARAH DENNISON-LEONARD

DATE TAKEN:   APRIL 23, 2019

TIME:       9:00 AM

PLACE:   Bonneville Power Administration  
          Portland, Oregon

COURT REPORTER:   SHELLENE L. IVERSON, CSR

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

2 HEARING OFFICER DENNISON-LEONARD: All  
3 right. Let's go on the record.

4 Good morning. This is the  
5 cross-examination in the Bonneville Power  
6 Administration's BP-20 power and transmission rates  
7 proceeding being held in Portland, Oregon, on Tuesday,  
8 April 23, 2019. My name is Sarah Dennison-Leonard. I  
9 am the hearing officer designated by the Bonneville  
10 Power Administration to preside in this matter.

11 Before we begin cross-examination, are  
12 there any preliminary matters that counsel for the  
13 witnesses would like to bring up?

14 Ms. Scruggs?

15 MS. SCRUGGS: Good morning, Your Honor.  
16 Irene Scruggs appearing for the Public Power Council.  
17 And we do have a couple of preliminary matters to  
18 address with regard to the cross-examination exhibits  
19 filed by Joint Party 01. Specifically, Your Honor,  
20 the Public Power Council would like two -- to make two  
21 motions.

22 The first motion will be a motion for an  
23 order requiring Joint Party 01 to identify which  
24 exhibits will be used to cross-examine which  
25 witnesses.

1           Your Honor, on Friday, April 19th, Joint  
2 Party 01 filed 14 exhibits totaling 414 pages, and  
3 that filing did not identify which of those exhibits  
4 will be used to cross-examine which witnesses. There  
5 are 14 expert witnesses that have been summoned for  
6 cross-examination today. And over the weekend PPC was  
7 left guessing which of those exhibits will be  
8 presented to its one witness, Michael Deen.

9           After several requests we finally got some  
10 partial clarification on Easter Sunday, Your Honor.  
11 Section 1010.14(k)(1) of the Bonneville Rules of  
12 Procedure as well as Order BP-20-H00-13, which is the  
13 hearing officer's order on cross-examination  
14 scheduling, require litigants to file each  
15 cross-examination exhibit to be presented to a witness  
16 two business days ahead of cross-examination.

17           Public Power Council believes that Joint  
18 Party 01 failed to comply with this rule and this  
19 order. But in lieu of making a motion to strike the  
20 filed cross-examination exhibits, I'm asking that the  
21 hearing officer order Joint Party 01 to do what it  
22 should have done on Friday and identify for the record  
23 which of its cross-examination exhibits it will  
24 present to which of the 14 expert witnesses.

25           HEARING OFFICER DENNISON-LEONARD: Okay.

1 Do you want to tell me what both motions are or go one  
2 at a time?

3 MS. SCRUGGS: Whatever your pleasure.

4 HEARING OFFICER DENNISON-LEONARD: Counsel  
5 for Joint Party 01, are you able to identify  
6 specifically which exhibits pertain to which  
7 witnesses?

8 MR. REITER: I think we've already done  
9 that, Your Honor. I'm not sure -- we had  
10 conversations by e-mail with all of the participants.  
11 No one had raised this when we provided the list.  
12 There isn't any specific requirement that -- other  
13 than identifying the documents we intend to use, that  
14 we have to identify each going to which witness, but  
15 we did attempt to do that.

16 What we said was that the data requests  
17 that we will be asking questions about will relate to  
18 the -- to the witnesses to whom they were addressed to  
19 begin with. And we also tried to identify the other  
20 documents over -- that we intended to ask questions  
21 about.

22 I'm not sure what else we could do at this  
23 point. I mean, the witnesses have had the documents.  
24 They know that they're not going to be asked about  
25 somebody else's data requests.

1 HEARING OFFICER DENNISON-LEONARD: Okay.  
2 Understood. So you're saying that the data requests  
3 are specific to the witnesses to whom they were  
4 directed, but --

5 MR. REITER: Yes.

6 HEARING OFFICER DENNISON-LEONARD: -- you  
7 have a number of other exhibits, you know, this  
8 Powerex Go-Live Experience exhibit; the Powerex  
9 comments; you know, California ISO Business Practices.  
10 Are you able to correlate those exhibits to which  
11 witness will be asked about those particular exhibits?

12 MR. REITER: I thought that's what we did  
13 over the weekend. And maybe Mr. Jarboe who had sent  
14 the e-mail to all three of the other counsel -- so  
15 this is a surprise to us because no one else said they  
16 had an issue with it. If you don't mind, Your Honor,  
17 Mr. Jarboe would address that.

18 HEARING OFFICER DENNISON-LEONARD: Just a  
19 moment.

20 Ms. Scruggs?

21 MS. SCRUGGS: Thank you, Your Honor.

22 Actually, I don't think that accurately  
23 represents the correspondence we had over the weekend,  
24 Your Honor. On Friday, April 19th -- and I have  
25 copies of the correspondence for the hearing officer

1 as well as the parties involved. I specifically sent  
2 an e-mail in response to an e-mail from Mr. Jarboe  
3 saying PPC is prepared to waive the requirements in  
4 Section 1010.14(k)(2) that JP01 provide physical  
5 copies of each cross-examination exhibit for each  
6 witness on the condition that you clearly identify the  
7 cross-examination exhibits that will be presented to  
8 PPC's witness, Michael Deen.

9 I specifically cited the section of the  
10 rule that requires such an identification. And, Your  
11 Honor, while we had some correspondence over the  
12 holiday weekend, I'm asking for such identification to  
13 be made for the record --

14 HEARING OFFICER DENNISON-LEONARD: On the  
15 record.

16 MS. SCRUGGS: -- in this proceeding.

17 HEARING OFFICER DENNISON-LEONARD: Okay.  
18 Why don't we start with the exhibits that are relevant  
19 to the Public Power Council witness.

20 Can Joint Party 01 -- Mr. Reiter, can you  
21 identify specifically which exhibits are to be  
22 presented to Public Power Council's witness?

23 MR. REITER: I think Mr. Jarboe had  
24 engaged it. So if I understand Ms. Scruggs' request,  
25 she wants -- she's not satisfied with the informal

1 exchange. She wants it on the record.

2 HEARING OFFICER DENNISON-LEONARD: On the  
3 record.

4 MR. REITER: Okay. Mr. Jarboe has the  
5 identifications that we provided.

6 HEARING OFFICER DENNISON-LEONARD: Okay.

7 MR. REITER: We can do that.

8 HEARING OFFICER DENNISON-LEONARD: Just a  
9 quick time-out because we should have -- before we  
10 kind of dove in, I should have said I would like to  
11 remind counsel and witnesses let's try to speak slowly  
12 and clearly to make it easier for the court reporter  
13 to understand us.

14 And, Shellene, please feel free to let us  
15 know if we're making it too difficult for you to  
16 follow what we're saying. I apologize for not  
17 clarifying that up front.

18 But, yes, if you can let us know and kind  
19 of -- if you can sort of walk through between the  
20 different witness panels and which exhibits that would  
21 -- and put that on the record, that would be helpful.

22 MR. REITER: Your Honor, if I could, does  
23 any -- does any other counsel for the other parties  
24 need for us to take up all that time? We already have  
25 an informal understanding of that.



1 MR. JOHNSON: Your Honor, this is Ty  
2 Johnson for Powerex. I too would like to join PPC's  
3 motion. The correspondence identified several of the  
4 exhibits as to -- indicated to be used to  
5 cross-examine Mr. Wellenius. I would like, just for  
6 the record, to clarify that the other exhibits will  
7 not be used to clarify Powerex's two witnesses.

8 HEARING OFFICER DENNISON-LEONARD: All  
9 right. So for the record, I'm going to grant the  
10 motion of Public Power Council and Powerex and give  
11 Joint Party 01 an opportunity to the state on the  
12 record today which exhibits will be presented to which  
13 panels.

14 MR. JARBOE: So, Your Honor --

15 HEARING OFFICER DENNISON-LEONARD: Do you  
16 have a microphone?

17 MR. JARBOE: Yes, I do.

18 So the exhibits entitled BP-20-E-JP01-04  
19 through BP-20-E-JP01-08 generally having to do with  
20 the EIM, those will go to the Deen and Wellenius  
21 panels, so PPC and Powerex. And the following  
22 exhibits -- so JP01-09, -10, -11, and -12 will not go  
23 to the Deen or Wellenius panels. Those will instead  
24 go to BPA panels. And then --

25 MR. PERKINS: Your Honor, just for the

1 record, Bonneville supports this motion for  
2 clarification on the record as well. So I appreciate  
3 that clarification was given informally over the  
4 weekend, but for those specific exhibits that will not  
5 go to the PPC and Powerex panels but will go to  
6 Bonneville, if you could just clarify which panels  
7 each of those exhibits corresponds to, I would  
8 appreciate that.

9 HEARING OFFICER DENNISON-LEONARD: Thank  
10 you, Mr. Perkins. I think --

11 Can you please remind me your name?  
12 Sorry. I apologize.

13 MR. JARBOE: Tony Jarboe.

14 HEARING OFFICER DENNISON-LEONARD: Jarboe.

15 Mr. Jarboe, were you -- it sounds as if  
16 you had a few more you were going to list, or did  
17 you --

18 MR. JARBOE: There were a few more for PPC  
19 and Powerex.

20 HEARING OFFICER DENNISON-LEONARD: All  
21 right. Please finish and then let's circle back to  
22 what is -- you know, sort of breaking down among the  
23 Bonneville witnesses but let's start with the  
24 different entities, and then we'll come back to the  
25 Bonneville witness.

1 MR. JARBOE: Okay. And then JP01-13  
2 through JP01-16 are pieces of our testimony, of JP01's  
3 testimony. And we will only cross-examine witness  
4 panels to the extent that our testimony relates to  
5 either their rebuttal or their responses. So they're  
6 not responsible for knowing the entire testimony but  
7 rather only the pieces relevant to what they rebutted,  
8 but that goes to all -- all panels.

9 HEARING OFFICER DENNISON-LEONARD: So if I  
10 understand you correctly, you're saying, where they're  
11 essentially citing a portion of your testimony, we  
12 could expect you to be asking them about those  
13 Exhibits 13 through 16?

14 MR. JARBOE: Correct, Your Honor.

15 HEARING OFFICER DENNISON-LEONARD: All  
16 right. Ms. Scruggs, do you feel as if you have a  
17 clear answer?

18 MS. SCRUGGS: That's helpful, Your Honor.

19 With regard to Exhibit 17, which is a  
20 compilation of data requests, my understanding is  
21 those data requests will be presented to the witnesses  
22 that were involved in drafting those data requests.  
23 Is that correct?

24 HEARING OFFICER DENNISON-LEONARD:  
25 Mr. Jarboe, can you confirm, please?

1 MR. JARBOE: That is correct.

2 HEARING OFFICER DENNISON-LEONARD: Okay.  
3 All right. So I understand that exhibits -- and you  
4 know the preliminary numbers. We'll just assume those  
5 are all as stated, but 04 through 08 will be presented  
6 to Deen and Wellenius. 9 through 12 will be presented  
7 to BPA. 13 through 16 relate to portions of testimony  
8 that may have been cited but in rebuttal. And so you  
9 may ask about that to the extent the witness has cited  
10 your testimony in rebuttal. And then the data  
11 responses in Exhibit 17 will be specific to the  
12 witnesses that responded to those data responses.

13 Is that an accurate summary?

14 MR. JARBOE: Yes, Your Honor.

15 Now, would you like me to go to  
16 Mr. Perkins' request?

17 HEARING OFFICER DENNISON-LEONARD: Yes,  
18 please.

19 MR. JARBOE: So JP01-09 will go to panels  
20 BPA-19 and -22 panels. JP01-10 will go to BPA-22.  
21 JP01-11 will go to BPA-25. And JP01-12 will be for  
22 BPA-22.

23 HEARING OFFICER DENNISON-LEONARD: Thank  
24 you.

25 Mr. Perkins, any further questions on

1 this?

2 MR. PERKINS: No, Your Honor.

3 HEARING OFFICER DENNISON-LEONARD: All  
4 right. Thank you very much, Mr. Jarboe.

5 Ms. Scruggs, you said you had a second  
6 motion?

7 MS. SCRUGGS: I do. Thank you, Your  
8 Honor.

9 We have a number of concerns with the  
10 accuracy and completeness of the cross-examination  
11 exhibits that were filed on April 19th. And just to  
12 give the hearing officer a couple of examples, Exhibit  
13 No. 6 that was prefiled on April 19th, for example, is  
14 the Business Practice Manual for the Energy Imbalance  
15 Market of the California ISO. The link that was  
16 provided to, apparently, the actual exhibits doesn't  
17 work. And if you were to pull up the actual practice  
18 manual on your own, there are four more pages in the  
19 actual document. The pagination is quite different  
20 than the exhibit that was submitted as Exhibit No. 6.

21 With regard to Exhibit No. 13, that is the  
22 testimony of Lon Peters, Exhibit No. BP-20-E-JP01-13.  
23 And the filed version of this particular testimony,  
24 Your Honor, has not been conformed to reflect the  
25 errata, and the errata that was filed earlier in this

1 proceeding would actually replace pages 47 and 48 of  
2 this filed exhibit.

3           With regard to Exhibit No. 15, Your Honor,  
4 page 7 of this exhibit which is the testimony of  
5 Parker and Peters, BP-20-E-JP01-02, page 7 of this  
6 exhibit, there are -- it looks like there were some  
7 charts that were supposed to be present on page 7 of  
8 this exhibit, and they're missing. We understand that  
9 they are supply and demand curves that would reflect  
10 the economic theories JP01 advanced in that testimony.

11           With regard to Exhibit 16, Your Honor,  
12 that is Attachment 4 to the testimony of Joint Party  
13 01 that is Exhibit BP-20-E-JP01-02. This testimony as  
14 filed has not been conformed to reflect the errata  
15 that Joint Party 01 filed early in this proceeding.  
16 If the errata were to be taken into account, pages 16  
17 and 17 of this exhibit would be replaced.

18           With regard to Exhibit 17, that is the  
19 compilation of data requests that Joint Party 01 filed  
20 on April 19th, and there are a couple of problematic  
21 data requests, specifically Data Request No. 126  
22 directed to BPA which is on page 52 of the filed  
23 Exhibit 17. It includes text that was not properly  
24 part of the actual data response.

25           And Exhibit -- the Data Request No. 95

1 which is on page 29 of Exhibit 17, that particular  
2 data request is missing text.

3 In light of those concerns, Your Honor, to  
4 the extent that Joint Party 01 plans to admit the  
5 filed cross-examination exhibits into the record,  
6 which I would assume Joint Party 01 plans to do that  
7 pursuant to Rule 1010.14(k)(3), the Public Power  
8 Council would like to make a motion to have Joint  
9 Party 01 file corrected exhibits into the record.  
10 Obviously, it would ensure a creation of an accurate  
11 record, and it would also avoid any conflicts between  
12 the evidence filed as cross-examination exhibits and  
13 the evidence filed previously in this proceeding.

14 Thank you, Your Honor.

15 MR. JOHNSON: Your Honor, Powerex also  
16 joins that motion to ensure that the record is  
17 accurately represented.

18 MR. REITER: Your Honor, we have no  
19 objection. We'd be happy to do that.

20 HEARING OFFICER DENNISON-LEONARD: Okay.  
21 Mr. Reiter, I don't know. I think the court reporter  
22 could hear you. I'm not sure if the room could hear  
23 you.

24 MR. REITER: I said we have no objection,  
25 Your Honor. We're happy to do that.

1 HEARING OFFICER DENNISON-LEONARD: Okay.  
2 Thank you.

3 I think that with respect to most of the  
4 deviations that Ms. Scruggs described, that is pretty  
5 straightforward. I'd like to clarify in terms of the  
6 exhibit that are business practices from the EIM --  
7 you know, the California ISO EIM Business Practice  
8 Manual, what do we propose to do there?

9 MR. REITER: If I understood Ms. Scruggs'  
10 objection or the motion that there were several pages  
11 missing from what we produced, we can confer with her.  
12 I don't have a copy of the motion; so we would be  
13 happy to -- to --

14 HEARING OFFICER DENNISON-LEONARD: All  
15 right.

16 MR. REITER: -- to go over that with her  
17 and make sure we submit the entire document.

18 HEARING OFFICER DENNISON-LEONARD: So the  
19 disposition will be that that particular exhibit will  
20 be mutually satisfactory as between you and counsel  
21 for the witnesses that are being cross-examined?

22 MR. REITER: Yes.

23 I think Mr. Jarboe had something to add to  
24 that.

25 MR. JARBOE: I was just going to say we



1 only filed pages that were relevant to any  
2 cross-examination. So I guess, if Ms. Scruggs wants  
3 us to file all 140 pages, we would be happy to do so,  
4 but we didn't think that was a good use of resources.

5 MR. JOHNSON: Your Honor, when we did a  
6 comparison of the excerpt that was filed, it was hard  
7 to verify the accuracy and substance of the excerpt as  
8 compared to the --

9 HEARING OFFICER DENNISON-LEONARD: Source.

10 MR. JOHNSON: -- what was published on the  
11 website. So it was hard to verify the substance was  
12 accurate. We have no reason to believe it would be  
13 inaccurate; but, nonetheless, it was hard to verify.  
14 So perhaps we confer with -- with JP01's counsel at  
15 some break just to verify we're all talking about the  
16 same pages.

17 HEARING OFFICER DENNISON-LEONARD: So to  
18 paraphrase I think what I'm hearing is it isn't about  
19 putting in the entirety of the business practice  
20 manual, but it is about making sure that what is in  
21 the record corresponds to what is posted on the  
22 California ISO website.

23 MS. SCRUGGS: That's precisely right, Your  
24 Honor.

25 HEARING OFFICER DENNISON-LEONARD: And,

1 Mr. Reiter, Mr. Jarboe, that's acceptable to you?

2 You'll confer with counsel for Powerex --

3 MR. REITER: Yes.

4 HEARING OFFICER DENNISON-LEONARD: -- and  
5 Bonneville.

6 MR. REITER: Yes.

7 HEARING OFFICER DENNISON-LEONARD: Okay.  
8 That motion is granted.

9 MR. REITER: Your Honor, just to mention,  
10 if we could get a copy of the motion too, that would  
11 help.

12 HEARING OFFICER DENNISON-LEONARD: Do  
13 you want to restate the motion for the record and we  
14 can --

15 MR. REITER: I don't need that. Just a  
16 piece of paper so we can actually look at it. It  
17 would make it easier to go through to make sure we're  
18 not missing anything.

19 HEARING OFFICER DENNISON-LEONARD: So you  
20 need a written summary of the -- of the things that  
21 need to be conformed is what you're asking.

22 MR. REITER: Yeah. A copy of the motion  
23 would be fine, yeah.

24 MS. SCRUGGS: Your Honor, I don't have a  
25 written copy of the motion. Obviously, the

1 cross-examinations were filed Friday, and things  
2 developed over the weekend. But I'm sure the court  
3 reporter will provide daily summaries to Mr. Reiter if  
4 that is necessary.

5 HEARING OFFICER DENNISON-LEONARD: Would  
6 you be willing to prepare some -- prepare a short  
7 summary of the -- and parties can confer to make sure  
8 sort of -- you kind of go through your checklist. Is  
9 that acceptable?

10 MS. SCRUGGS: Yeah. No objection to that,  
11 Your Honor, so long as we have some time after  
12 cross-examination. Obviously, it would be difficult  
13 for us to deliver that during the day today.

14 MR. REITER: I think, Your Honor, the  
15 documents would be introduced by the 26th anyway; so  
16 we would have some time to confer.

17 HEARING OFFICER DENNISON-LEONARD: So just  
18 to paraphrase what you -- are you saying that you  
19 intend to introduce your exhibits by declaration in  
20 any case so that we have until Friday?

21 MR. REITER: Yes.

22 HEARING OFFICER DENNISON-LEONARD: Is that  
23 acceptable, Ms. Scruggs? So you can confirm  
24 informally -- confer informally to make sure that  
25 everything is conformed according to the discrepancies

1 that you described.

2 MS. SCRUGGS: No objection, Your Honor.

3 And just for clarification, what we're  
4 being asked to present is the summary of the defects  
5 that we believe exist in the exhibits that were filed  
6 for cross-examination purposes; is that correct?

7 HEARING OFFICER DENNISON-LEONARD: Yes.  
8 That's what I intended.

9 Is that acceptable to Joint Party 01?

10 MR. REITER: Yes, Your Honor.

11 HEARING OFFICER DENNISON-LEONARD: Then  
12 with that understanding the motion is granted.

13 MS. SCRUGGS: Thank you, Your Honor. I  
14 have nothing further.

15 HEARING OFFICER DENNISON-LEONARD: Any  
16 other preliminary matters from the litigants  
17 participating in cross-examination?

18 Any other preliminary matters from others  
19 present?

20 MR. OLIVE: Just briefly. This is  
21 Courtney Olive representing Bonneville Power  
22 Administration.

23 On -- follow-up on the motion. Just to  
24 the extent some of these exhibits are used today and  
25 if pages are missing or replaced by a later errata are

1 not up to date, I guess we'll just need to sort that  
2 out as we go. I just wanted to flag that.

3 HEARING OFFICER DENNISON-LEONARD: Thank  
4 you.

5 The other thing I should have said earlier  
6 is that, when you first speak, not only state your  
7 name, but spell your last name for the court reporter,  
8 please. You don't have to do that retroactively. I  
9 should have said so sooner. I apologize.

10 All right. I think we are ready, then, to  
11 begin with the first panel.

12 I guess one question would be: Are all  
13 the witnesses, other than the one who will join us by  
14 telephone -- if they're all present, I guess we can  
15 swear them in all at once if all witnesses are  
16 currently present.

17 They're not all here yet. Okay. Well,  
18 then we'll do it panel by panel.

19 MR. PERKINS: I think first up in the  
20 order of cross is the Bonneville panel that filed  
21 rebuttal testimony titled the "Southern Intertie  
22 Hourly Rates."

23 Maybe if the witnesses could come up.

24 HEARING OFFICER DENNISON-LEONARD: All  
25 right. We'll swear in the panel.

1 (Panel sworn.)

2 HEARING OFFICER DENNISON-LEONARD:

3 Mr. Perkins, if you would like to introduce the panel.

4 MR. PERKINS: Thank you, Your Honor.

5 Again, this is the Bonneville witness  
6 panel that filed rebuttal testimony titled "Southern  
7 Intertie Hourly Rate," and it was No. BP-20-E-BPA-22.

8 If the witnesses could please state your  
9 name for the record.

10 MR. LINN: Michael Linn.

11 MS. FREDRICKSON: Rebecca Fredrickson,  
12 F-r-e-d-r-i-c-k-s-o-n.

13 MR. PERKINS: And based on the order that  
14 your names appear in your testimony, do your  
15 qualifications statements appear at BP-20-Q-BPA-10 and  
16 -24?

17 MS. FREDRICKSON: Yes.

18 MR. LINN: Yes.

19 MR. PERKINS: And did you co-sponsor the  
20 rebuttal testimony in BP-20-E-BPA-22 along with the  
21 attachments -AT01 through -AT05 and the errata to that  
22 testimony, BP-20-E-BPA-22-E01?

23 MS. FREDRICKSON: Yes.

24 MR. LINN: Yes.

25 MR. PERKINS: And aside from the errata

1 filed previously, do you have any other corrections to  
2 your testimony today?

3 MS. FREDRICKSON: No.

4 MR. LINN: No.

5 MR. PERKINS: And is your testimony true  
6 and correct to the best of your knowledge and belief?

7 MS. FREDRICKSON: Yes.

8 MR. LINN: Yes.

9 MR. PERKINS: Your Honor, the panel is  
10 available for cross-examination.

11 CROSS-EXAMINATION

12 BY MR. REITER:

13 Q. Good morning, I had a couple of things.

14 HEARING OFFICER DENNISON-LEONARD:

15 Mr. Reiter, is your microphone on?

16 MR. REITER: I'm sorry.

17 BY MR. REITER:

18 Q. Can you hear me?

19 So I thought I would mention a couple of  
20 things that might make it easier. I have provided  
21 three sets of volumes there. The first set, Binder 1,  
22 includes data responses from Bonneville and others,  
23 but I'll only be asking you about the Bonneville data  
24 responses. And they're in order of -- you know, with  
25 the last number. So for convenience, if you don't

1 mind, I'll just refer to Data Response 71 or whatever  
2 it is.

3 The other binder is the testimony of JP01  
4 witnesses, and then the last binder is other exhibits  
5 that we may ask you questions about. So, hopefully,  
6 that will make it a little easier to juggle those.

7 So let me start with page -- and if you  
8 don't mind, again for shorthand, if I can just refer  
9 to your testimony as 22. So if we could look at the  
10 BPA-22, page 13. And at the top of the page you refer  
11 to studying whether the hourly -- higher hourly rate  
12 was effective in creating an incentive to renew  
13 long-term firm service. Do you see that?

14 Did you study whether long-term firm  
15 customers have had at any time an incentive, other  
16 than the increase in hourly rates, as a reason to  
17 renew their long-term firm services?

18 **A. (Michael Linn) We simply observed renewal**  
19 **behavior and offers of new service whether it was**  
20 **accepted or not.**

21 Q. Okay. So you don't know whether there were  
22 any other incentives at work that may have resulted in  
23 renewals; is that right?

24 **A. (Michael Linn) Can you rephrase that**  
25 **question?**



1       Q.   Yeah.  You referred to the hourly rate  
2 providing -- creating an effective incentive to renew  
3 long-term firm service.  I'm asking you:  Did you look  
4 at whether there were any other incentives that were  
5 for renewal that were at play when they made their  
6 decisions?

7       A.   (Michael Linn)  Everything we monitored would  
8 have been in the BPA Southern Fiscal Year 2018 data  
9 report, though we did monitor price spreads and  
10 changes in resource mixes, things of that nature.

11       Q.   But in answer to my question, the answer is  
12 you don't know what other incentives they might have  
13 had to renew other than the increase in rate; isn't  
14 that right?

15       A.   (Michael Linn)  I would say Bonneville  
16 principally created an incentive through its hourly  
17 rates.

18       Q.   Yeah.

19       A.   (Michael Linn)  It's difficult for Bonneville  
20 to know each customer's actual incentives.  So what we  
21 do is monitor before and after the response in renewal  
22 behavior.

23       Q.   Okay.  So I think the short answer to my  
24 question is no, isn't it?

25       A.   (Michael Linn)  I don't know.  I think that --

1 I think I answered the question the way I felt  
2 appropriate.

3 Q. Okay. I think you would agree with me, would  
4 you not, that you're not privy to the internal  
5 decision-making processes of those entities that renew  
6 their long-term firm contracts; right?

7 A. (Michael Linn) Yeah. We do not -- I'm not  
8 privy to --

9 Q. Okay.

10 A. (Michael Linn) -- customers' renewal  
11 decisions.

12 Q. If you could turn to your Data Response 78  
13 that's in Binder 1. And in the last sentence of the  
14 response, you say that "The BP-18 hourly rate was  
15 designed so that a customer would have incentive to  
16 purchase long-term firm service rather than purchasing  
17 hourly service for 25 hours or more per week." Do you  
18 see that?

19 A. (Michael Linn) Yes.

20 Q. If the long-term firm service is fully  
21 subscribed, would the increase in the hourly rate have  
22 any effect on the ability of original hourly customers  
23 to purchase long-term firm service?

24 A. (Michael Linn) Can you ask that question  
25 again, please?

1       Q.   Yeah.  If, as you say, the long-term firm  
2 service is fully subscribed, would the increase in the  
3 hourly rate have any effect on the ability of original  
4 hourly customers to purchase long-term firm service?

5       A.   (Michael Linn)  So whether or not the line is  
6 fully subscribed, customers put in a request and are  
7 entered into the queue.  I don't know the interplay  
8 between hourly customers and other customers.  I'm not  
9 following the distinction there.

10       Q.   So I'm asking you, if the line is fully  
11 subscribed, do -- would original hourly customers have  
12 any ability to subscribe to long-term firm service if  
13 it's fully subscribed?

14       A.   (Michael Linn)  I mean, original hourly  
15 customers and long-term customers are for the most  
16 part the same group of customers.  If somebody didn't  
17 renew service, the customer in the queue would be  
18 offered service on long-term.

19       Q.   That's not my question.  You stated that the  
20 line is now fully subscribed and that's because of the  
21 incentive -- you say because of the incentive created  
22 by the increase in the hourly rate.

23       A.   (Michael Linn)  Correct.

24       Q.   So if somebody is an hourly service customer,  
25 do they have any ability to subscribe to long-term

1 firm service if the line is fully subscribed? Isn't  
2 the answer no?

3 A. (Michael Linn) Well, they can get into the  
4 queue, and if, then, long-term becomes available, that  
5 would be offered to them.

6 Q. But not until that time; right?

7 A. (Michael Linn) That's the way all of our  
8 transmission works.

9 Q. But you're saying that the hourly rate is  
10 ensuring that it's going to remain fully subscribed.

11 MR. PERKINS: Your Honor, I'm  
12 uncomfortable with how counsel is instructing the  
13 witnesses to what his testimony is. I don't think  
14 that's a fact that's been put in evidence or that the  
15 witness has said that's his testimony.

16 MR. REITER: He can correct it if I  
17 misstated his testimony.

18 MR. LINN: The data response simply says  
19 that the rate was -- was an incentive for customers to  
20 purchase long-term service.

21 BY MR. REITER:

22 Q. Okay. So if long-term service is fully  
23 subscribed, does it create any incentive for an hourly  
24 customer to purchase that service if there's nothing  
25 available?

1           A.   (Michael Linn) I mean, there's requests in  
2 the queue right now for people that want the service,  
3 and you can also buy long-term from somebody else.  
4 You can transfer service.

5           Q.   Okay. If there were any customers who would  
6 have renewed their long-term firm contracts regardless  
7 of the level of the hourly rate increase, isn't it  
8 correct that the increase in the hourly rate would  
9 provide those customers no incentive to renew?

10           MR. PERKINS: Objection, Your Honor. This  
11 is calling for the witness to speculate on things that  
12 are -- a couple of different grounds.

13           MR. REITER: Your Honor, this is a pretty  
14 straightforward question. This isn't speculation.

15           HEARING OFFICER DENNISON-LEONARD:  
16 Mr. Perkins?

17           MR. PERKINS: Oh, I was just going to say,  
18 is there any customers that would have renewed  
19 regardless of the hourly rate? There's multiple  
20 assumptions in there that these witnesses, you know,  
21 can't testify to. Mr. Linn has already testified he's  
22 not privy to their decision-making.

23           MR. REITER: That's my point. He's not  
24 privy to their decisions; so isn't it possible that  
25 there were reasons for renewing other than an increase

1 in hourly rate that led them to renew?

2 MR. PERKINS: If that's Mr. Reiter's  
3 point, that's already on the record.

4 BY MR. REITER:

5 Q. Is that correct?

6 A. (Michael Linn) Can you repeat that?

7 MR. REITER: Could I ask the reporter to  
8 read it back.

9 (Page 29, line 23 through page 30, line 1  
10 was read as requested.)

11 MR. LINN: I'm not privy to those  
12 discussions; so I do not know.

13 BY MR. REITER:

14 Q. You don't know. Okay.

15 So if there were customers who would have  
16 renewed their long-term firm contracts regardless of  
17 the level of the hourly rate increase, then isn't it  
18 correct that the increase in the hourly rate would  
19 provide those customers no incentive to renew?

20 A. (Michael Linn) Well, it's not a binary  
21 decision.

22 Q. No ability to --

23 A. (Michael Linn) There's incentive.

24 Q. Well, if they would have renewed anyway,  
25 what's the incentive?

1                   MR. PERKINS: Again, Your Honor, I think  
2 this calls for the witness to speculate about whether  
3 they would have renewed anyway which is something he's  
4 testified he's not privy to that decision-making.

5                   MR. REITER: Do you need a response, Your  
6 Honor?

7                   HEARING OFFICER DENNISON-LEONARD: I think  
8 that the question is answered as I understand it.  
9 You're asking are there other incentives and how that  
10 affects the others. I think the witnesses have  
11 answered.

12                  MR. REITER: I don't think I've gotten an  
13 answer to that question; otherwise, I don't think  
14 Mr. Perkins would have objected.

15 BY MR. REITER:

16           Q. But my question is: If the customer would  
17 have renewed anyway regardless of the increase in the  
18 hourly rate, then what incentive would the hourly rate  
19 have provided to that customer?

20           **A. (Michael Linn) I don't know.**

21           Q. Okay. That's fine.

22                   If you could turn to page 29 of -- of that  
23 Exhibit 22. You state there in lines 19 to 21, "Since  
24 power exports from the Pacific Northwest to California  
25 did not fall, there was no corresponding increase in

1 power supplies at Mid-C and no reduction in Mid-C  
2 prices." Do you see that?

3 **A. (Michael Linn) Yes.**

4 Q. Okay. And then if I could ask you to turn to  
5 your Data Response 135. And there you say that "...it  
6 is unclear how the hourly rate, which only applies to  
7 power exports from the Pacific Northwest to  
8 California, could affect power prices at Mid-C without  
9 a decrease in power exports caused by that rate." Do  
10 you see that?

11 **A. (Michael Linn) Yes.**

12 Q. Okay. Now, there are lots of variables that  
13 determine the quantity of energy sold in spot markets  
14 at Mid-C; isn't that right?

15 **A. (Michael Linn) Yes.**

16 Q. And there are lots of variables that determine  
17 the quantity of energy exported from the Northwest to  
18 California in day-ahead and real time markets; isn't  
19 that true?

20 **A. (Michael Linn) Yes.**

21 Q. So an increase in hydro operations from one  
22 year to the next, for example, might increase exports  
23 into California over the prior year; is that correct?

24 **A. (Michael Linn) I would say it's possible.**

25 Q. Okay. And did anything like that happen



1 between Fiscal Year '17 and '18?

2       **A. (Michael Linn) I believe that the water flow**  
3 **was less in Fiscal '18 and exports increased.**

4       Q. Okay. Is it possible that an increase in  
5 exports made possible by the availability of more  
6 hydroelectric power in any given year might have been  
7 greater but for the increase in the rates for original  
8 hourly service into California?

9       **A. (Michael Linn) I'm going to have to hear that**  
10 **question again. I'm sorry.**

11       Q. Okay. Isn't it possible that an increase in  
12 exports made possible by the availability of more  
13 hydroelectric power in a given year might have been  
14 greater but for the increase in the rate for original  
15 hourly service into California? Isn't that a  
16 possibility?

17       **A. (Michael Linn) So in this example are we**  
18 **talking about a specific year or are we talking**  
19 **about -- I think there's a lot more circumstances that**  
20 **I would probably need to think through to confirm that**  
21 **statement.**

22       Q. So when you -- what other things would you  
23 need to think through?

24       **A. (Michael Linn) Well, is the line fully**  
25 **subscribed?**

1 Q. Yes.

2 A. (Michael Linn) Are there derates on the path?

3 Q. Doesn't matter.

4 A. (Michael Linn) And then the question is:

5 Would a higher hourly rate reduce flows?

6 Q. No. The question is: Is it possible that the  
7 increased availability of hydroelectric power in that  
8 given year might have been greater but for the  
9 increase in the rate for hourly original service?

10 A. (Michael Linn) Wait. So is the question does  
11 the hourly rate increase hydro generation in the  
12 Pacific Northwest?

13 Q. Now I don't understand.

14 A. (Michael Linn) I don't understand the  
15 question. I'm sorry.

16 Q. Okay. That's okay.

17 If we could -- I could ask you to turn to  
18 your response to No. 139. There you had responded to  
19 questions about whether you had analyzed the degree to  
20 which other transmission capacities from nonfederal  
21 transmission owners into California could be  
22 substituted for hourly service by saying that -- and  
23 you said that JP01 had failed to analyze this question  
24 itself. Do you see your general response to that  
25 effect?

1                   MR. PERKINS: Your Honor, I would just  
2 point out as we -- the discussion we had earlier about  
3 the clarifications of which exhibits correspond to  
4 which witness panel. This response to the data  
5 request is designated for the Bonneville Panel BPA-25  
6 which is not this panel.

7                   MR. REITER: Your Honor, same witnesses  
8 are in both. Is this a problem?

9                   MR. PERKINS: That's incorrect. The same  
10 witnesses are not in both, Your Honor.

11                  MR. REITER: Isn't Mr. Linn on both  
12 panels?

13                  HEARING OFFICER DENNISON-LEONARD: I think  
14 you need to direct your questions to the panels, and  
15 consistent with the agreement at the beginning --

16                  MR. REITER: Okay, Your Honor.

17                  HEARING OFFICER DENNISON-LEONARD: So if  
18 you have that question, I would recommend that you  
19 pose it to the panel responsible for the testimony at  
20 25.

21                  MR. REITER: Okay.

22                  HEARING OFFICER DENNISON-LEONARD: Thank  
23 you.

24 BY MR. REITER:

25                  Q. Now, we had earlier asked some questions about

1 your statement that the hourly rate had increased  
2 incentives to renew hourly service. Wouldn't it be  
3 relevant to determine if the higher rate was really  
4 creating a renewal incentive to ascertain the degree  
5 to which there were viable substitutes for original  
6 hourly service that would have achieved the renewal  
7 objective consistent with sound business principles  
8 without a rate increase?

9       **A. (Rebecca Fredrickson) Can you please state**  
10 **where you're referring to?**

11       Q. I just -- we just had this discussion just two  
12 minutes ago about --

13       **A. (Rebecca Fredrickson) But you were referring**  
14 **to -- sorry.**

15       Q. You don't remember your testimony that says  
16 that the hourly rate increase has increased the  
17 incentives to renewal?

18       **A. (Rebecca Fredrickson) I would like an**  
19 **understanding of where you're --**

20       Q. Don't you remember that? I mean, we were just  
21 talking about it two minutes ago. It's in your  
22 testimony. Didn't you prepare for today?

23               MR. PERKINS: Your Honor, I think the  
24 witnesses are just asking for identification of where  
25 this is in the testimony.

1 HEARING OFFICER DENNISON-LEONARD:

2 Mr. Reiter, can you please cite to the testimony that  
3 question concerns.

4 MR. REITER: Your Honor, there's nothing  
5 in the rules that requires that the witness  
6 remember -- fine.

7 BY MR. REITER:

8 Q. At page 13 at the top of the page, you were  
9 describing whether the hourly rate was effective in  
10 creating an incentive to renew long-term service, and  
11 you said that that was your view that it did; right?

12 A. (Michael Linn) Our view is that the hourly  
13 rate created an incentive for customers to renew  
14 service.

15 Q. Right. That's what you said. Okay.

16 And wouldn't it be relevant to determining  
17 if the higher rate was really creating a renewal  
18 incentive to ascertain the degree to which there were  
19 viable substitutes for original hourly service that  
20 would have achieved the renewal objective consistent  
21 with sound business principles without the rate  
22 increase?

23 A. (Michael Linn) So there were a lot of pieces  
24 to that question. Can we slowly work through each  
25 piece? Can you describe that a little bit?

1 Q. I'll just ask it slowly because it's really  
2 one piece.

3 A. (Michael Linn) Okay.

4 Q. So you've said that the hourly rate creates an  
5 incentive for renewal. In determining whether that is  
6 true or not, wouldn't you want to ascertain the degree  
7 to which there were viable substitutes for original  
8 hourly service that would have achieved the renewable  
9 objective consistent with sound business principles  
10 without the rate increase?

11 A. (Michael Linn) And what is the renewable  
12 objective? Are you referring to Bonneville's  
13 objective of renewing?

14 Q. Yes. Of -- of getting LTF -- or long-term  
15 firm service renewed, yes.

16 A. (Michael Linn) And what do you mean "other  
17 viable products"?

18 Q. Other viable alternatives.

19 A. (Michael Linn) Alternatives?

20 Q. They could be -- they could be products. They  
21 could be -- so products would be other transmission  
22 services; right?

23 A. (Rebecca Fredrickson) So are you asking  
24 whether or not -- we're not clear on the question.  
25 Are you asking what other --

1       Q.   You did a study to determine whether the  
2 hourly rate increase was increasing the incentive to  
3 renew. And one of the things you looked at is the  
4 renewal rates is 100 percent; so from that you said  
5 that's an indicator that the renewal -- that the  
6 higher rate is performing a renewal incentive; right?

7       A.   (Rebecca Fredrickson) Correct.

8       A.   (Michael Linn) Yes.

9       Q.   Okay. Now, on that point isn't that -- aren't  
10 you simply drawing a correlation rather than  
11 establishing causality?

12       A.   (Michael Linn) Well, I mean, it's our opinion  
13 that the rate did cause the strong amount of renewals.  
14 Do you mean correlation from a --

15       Q.   Well, your opinion derives from your saying,  
16 okay, we raised the rate. The renewal rate is 100  
17 percent. Isn't that -- aren't you drawing that  
18 conclusion from a correlation rather than evidence of  
19 causality?

20       A.   (Michael Linn) Well, I mean, we've had three  
21 years of process on this very issue, and we've heard  
22 from customers about this issue. So I don't think  
23 we're making a big leap that, when we had this public  
24 process, as a region formulated an alternative, and  
25 the results were what we expected, that it's just a

1 mere correlation.

2 Q. Okay. So when the renewal rates were 100  
3 percent or in that range in the -- in the 2012 case,  
4 the 2014 case, was the lower hourly rate the --  
5 causing an incentive for people to renew long-term  
6 firm service?

7 A. (Michael Linn) So in the -- in the process  
8 that led to the BP-18 rate change, we described both  
9 the California ISO seams and the emergence of the  
10 California duck curve. So prior to the emergence of  
11 the duck curve, it seems that the denominator of the  
12 previous hourly rate was effective.

13 Q. Okay. So it was the duck curve that you're  
14 saying caused the -- the disincentive to renew?

15 A. (Michael Linn) The duck curve in combination  
16 with the ISO market rules.

17 Q. Okay. When did -- when did you first see the  
18 duck curve emerge?

19 A. (Michael Linn) I believe, if you look at our  
20 report we put out in January, you can see the  
21 progression of the duck curve growing pretty  
22 drastically.

23 Q. So if you -- if you were -- strike that.

24 So if there were alternatives to raising  
25 the hourly rate that would have addressed the duck



1 curve effect, would have that been relevant to your  
2 consideration about whether it was -- whether it was  
3 necessary to raise the hourly rate?

4 **A. (Rebecca Fredrickson) Yes. It would have**  
5 **been.**

6 Q. Okay. Now, if you could turn to page 1 of  
7 your testimony, and specifically I'm referring to  
8 lines 21 to 26 where you're talking about the -- the  
9 proposed rates that were part of this settlement.  
10 Would it be accurate to say that, prior to execution  
11 of the settlement agreement in this case, you began  
12 work on the BP-20 rate case? Before you ever had  
13 settlement talks, you were beginning work on this  
14 proceeding. Is that fair?

15 **A. (Rebecca Fredrickson) Yes.**

16 Q. And at some point -- that would have been at  
17 some point during Fiscal Year 2018?

18 **A. (Rebecca Fredrickson) I believe it's Fiscal**  
19 **Year '17, '18.**

20 Q. Okay. And so among other things, you began --  
21 one thing we know you did was you began collecting and  
22 analyzing Southern Intertie data before execution of  
23 the settlement agreement; right?

24 **A. (Rebecca Fredrickson) Yes.**

25 Q. Okay. And would it be fair to say that you

1 would be, then, thinking about what rates for hourly  
2 service on the other -- of the Southern Intertie  
3 should be before you entered into the settlement  
4 agreement?

5 **A. (Rebecca Fredrickson) So are you -- are you**  
6 **asking about the methodology, or are you asking about**  
7 **the specific rates? It wasn't clear to me.**

8 Q. Well, both. I mean, wouldn't you have been  
9 considering the -- you know, in developing -- in the  
10 process of getting ready for the BP-20 proceeding,  
11 wouldn't you have considered both the rate design and  
12 the rate levels that you might want to implement?  
13 That was part of what you would be looking at; right?

14 **A. (Rebecca Fredrickson) Yes.**

15 Q. And would it be fair to say that, in this  
16 process of thinking about and formulating a new rate  
17 for hourly service preceding the settlement  
18 negotiations, you had in mind whether the rate would  
19 ultimately -- you would ultimately propose for hourly  
20 service would ensure hourly -- original hourly  
21 customers would pay a fair share of Bonneville's  
22 costs? That's one of the things you were thinking  
23 about; right?

24 **A. (Michael Linn) That's the purpose of our rate**  
25 **design, yes.**

1       Q.    Okay.  And isn't it fair to say, in the  
2 process of considering a new rate for hourly service  
3 on the Southern Intertie preceding the period of  
4 settlement negotiations, you had in mind that the  
5 proposed rate in BP-20 would not be so low as to  
6 encourage long-term firm customers to switch to hourly  
7 service instead of retaining or renewing their  
8 long-term firm services?

9       A.    **(Michael Linn)  We are planning on maintaining**  
10 **the same hourly denominator to keep the incentive.**

11       Q.    Okay.  And during this formulation stage  
12 before you entered into settlement talks, didn't you  
13 consider -- did you consider whether discounting the  
14 hourly rate would still satisfy Bonneville's needs to  
15 recover its costs without creating an unacceptable  
16 risk that long-term firm customers might switch to  
17 hourly service if it was discounted?

18               MS. FREDRICKSON:  I'm sorry.  Can I have  
19 the court reporter please restate the question?  It  
20 was fairly long.

21               (Page 43, line 11 through page 43, line 17  
22 was read as requested.)

23               MR. PERKINS:  Your Honor, perhaps I can  
24 ask a question in aid of objection.  I'm unclear.  
25 When you say "discounting rates," what rates are you

1 talking about?

2 MR. REITER: The hourly service. The  
3 rates for hourly service.

4 MR. PERKINS: What rate period?

5 MR. REITER: They're the BP-20 period.

6 MR. PERKINS: But there's no rates in  
7 effect to discount. That's why I'm unclear what the  
8 question is.

9 BY MR. REITER:

10 Q. They were proposing rates. For example, you  
11 have rates for northbound service on the Southern  
12 Intertie that provide for discounting; right?

13 A. (Rebecca Fredrickson) Can you clarify? Are  
14 you specifically talking about northbound on the  
15 Southern Intertie?

16 Q. Yes.

17 A. (Rebecca Fredrickson) So from south to north,  
18 the discount, is that what you're --

19 Q. Yeah. You --

20 A. (Rebecca Fredrickson) -- referring to on the  
21 Southern Intertie?

22 Q. You propose -- you do have a proposal to  
23 discount rates north to -- south to north on the  
24 Southern Intertie.

25 A. (Rebecca Fredrickson) We had that in our

1 **current rate schedule --**

2 Q. Yes.

3 **A. (Rebecca Fredrickson) -- for BP-18.**

4 Q. Yes. Understood.

5 And it would be -- under the settlement  
6 that would effectively continue; right?

7 **A. (Rebecca Fredrickson) In our rate schedules.**  
8 **That's what we have.**

9 Q. Okay. So I'm asking you, during the  
10 formulation stage of the BP-20 rates before you  
11 entered into settlement, did you consider whether  
12 discounting the hourly rate for southbound service on  
13 the Southern Intertie would still satisfy Bonneville's  
14 needs to recover costs without creating an  
15 unacceptable risk that LTF customers might switch to  
16 hourly service if it was discounted?

17 **A. (Rebecca Fredrickson) So after ten months of**  
18 **monitoring, we did not see any reason to make any**  
19 **changes to our rate design.**

20 Q. I understand that. But I'm asking: Did you  
21 consider whether discounting would still satisfy  
22 Bonneville's needs to recover its costs without  
23 creating an unacceptable risk that long-term firm  
24 customers would switch to hourly service if it was  
25 discounted?

1           A.   (Rebecca Fredrickson)   So when we are looking  
2   at our rate methodologies, if there are no major  
3   changes or significant changes, we did not consider --  
4   we looked at it and we didn't make any changes to the  
5   methodology. We weren't considering making any  
6   changes.

7           Q.   Well, I'm unclear. You considered it, or you  
8   didn't consider it? I'm not asking what you  
9   ultimately did, but did you consider it?

10          A.   (Rebecca Fredrickson)   We look at all the  
11   options --

12          Q.   Okay.

13          A.   (Rebecca Fredrickson)   -- and we did not --

14          Q.   Okay.

15          A.   (Rebecca Fredrickson)   -- see any reason to  
16   make any change.

17          Q.   I understand that.

18                        So -- and didn't you conclude that  
19   Bonneville could discount its hourly rates on the  
20   Southern Intertie for southbound service without  
21   creating an unacceptable risk that long-term firm  
22   customers might switch to discounted hourly service?

23                        MS. SCRUGGS: Your Honor, if I may. This  
24   is Irene Scruggs for the Public Power Council.

25                        I'm not objecting to this particular

1 question for this particular panel, but with regard to  
2 the line of questioning that calls into question the  
3 discussions that occurred during the TC-20 settlement  
4 process, all of those discussions were pursuant to a  
5 settlement and are not admissible for any other --

6 MR. REITER: Absolutely, Your Honor.

7 MS. SCRUGGS: -- and should not be --

8 Excuse me, Mr. Reiter. Please let me  
9 finish.

10 MR. REITER: Well, you're -- you're --

11 MS. SCRUGGS: Please let me finish.

12 MR. REITER: You're not --

13 HEARING OFFICER DENNISON-LEONARD:

14 Mr. Reiter, I think her -- her objection is on the  
15 basis of how this relates to settlement discussions;  
16 so let's let Ms. Scruggs finish, please.

17 MS. SCRUGGS: Thank you, Your Honor.

18 And, again, I'm not objecting to this  
19 particular question to this particular panel, but to  
20 the extent this line of questioning continues for  
21 other witnesses including Public Power Council's  
22 witness, Mr. Deen, the line of questioning pertaining  
23 to the settlement discussions and consideration by any  
24 party during those settlement discussions in the TC-20  
25 settlement proceeding cannot be used for any other

1 purpose. And that was made abundantly clear during  
2 those settlement discussions.

3 MR. REITER: We absolutely agree, Your  
4 Honor. As Ms. Scruggs says, she's not objecting to  
5 the question. I'm not sure what the point of this is.

6 MR. PERKINS: Well, Your Honor, this is  
7 Matt Perkins for Bonneville.

8 And I guess we've kind of gone along and  
9 carefully listened to these questions. This last one  
10 seems to tread into an area that I'm not sure where it  
11 would come from other than settlement discussions. So  
12 I guess --

13 MR. REITER: We were very specific. And I  
14 asked it three or four times, and you never objected  
15 and now you --

16 MR. PERKINS: Well, it sounds like --

17 HEARING OFFICER DENNISON-LEONARD:  
18 Mr. Reiter, can you -- can you point to a portion of  
19 the testimony that this question concerns?

20 MR. REITER: I have been -- this whole  
21 line has been related to the testimony at page 1,  
22 lines 21 to 26.

23 HEARING OFFICER DENNISON-LEONARD: On  
24 which page?

25 MR. REITER: Page 1, Your Honor.



1 MR. PERKINS: Your Honor, this --

2 MR. REITER: I mean, we'll be here all day  
3 if we do this. There was no objection to the  
4 question. Then we have someone with a speaking  
5 objection talking about what if you did ask about  
6 settlement. You can't do that. We agree with that.  
7 And then Mr. Perkins tries to say, you know what? Now  
8 that I think about it, he's had ten questions. Let me  
9 make an objection now. Your Honor, I think we'll be  
10 here all day if we do this.

11 I think we've been explicit in every one  
12 of these questions. We're not talking about  
13 settlement.

14 If -- Your Honor, could I ask the witness  
15 -- ask you to direct the witness to answer the  
16 question?

17 HEARING OFFICER DENNISON-LEONARD: So I  
18 think a lot has transpired in the last couple of  
19 minutes. Let's back up for a minute and say -- so can  
20 you state what is the question you're trying to get  
21 answered right now?

22 MR. REITER: Yes. I'll repeat it.

23 BY MR. REITER:

24 Q. During the formulation stage of developing  
25 your proposals in BP-20 before you entered into

1 settlement negotiations, didn't you conclude that BPA  
2 could discount its hourly rates on the Southern  
3 Intertie without creating an unacceptable risk that  
4 long-term firm customers might switch to discounted  
5 hourly service?

6 MR. PERKINS: Again, I would object to  
7 that question and ask Mr. Reiter to identify where in  
8 the testimony it states that.

9 HEARING OFFICER DENNISON-LEONARD: Yes.

10 Mr. Reiter, can you point to the testimony  
11 where Bonneville states that it concluded it could --  
12 could discount the Southern Intertie rate without  
13 compromising its objective. Where --

14 MR. REITER: That's what I'm asking them  
15 about, Your Honor.

16 HEARING OFFICER DENNISON-LEONARD: But he  
17 said "didn't you state."

18 MR. REITER: No. I said "didn't you  
19 conclude."

20 HEARING OFFICER DENNISON-LEONARD: Okay.

21 MR. REITER: Not in their testimony.  
22 Didn't you conclude in -- and this whole line of  
23 questioning concerns what they did leading up to the  
24 settlement. We've had a whole bunch of questions  
25 about what kinds of things they thought about before

1 the settlement negotiations started in formulating a  
2 proposal because they had to get ready to make a  
3 proposal for BP-20.

4 So I'm saying didn't you conclude -- it's  
5 one of the questions I'm asking about, what they did.  
6 I could have said "did you conclude," but I asked it  
7 "didn't you conclude."

8 HEARING OFFICER DENNISON-LEONARD: So  
9 you're asking the witnesses to testify about their  
10 conclusions about the feasibility of discounting the  
11 Southern Intertie --

12 MR. REITER: Yeah.

13 HEARING OFFICER DENNISON-LEONARD: --  
14 rate.

15 MR. REITER: If they had reached those  
16 conclusions, yeah. I'm asking if they did.

17 MR. PERKINS: And I guess I would ask  
18 again: What is the basis for stating that conclusion?

19 MR. REITER: They'll have to answer that.  
20 I mean, that's what I'm asking.

21 HEARING OFFICER DENNISON-LEONARD: It  
22 sounds as if you were proposing a conclusion that  
23 you're asking them to agree with. Is that correct?

24 MR. REITER: I'm asking them if this was  
25 -- they looked at a lot of things. So I'm asking them

1 "did they conclude." I'm asking -- they've already  
2 said they considered discounts. They already said  
3 that. So I'm asking what they concluded about that.

4 HEARING OFFICER DENNISON-LEONARD: Okay.  
5 So the nature of your question is what they  
6 considered -- what they concluded about the  
7 feasibility of discounts.

8 MR. REITER: Yes, Your Honor.

9 HEARING OFFICER DENNISON-LEONARD:  
10 Mr. Perkins?

11 MR. PERKINS: Again, Your Honor, I don't  
12 know where the basis for his question about that  
13 conclusion comes from. It's certainly not in the  
14 testimony, or at least he hasn't identified any of  
15 that.

16 As far as the objections earlier about,  
17 well, we might be here all day, you know, discounting  
18 is not even within the scope of this case. So if we  
19 need to make those objections each time we can, I  
20 think we're trying to help things to move along a  
21 little bit. But, again, this question is kind of  
22 troubling given the nature of it.

23 And given that Mr. Reiter indicated he's  
24 already asked about rate development and discounting  
25 multiple times, it seems like we should just move on.

1           MR. REITER: Your Honor, I haven't gotten  
2 an answer to my question which was not objected to the  
3 first two times it was asked.

4           MR. PERKINS: Well, if you've asked it two  
5 times, why do you need to ask it again?

6           MR. REITER: I haven't gotten an answer.

7           HEARING OFFICER DENNISON-LEONARD: All  
8 right. Unless there is testimony about those  
9 conclusions, let's move on.

10          MR. REITER: Your Honor, if I could ask  
11 for an explanation of your ruling. We've asked -- the  
12 witnesses have said that they considered various  
13 factors including discounts. We've already had that  
14 testimony. And I'm asking them what did they conclude  
15 about that consideration. And I don't understand your  
16 ruling. So if I could ask for an explanation, Your  
17 Honor.

18          HEARING OFFICER DENNISON-LEONARD: So the  
19 rule is that the questions have to be within the scope  
20 of the testimony or things that fairly follow. I  
21 think you're arguing that it fairly follows.

22          MR. REITER: Yes. And doesn't it fairly  
23 follow, since we've already -- the witnesses have  
24 already explained that they considered discounting.  
25 It's a simple follow-up of, well, did you conclude

1 that that would create a risk of, you know -- an  
2 unacceptable risk that LTF customers would not renew?  
3 And that's one of the things they said was high on  
4 their agenda, making sure that customers continue to  
5 renew long-term firm service. It seems to me closely  
6 related to the earlier response.

7 MR. PERKINS: To be clear, Your Honor,  
8 before Mr. Reiter said his questions is "didn't you  
9 conclude." So there's shifting here.

10 MR. REITER: Like I said, I could have  
11 worded it either way. I can word it either way, Your  
12 Honor. I've already said that.

13 HEARING OFFICER DENNISON-LEONARD: So the  
14 witnesses can answer about the basis for the proposal  
15 they made.

16 MR. LINN: As we --

17 MR. REITER: Your Honor, you're saying --  
18 Okay. Go ahead. I'm sorry.

19 MR. LINN: The data we monitored indicates  
20 that both the market seems that created the renewal  
21 risk and a duck curve have only gotten -- the duck  
22 curve has gotten more pronounced. So it doesn't seem  
23 that a discount would make any sense given that the  
24 reasons for changing the rate have only intensified.

25 MR. REITER: If you could turn to page 3

1 of your testimony.

2 HEARING OFFICER DENNISON-LEONARD:

3 Mr. Reiter, could you please make sure your microphone  
4 is on.

5 MR. REITER: Yeah. I'm sorry, Your Honor.

6 BY MR. REITER:

7 And I'm looking at line 10 where you say  
8 that "...for many years" -- I'm sorry. It starts on  
9 line 8. "...for many years" --

10 HEARING OFFICER DENNISON-LEONARD: Is your  
11 microphone on?

12 MR. REITER: I think so.

13 HEARING OFFICER DENNISON-LEONARD:  
14 Sometimes they turn themselves off.

15 MR. REITER: It looks like it's on.

16 Is that better, Your Honor?

17 HEARING OFFICER DENNISON-LEONARD: Thank  
18 you.

19 BY MR. REITER:

20 Q. You state that "...for many years [Bonneville]  
21 has designed its hourly rates so that a customer that  
22 reserves service for only the 'peak' hours would pay  
23 the same amount as a customer that has reserved  
24 long-term service for all hours."

25 Do you admit that during the BP-16

1 proceedings BPA assumed that customers seeking nonfirm  
2 hourly service had no assurance that they would be  
3 able to take that service during peak hours of usage  
4 on the Southern Intertie?

5 MR. PERKINS: Objection, Your Honor. I  
6 don't think the BP-16 proceeding is relevant to  
7 the proposal that we have in BP-20.

8 HEARING OFFICER DENNISON-LEONARD: Can you  
9 point, Mr. Reiter, to testimony where the witnesses  
10 discuss BP-16?

11 MR. REITER: Well, my point, Your Honor --  
12 and I'll connect this up very quickly -- is that this  
13 was a circumstance that existed in BP-16 and that they  
14 either -- it either continues to exist today, or they  
15 don't know. And that would go to, you know,  
16 whether -- whether, you know, their statement is  
17 supportable that the rates were designed related to  
18 those customers who could take service during peak  
19 hours. If they had no assurance of taking service  
20 during peak hours, that would undermine the general  
21 principle that they articulate.

22 So my question, again, Your Honor, is --  
23 BY MR. REITER:

24 Q. Do you still have it in mind?

25 A. (Michael Linn) Please repeat it.



1 Q. Okay.

2 MR. PERKINS: I guess, Your Honor, if I  
3 could jump in. You know, Bonneville's proposal in  
4 this proceeding is to adopt a settlement that  
5 increases all transmission rates by approximately 4  
6 percent. These questions of what was assumed in BP-16  
7 or what decisions were made in BP-18 and the factors  
8 that led to that are outside the scope of this  
9 proceeding.

10 MR. REITER: That's not my point, Your  
11 Honor. My point is they're offering a settlement, and  
12 if the circumstances that underlay the decision in  
13 BP-18 have changed and if they're -- if they don't  
14 support the general settlement that they're proposing  
15 now, I'm entitled to try to establish that.

16 MR. PERKINS: Well, I would first point  
17 out the question was about BP-16; and so the point  
18 about BP-18 and the circumstances around BP-18 aren't  
19 relevant to this proceeding either.

20 MR. REITER: So let me -- let me phrase it  
21 a different way because I think the record in '16, it  
22 says what it says because, if BP-16 the -- the  
23 commission -- or the administrator said -- and I'm  
24 quoting from the decision. "Participants that rely on  
25 hourly nonfirm transmission service often cannot

1 obtain service on Bonneville's system during times of  
2 high Intertie demand because the capacity is being  
3 scheduled by customers with long-term service" [as  
4 read].

5 Is that still true today?

6 MR. PERKINS: I guess, multiple issues  
7 there. I guess I would ask Mr. Reiter to point out  
8 where he is quoting from and renew the objection that,  
9 again, this isn't relevant to the proposal that  
10 Bonneville's made in these proceedings.

11 HEARING OFFICER DENNISON-LEONARD:  
12 Mr. Reiter, I'm going to sustain the objection unless  
13 you can tell me where in the testimony of these  
14 witnesses you're referring to.

15 MR. REITER: I'm referring to their  
16 testimony at lines 8 through 10 that they said "...for  
17 many years [Bonneville] designed its hourly rates so  
18 that a customer that reserves hourly service for only  
19 the 'peak' hours would pay the same amount as a  
20 customer that has reserved long-term service for all  
21 hours."

22 So they're proposing a rate now, and I'm  
23 asking whether the circumstances that they assume  
24 justifies this rate still exists. So back in BP-16  
25 the commission -- or the administrator said -- and

1 this was at page 111 of the record of decision, the  
2 quote I articulated. They said, "Participants that  
3 rely on hourly nonfirm transmission often cannot  
4 obtain service on Bonneville's system during times of  
5 high Intertie demand because that capacity is being  
6 scheduled by customers with long-term service" [as  
7 read]. And that's a quote from page 11 -- 111 of  
8 Bonneville's BP-16 ROD.

9           Okay. So if their premise, Your Honor, is  
10 that -- that they're supporting rates that are  
11 designed so that a customer that reserves hourly  
12 service only for the peak hours, if that's not true  
13 because you can't -- you don't have any assurance that  
14 you can take service during the peak hours, I want to  
15 know if that's the case today. It was the case in  
16 BP-16. Is that the case today is my question.

17           HEARING OFFICER DENNISON-LEONARD: So ask  
18 the question in a way that is based on the testimony  
19 now, not the BP-16 rate case, or else I'll sustain the  
20 objection.

21 BY MR. REITER:

22           Q. Okay. Do you know whether participants that  
23 rely on hourly nonfirm service, whether -- I'm sorry.  
24 Today is it correct that participants that rely on  
25 hourly nonfirm transmission service often cannot

1 obtain service on Bonneville's system during times of  
2 high Intertie demand because the capacity is being  
3 scheduled by customers with long-term service?

4       **A. (Michael Linn) The majority of hourly nonfirm**  
5 **service is reserved during times of the highest usage.**  
6 **And the California ISO holds that capacity out if**  
7 **you're awarded.**

8       Q. My question is: Are there oftentimes that  
9 someone taking nonfirm hourly service -- or looking to  
10 take nonfirm hourly service cannot obtain it during  
11 high -- periods of high demand because that capacity  
12 is being scheduled by customers with long-term firm  
13 service?

14               MR. PERKINS: Again, objection, Your  
15 Honor. I mean, the statement that even Mr. Reiter  
16 quoted in the testimony here is just a general  
17 statement, you know, in a section titled "Background  
18 and Context for JP01's Opposition to the Hourly Rate."  
19 There's nothing in this statement about whether  
20 customers -- or whether customers are able to obtain  
21 service at any particular time of day. Again, these  
22 issues all go back to the opposition to the BP-18  
23 decision, and those issues are outside the scope of  
24 this proceeding --

25               MR. REITER: Your Honor, you already ruled

1 that the question is permissible. Do we have to keep  
2 doing these speaking objections to coach the witness?

3 MR. PERKINS: Well, I would say earlier  
4 you said I hadn't objected earlier enough; so I'm just  
5 following your lead.

6 HEARING OFFICER DENNISON-LEONARD: So your  
7 question that you're asking for an answer to is the  
8 availability of alternatives. You're tying it into  
9 testimony on page 1?

10 MR. REITER: Yes. I'm sorry. Page 3, not  
11 page 1, Your Honor.

12 HEARING OFFICER DENNISON-LEONARD: And the  
13 lines?

14 MR. REITER: Lines 8 to 10.

15 HEARING OFFICER DENNISON-LEONARD: All  
16 right. So the statement there is the basis for which  
17 Bonneville designed its rates. And your question  
18 relating to that testimony is?

19 BY MR. REITER:

20 Q. Are there frequently times when someone who  
21 wants to schedule nonfirm hourly service during peak  
22 periods will not be able to do so because the capacity  
23 is being scheduled by customers with long-term firm  
24 service?

25 A. (Michael Linn) What do you mean by

1 "frequently"?

2 Q. Often.

3 A. (Michael Linn) Well, the ISO makes it, if you  
4 win an award, it holds out capacity for you. So I  
5 don't understand why they wouldn't be able to get it.

6 Q. So you're saying that -- was that true in  
7 BP-16?

8 HEARING OFFICER DENNISON-LEONARD: No.  
9 Okay. So we already said BP-16 is outside the scope.  
10 I'd also -- a time check. You asked for  
11 45 minutes with these witnesses. We're past that  
12 time. So are you getting close to the end of your  
13 cross-examination of these witnesses?

14 MR. REITER: Of these witnesses, no, Your  
15 Honor. No.

16 HEARING OFFICER DENNISON-LEONARD: Okay.  
17 Because I have the power under the rules to limit the  
18 time of cross-examination. So I need to understand  
19 how long -- much further you need to go.

20 MR. REITER: I don't know, Your Honor. I  
21 would have thought I would have been a lot further  
22 along. I don't know, Your Honor. Maybe another 40  
23 minutes.

24 HEARING OFFICER DENNISON-LEONARD: Then I  
25 think we need to take a break. We're going to take a

1 five-minute break.

2 (Brief recess taken at 10:14 AM. Resume  
3 at 10:19 AM.)

4 HEARING OFFICER DENNISON-LEONARD: All  
5 right. We're going to go back on the record. I would  
6 just observe that under Section 1010.14(j) of  
7 Bonneville's rules, I have the authority to impose  
8 reasonable time limitations on cross-examination. I  
9 don't think doubling the amount of time  
10 cross-examining witnesses kind of fits in with those  
11 parameters.

12 I would like to understand in terms of the  
13 aggregate amount of time that you've asked for today,  
14 which is close to five hours, how this is going to  
15 affect the total time.

16 MR. REITER: I don't -- I would hope we  
17 would still get back on track, Your Honor, to -- to  
18 complete cross.

19 HEARING OFFICER DENNISON-LEONARD: Do you  
20 have your microphone on?

21 MR. REITER: I apologize.

22 I would hope we would get back on track,  
23 Your Honor, to get back on the estimated total time.  
24 I will do my best.

25 HEARING OFFICER DENNISON-LEONARD: Okay.

1 I think, you know, there will come a time where you  
2 may need to decide how you're going to manage time  
3 because we're not going to allow an unlimited amount  
4 of time for cross-examination today.

5 MR. REITER: I understand, Your Honor.

6 BY MR. REITER:

7 Q. I wonder -- Section -- if you could just turn  
8 to Section 4 of your testimony. This concerns the  
9 analysis of Bonneville's Southern Intertie report.

10 Now, I think in -- in the testimony and in  
11 your report, you mentioned that the increase in hourly  
12 rates that -- I'm sorry. After the increase of hourly  
13 rates, total load on the Southern Intertie increased  
14 in Fiscal Year '18; is that correct?

15 A. (Michael Linn) Where is the specific cite,  
16 please?

17 Q. I don't have the specific cite. I think you  
18 say it in several places. Do you recall that, that --

19 A. (Michael Linn) In Fiscal Year '18, net  
20 transfers south on the Southern Intertie were higher  
21 than they had been in the other years we observed.

22 Q. Yeah. Okay. Now, the report that you  
23 reference shows that original hourly sales declined in  
24 Fiscal Year '18 but other volumes replaced it. Is  
25 that essentially your understanding of what the data



1 shows?

2       **A. (Michael Linn) Yes. In Fiscal Year '18,**  
3 **hourly reservations in the north-to-south direction**  
4 **declined, but total net exports went up.**

5       Q. Okay. So part of the -- part of the  
6 difference would be, if you had somebody who was  
7 taking hourly service and now are taking less of it,  
8 they might have purchased resales of hourly service  
9 from long-term firm customers.

10       **A. (Michael Linn) That combination is possible,**  
11 **but I believe the hourly resales on the Intertie**  
12 **decreased.**

13       Q. Okay. But some of that -- I'm saying -- so  
14 some of that -- so some of the hourly service that was  
15 no longer being purchased might be using resales of  
16 long-term firm service.

17       **A. (Michael Linn) I don't know the customer's**  
18 **intent.**

19       Q. Okay. So what other kinds of substitutes for  
20 hourly service would account for the increase in  
21 volume? Where would they -- where would the other  
22 substitutes come from?

23       **A. (Michael Linn) It's mostly increased**  
24 **utilization of long-term service.**

25       Q. Okay. So is it possible, for example, that

1 someone who was interested in purchasing hourly  
2 service but then the original hourly service rate went  
3 up instead sold their energy at Mid-C to someone with  
4 long-term firm rights who then resold it into  
5 California?

6 **A. (Michael Linn) Can you walk me through this**  
7 **one?**

8 Q. Yeah, sure. So you have somebody who was  
9 previously using the original hourly service at the  
10 pre-BP-18 rate. So now the rate went up in BP-18, and  
11 instead of using hourly service, they could sell their  
12 energy at Mid-C to someone with long-term firm rights  
13 who would then transmit it down the Southern Intertie  
14 using their rights.

15 **A. (Michael Linn) That possibility has always**  
16 **existed.**

17 Q. Do you know the degree to which that happened  
18 in Fiscal Year '18?

19 **A. (Michael Linn) The degree to which customers**  
20 **sold at Mid-C and then that customer then wheeled it**  
21 **to California?**

22 Q. Yeah.

23 **A. (Michael Linn) I don't know how I would know**  
24 **that.**

25 Q. If you could turn to page 12, lines 1 to 15 of

1 your testimony. I'm sorry. You're already there.  
2 And if I could ask you also to turn to the Data  
3 Response 124.

4                   So you were asked about the 2015  
5 Bonneville presentation that stated that "...firm  
6 contract holders that make power sales to the  
7 [California ISO] are expected to receive higher  
8 revenues resulting from capturing a higher portion of  
9 the...spread between Mid-C and California trading  
10 hubs." Do you see that reference?

11           **A. (Michael Linn) Is this in the data request**  
12 **you're referring to?**

13           Q. Yes. Yeah.

14           **A. (Michael Linn) Is that --**

15           Q. I think it's at the beginning of the text of  
16 the data request.

17           **A. (Michael Linn) So you're -- this is the quote**  
18 **in the beginning of the request text?**

19           Q. Yes.

20           **A. (Michael Linn) Yes, I do have that.**

21           Q. Did you analyze whether those expectations  
22 were met after the BP-18 rate hike went into effect  
23 for hourly service?

24                   MR. PERKINS: Objection, Your Honor.

25 Again, this gets back to the issue of all of these

1 issues are outside the scope of the BP-20 proceeding.  
2 We objected to this Data Response 124 and provided an  
3 answer after -- without waiving the objection. And  
4 the answer explains why this presentation from 2015  
5 is -- you know, it says what it says. But the  
6 discussion in the BP-18 ROD of these types of issues  
7 are what Bonneville's, you know, pronouncement is.

8           So questions about a presentation from  
9 four years ago where Bonneville's already explained  
10 its best explanation of the issues in the BP-18 ROD  
11 are outside the scope of this proceeding. And I don't  
12 really see how they're going to be relevant to any  
13 issue that's going to be decided in BP-20.

14           HEARING OFFICER DENNISON-LEONARD:  
15 Mr. Reiter?

16           MR. REITER: Your Honor, the question goes  
17 to what their expectations are and whether that could  
18 ultimately justify the rates being approved in this  
19 case.

20           What Mr. Perkins refers to is that in  
21 their response Bonneville now says that the  
22 presentation in 2015 was not a statement of  
23 Bonneville's objectives but the -- but the  
24 expectations of the staff.

25           So what I'm asking, since they reviewed

1 what affects the -- part of what they did was they  
2 wanted to see if there may be any adverse consequences  
3 resulting from the rate increase -- that's in their  
4 testimony -- whether they -- whether these  
5 expectations they had, whether they looked at whether  
6 these expectations were realized when the BP-18 rate  
7 hike went into effect, not whether these were  
8 Bonneville's goals. That was Bonneville's objection.

9           They -- they responded to the data request  
10 saying that these were their expectations. So I  
11 wanted to ask if they looked at whether these  
12 expectations were met.

13           MR. PERKINS: And I guess I'd just point  
14 out, again, that we responded to the data request  
15 after objecting and without waiving those objections.  
16 You know, the discussion in the testimony that  
17 Mr. Reiter's pointing to basically refers back to the  
18 BP-18 record of decision and says why that is  
19 Bonneville's, you know, best statement of its  
20 objectives for the changes in the BP-18 rate case  
21 which again are not within the scope of what we're  
22 proposing in BP-20.

23           MR. REITER: Your Honor, what they're  
24 proposing has to be justified under the Northwest  
25 Power Act. And one of the things that Bonneville

1 administrators said in the BP-18 proceeding which was  
2 to govern future proceedings was that the -- that  
3 Bonneville would monitor to see if there would be  
4 adverse consequences. That's the purpose of this  
5 Southern Intertie report.

6 So I'm asking whether they could --  
7 whether they analyzed whether their expectations were  
8 met about, you know, the rate increase making it more  
9 profitable for long-term firm service customers to  
10 hold long-term firm service.

11 MR. PERKINS: But to be clear,  
12 expectations stated in a slide from 2015 when  
13 Bonneville has much more clearly stated what its  
14 objectives were in the BP-18 ROD which were --

15 HEARING OFFICER DENNISON-LEONARD:  
16 Mr. Reiter, can you frame your question within the  
17 text of this testimony that you're citing to?

18 MR. REITER: Your Honor, I thought I...  
19 BY MR. REITER:

20 Q. Let me back up. You were part -- the Southern  
21 Intertie report was to look at consequences resulting  
22 from the rate increase. Among other things that's  
23 part of the purpose of the Southern Intertie report;  
24 right?

25 A. (Michael Linn) Yeah. To monitor if there

1 were adverse impacts.

2 Q. Okay. So did you examine whether the  
3 long-term firm rights holders were -- whether their  
4 service became more profitable after the -- after the  
5 rates -- rate increase went into effect?

6 A. (Michael Linn) Bonneville doesn't have a way  
7 to tell if our long-term customers are having more  
8 profit or not.

9 Q. Okay. If I could ask you to turn to Data  
10 Response 120 -- 127. And also to page 21 of -- so  
11 keep that in mind as well as page 21 of your  
12 testimony.

13 So in particular on page 21, I'm referring  
14 to lines 5 to 6 where you say that "It is unclear from  
15 JP01's analysis if prices were the average price of  
16 energy, or the average price of all products,  
17 including those that would not be impacted by the  
18 hourly rate." Do you see that reference?

19 A. (Michael Linn) Yes.

20 Q. You stated in response to 127(b) that it was  
21 unnecessary to replicate or compare JP01's data to see  
22 if it used energy prices or some other prices because  
23 JP01 gave you the SQL code used to filter the FERC EQR  
24 data. Do you see that portion of your response?

25 A. (Michael Linn) Yes.

1       Q.   Now, transmission rights are necessary to move  
2 any electricity products from Point A to Point B;  
3 isn't that right?

4       A.   (Michael Linn)   I believe that to be the case.

5       Q.   Okay.   And it doesn't matter whether the  
6 product is capacity or energy or ancillary services  
7 or -- correct?

8       A.   (Michael Linn)   And are you referring to the  
9 FERC-listed products?

10      Q.   Well, let's say first FERC-listed products,  
11 ancillary services, energy, capacity.

12      A.   (Michael Linn)   First of all, FERC reports  
13 booked out power which isn't actually flowing over the  
14 path.

15      Q.   Setting aside that.

16      A.   (Michael Linn)   Setting aside booked out  
17 power?   So that would include --

18      Q.   Well, let's just focus on the three I  
19 mentioned.

20      A.   (Michael Linn)   Okay.   And what were the  
21 three?

22      Q.   Capacity, energy, and ancillary services.

23      A.   (Michael Linn)   Which ancillary services?

24      Q.   Would it make a difference?

25      A.   (Michael Linn)   Well, I'm just trying to



1 understand which products you're referring to.

2 Q. Well, let's say all ancillary services that  
3 are -- I mean, don't you require transmission in order  
4 to move ancillary services from Point A to Point B?

5 A. Well, SCD is an ancillary service, and it's  
6 just paying for the scheduling and control and  
7 dispatch inventory or the facilities that provide that  
8 service.

9 Q. How about confine it to any ancillary service  
10 that involves the delivery of energy.

11 A. (Michael Linn) My understanding is that it  
12 needs transmission service.

13 Q. Okay. Now, based on your experience with AQ  
14 -- EQRs -- excuse me, not AQR -- EQRs, a transaction  
15 might not be coded as energy in the EQR filing but  
16 would still require transmission rights; isn't that  
17 true?

18 A. (Michael Linn) Well, for a portion because,  
19 like I said earlier, booked out power is not.

20 Q. Okay. So even if a transaction is labeled  
21 something else, it might require transmission service.

22 A. (Michael Linn) Some of the products in there  
23 might require transmission service.

24 Q. Okay. Now, your response states that JP01  
25 would not have been able to distinguish energy

1 transactions based on your review of their Exhibits  
2 JP01-02-AT02. Do you see that statement?

3 A. (Michael Linn) Yes.

4 Q. Okay. Is it your position that transactions  
5 other than energy are not legitimately included in a  
6 regression analysis of the impact of the BP-18 hourly  
7 rate increase?

8 A. (Michael Linn) I think it's our perspective  
9 that the testimony of JP01 seemed to say this was  
10 regarding energy transactions, and then the data they  
11 used was not in alignment with that.

12 Q. Well, that doesn't quite answer my question.  
13 Is it your position that transactions other than  
14 energy are not legitimately included in a regression  
15 analysis of the impacts of the BP-18 hourly rate  
16 increase?

17 A. (Michael Linn) It's my perspective that there  
18 probably are things other than energy included in that  
19 regression.

20 Q. Okay. And is there -- you're not saying that  
21 that wouldn't be legitimate to include those if they  
22 required transmission services, are you?

23 A. (Michael Linn) Well, portions of that might  
24 be on types of transmissions that aren't hourly; so  
25 it's unclear why that would be analyzed.

1       Q.   Okay.  What would be an example of not hourly  
2 for ancillary services?

3       A.   (Michael Linn)  I believe, like, the CAISO-reg  
4 products require long-term service or on Bonneville  
5 systems dynamic transfers require long-term service.  
6 I know that as a fact.

7       Q.   If you could turn to your Data Response 44.  
8 Now, your response provided actual Intertie revenues  
9 for Fiscal Years '14 through '18.  Did your report on  
10 Intertie data look at determinants of those revenues?

11               MR. PERKINS:  Yeah.  I would just note for  
12 the record the issues that Ms. Scruggs raised  
13 preliminarily.  This is one of the responses where  
14 there appears to be data that's missing or wasn't  
15 included with the response that Bonneville provided on  
16 the website.  I'm not sure if that was intentional or  
17 inadvertent.  But I'd just note for the record that it  
18 -- the response refers to an attachment and data  
19 that's not included.

20               HEARING OFFICER DENNISON-LEONARD:  Thank  
21 you, Mr. Perkins.

22 BY MR. REITER:

23       Q.   Can you answer the question?

24       A.   (Michael Linn)  Can you repeat the question?

25       Q.   Did your report on Intertie data look at

1 determinants of those revenues? that is the revenues  
2 for -- the revenues for Fiscal Years '14 through '18?

3 A. (Michael Linn) What do you mean by  
4 "determinants of"?

5 Q. The sources of those revenues.

6 A. (Michael Linn) The purpose of that report was  
7 to see if there were adverse consequences that  
8 basically JP01 described in previous rate periods. It  
9 wasn't an attempt to analyze the sources of revenue  
10 for the Southern Intertie to Bonneville.

11 Q. Did you analyze what caused the revenues to be  
12 what they were?

13 MR. PERKINS: Your Honor, just while the  
14 witnesses are conferring here, I would note that this  
15 request also -- and I didn't mention this the first  
16 time -- is noted for a different panel than this one.  
17 We've had some back and forth with JP01 about whether  
18 the questioning for the 19 panel would occur  
19 through --

20 MR. REITER: I'm sorry, Matt.

21 MR. PERKINS: That's okay. I just wanted  
22 to clarify if that's where we're going now which I --  
23 I think it's probably okay. I just want to clarify if  
24 that's --

25 MR. REITER: Yeah. That wasn't my intent.

1 MR. PERKINS: Okay.

2 MR. REITER: If they're able to answer and  
3 we can get through it, I won't ask it twice.

4 MR. PERKINS: Okay. I think that makes  
5 sense if the witnesses are able to answer because we  
6 think a lot of the testimony under the 19 panel may be  
7 able to be cleaned -- or cross-examination may be able  
8 to be cleaned up here. But we'll see if the witnesses  
9 can answer.

10 HEARING OFFICER DENNISON-LEONARD: Thank  
11 you.

12 MR. LINN: No. The report did not look at  
13 causes of revenue other than documenting the amount of  
14 reservations themselves which -- but I don't think  
15 that's what you mean by "cause."

16 BY MR. REITER:

17 Q. No. That's fine.

18 If you could turn to page 16 of your  
19 testimony. And in particular look at lines 24 to 26  
20 where you say that you decided not to conduct a  
21 regression analysis. In response to Data Request 83,  
22 if you could pull that out -- I'm sorry to make you  
23 flip back and forth on all of these.

24 You define a meaningful analysis as  
25 controlling for enough variables to isolate the effect

1 of the hourly rate on power prices. Do you see that?

2 **A. (Michael Linn) Yes.**

3 Q. And you also state that you did not have the  
4 data on generation outside of the BPA balancing area  
5 by fuel type that would have been necessary to conduct  
6 such a regression. Do you see that?

7 **A. (Michael Linn) Yes.**

8 Q. Why did you think that generation outside the  
9 Bonneville Balancing Authority by fuel type would be  
10 necessary to perform a meaningful analysis?

11 **A. (Michael Linn) Well, the Mid-C price reflects**  
12 **the supply and demand dynamics in the whole Pacific**  
13 **Northwest, not just Bonneville's Balancing Authority.**

14 Q. So your testimony and the data response said  
15 that you -- that this data was necessary to conduct a  
16 meaningful regression analysis. And you say that the  
17 data is only available on a monthly basis; right?

18 **A. (Michael Linn) That's -- that's also just one**  
19 **piece of missing data, describing issues with that**  
20 **missing data. The statement was made more generally**  
21 **with -- that there was lots of data that Bonneville**  
22 **doesn't have that it thinks could affect Mid-C prices**  
23 **that --**

24 Q. So when you say "doesn't have," are you saying  
25 doesn't presently have or couldn't obtain?

1       A.   (Michael Linn)   I -- I don't know how to  
2 obtain it.

3       Q.   Okay.   So is your position on regression  
4 analysis that, if the data on Proposition X is  
5 necessary but unavailable, that you can't conduct a  
6 meaningful regression analysis?

7       A.   (Michael Linn)   It seems it would be hard to  
8 make a meaningful causal relationship between the  
9 hourly rate in this context without having all the  
10 appropriate data.

11      Q.   If you could turn to page 19 of your -- of  
12 your testimony.   And I'm looking generally at lines  
13 15 -- or 5 to 17.   At line 5 you say that "Hourly  
14 service is widely available."   Do you see that  
15 reference?

16      A.   (Michael Linn)   Yes.

17      Q.   Why is that significant?

18      A.   (Michael Linn)   It's relevant in the context  
19 of people substituting between long-term transmission  
20 and hourly transmission.

21      Q.   Are you including resales of long-term firm  
22 transmission service on an hourly basis in the wide  
23 availability of hourly service?

24      A.   (Michael Linn)   This appears to be quoting the  
25 BP-18 ROD.   I would have to look at the specific

1 **reference.**

2 Q. I'm just asking in your general experience,  
3 not what the ROD says.

4 A. (Michael Linn) In my general experience, what  
5 was the question?

6 Q. You stated that the hourly services are widely  
7 available. Are you including in the wide availability  
8 of hourly service resales of long-term firm service on  
9 an hourly basis? Is that part of what makes it widely  
10 available?

11 MR. PERKINS: I do think, Your Honor, the  
12 witness answered initially this was a reference back  
13 to the BP-18 ROD. It kind of gets to some of the  
14 discussion we had before where there were specific  
15 findings in BP-18 about these issues. And really the  
16 answer here, I think, probably -- I do think the BP-18  
17 ROD is probably what is going to speak to this issue  
18 here.

19 I would note that the next statement in  
20 the testimony is that even JP01 has conceded at this  
21 point. So kind of in the interest of moving this  
22 along, I wonder what this line of questioning is to.

23 MR. REITER: I don't understand the  
24 objection. There's a statement in the testimony,  
25 "Hourly service is widely available." I asked him why



1 he thought that was significant. That's a declarative  
2 statement by the witness presumably based on his  
3 expertise. And I've asked him whether in saying it's  
4 widely available, are you including resales of  
5 long-term firm service on an hourly basis as part of  
6 what makes it widely available?

7 BY MR. REITER:

8 Q. Within your knowledge is that so?

9 A. **(Michael Linn) This general statement and the**  
10 **quote from the ROD is referring to original hourly**  
11 **service.**

12 Q. So it doesn't include. So you're saying it's  
13 widely available without considering other hourly  
14 services like resales.

15 A. **(Michael Linn) Yeah. This statement is made**  
16 **without reference to hourly resale markets.**

17 Q. In Part (d) of your data response, you say  
18 that "[Long-term firm customers] have the ability to  
19 post capacity for resale."

20 A. **(Michael Linn) Which data response?**

21 Q. This was -- I'm sorry. 80 -- 84 or -- yes,  
22 84. I apologize I didn't mention that.

23 Do you see that reference now? It's in  
24 Subpart (d) of your response.

25 A. **(Michael Linn) Yes.**

1       Q.   Okay.  When you say that the "LTF customers  
2 have the ability to post capacity for resale," does  
3 that mean that posting capacity is publicly available  
4 data?

5       A.   (Michael Linn)  If it's posted on OASIS,  
6 that's a public posting.

7       Q.   And do you know how many LTF customers  
8 actually post transmission capacity for resale?

9       A.   (Michael Linn)  Specific to that mechanism of  
10 reselling transmission?

11      Q.   Yeah.

12      A.   (Michael Linn)  No, I haven't looked.

13      Q.   Okay.  If we could go back to page 19 again of  
14 your testimony.  At line 9 you state that, "If there  
15 was unmet demand for hourly service, long-term  
16 firm...could resell [that] capacity to other  
17 customers..."  Do you see that reference?

18      A.   (Michael Linn)  Yes.

19      Q.   And the question to which you responded asked  
20 how BPA measures something.  Your response points to  
21 the -- page 155 of the BP ROD.  When I looked at that,  
22 I -- I found a statement that said the market for  
23 resales of long-term firm transmission service shows  
24 relatively little unmet demand for hourly service.  Do  
25 you recall a statement to that effect in the

1 ROD? something along those lines?

2 A. (Michael Linn) Where is this statement?

3 Q. I think you mentioned earlier that -- that the  
4 amount of resales in Fiscal '18, it was lower than it  
5 was in Fiscal '17. Is that your recollection?

6 A. (Michael Linn) Yes.

7 Q. Okay. So in your Data Response 86 -- can I  
8 ask you to flip to that for a second. If you could  
9 flip to 86. And you refer to -- you were asked about  
10 unmet demand for hourly service. And you said that  
11 Bonneville's not changed its position on that since --  
12 since the -- the BP ROD -- or 18 ROD.

13 Is it your position that the lack of  
14 resales -- or the reduced level of resales of hourly  
15 service reflects relatively little unmet demand for  
16 hourly service?

17 A. (Michael Linn) I think this is more generally  
18 referring to our agreement with, I guess at the time,  
19 JP03's perspective that, if there was unmet demand,  
20 you would see a price, and you would bid up close to  
21 the hourly rate. And that's not what we saw.

22 Q. Okay.

23 A. (Michael Linn) And this is what this is  
24 referring to.

25 Q. Okay. So is it possible that the lack of

1 resales as evidenced -- well, let me back up.

2           You mentioned the number of resales have  
3 gone down from the last time. I'm correct, am I not,  
4 that -- and it's your understanding that there's no  
5 requirement for long-term firm customers to resell  
6 their capacity, to post it.

7           **A. (Michael Linn) There's no requirement, but if**  
8 **they do not use that transmission, it's posted as**  
9 **nonfirm.**

10          Q. Okay. But they could use it -- I think you  
11 mentioned another way they can use it rather than  
12 reposting it as resales of hourly would simply be to  
13 buy the energy at Mid-C and then move it down the  
14 Southern Intertie using their long-term firm rights;  
15 right?

16          **A. (Michael Linn) So you're asking me if -- I'm**  
17 **sorry. Can you rephrase the question for me?**

18               MR. REITER: Could I ask the reporter to  
19 just read it back.

20               (Page 84, line 10 through page 84, line 15  
21 was read as requested.)

22               MR. LINN: So the -- the long-term  
23 customer can schedule energy over the -- their  
24 transmission however they -- any way they want whether  
25 the source is that they're generating or at Mid-C.

1 BY MR. REITER:

2 Q. If I could ask you to look at Data Response  
3 87. Your response indicates that you had difficulty  
4 in distinguishing between hourly and day-ahead  
5 transactions. Did you ask in discovery how JP01 made  
6 this distinction?

7 A. (Michael Linn) I think we did. If we didn't  
8 ask in a data response, we asked in clarification  
9 whether you used the hourly flag, the increment name,  
10 to distinguish those transactions.

11 Q. So you say that you asked during the  
12 clarification session. Did you get an answer to that  
13 question?

14 A. (Michael Linn) I -- I would have to look, but  
15 I believe there might even be a data request that  
16 asked if they -- if you specified hourly transactions  
17 through the increment flag in the EQR data.

18 Q. If you could turn to Data Request 88. And  
19 looking at the last sentence of your response, you're  
20 referring to negative and positive price spreads. Do  
21 you see that reference?

22 A. (Michael Linn) Yes.

23 Q. Okay. Isn't it correct that JP01 did not use  
24 price spreads as a way of measuring prices at each hub  
25 from the EQR data?

1           A.   (Michael Linn)   I -- my understanding is that  
2   JP01 counted the number of transactions that occurred  
3   when there was a negative price spread.

4           Q.   That's not my question.

5           A.   (Michael Linn)   Sorry.   What was the question?

6           Q.   Did they use price spreads as a way of  
7   measuring prices at each hub for the EQR data?

8                   MR. PERKINS:   Is there a portion of BPA's  
9   testimony that addresses this?   I think it's hard if  
10   -- if Mr. Linn's testified to that, it's one thing,  
11   but the data response doesn't seem to address that  
12   issue.

13                   MR. REITER:   The data response -- there's  
14   no objection in the data response which refers back to  
15   BP-20 -- BP-22, page 20, line 8.   So there was no  
16   objection to that.

17                   So can the witness just answer the  
18   question?

19                   MR. LINN:   Can you please read back the  
20   question.

21                   (Page 85, line 23 through page 85, line 25  
22   was read as requested.)

23                   MR. LINN:   I don't know.   This -- this  
24   section is about percentage of transactions with a  
25   negative price spread.   I don't think I made a comment

1 on measuring prices as a price spread.

2 BY MR. REITER:

3 Q. Okay. Isn't it correct that using a weighted  
4 average of all prices reported in dollars per megawatt  
5 hours does not bias the estimated coefficient on the  
6 BP-18 rate increase?

7 MR. PERKINS: Your Honor, I would just  
8 object to that question. I guess there's not specific  
9 mathematics involved. It's a complicated question.  
10 But witnesses aren't required to do calculations on  
11 the stand. I'm not sure that the general testimony  
12 about that is going to be very useful for the record.

13 HEARING OFFICER DENNISON-LEONARD:  
14 Mr. Reiter?

15 MR. REITER: It's not a calculation, Your  
16 Honor. It was asking him, you know, about his  
17 expectation, and he's an expert on regression  
18 analysis.

19 BY MR. REITER:

20 Q. So isn't it correct -- my question is: Isn't  
21 it correct that using a weighted average of all prices  
22 reported in dollar per megawatt hour does not bias the  
23 estimated coefficient on the BP-18 rate increase?

24 MR. PERKINS: Again, objection, Your  
25 Honor. Mr. Linn's testified about JP01's regression

1 analysis, but he hasn't testified about regression  
2 analysis in general. He has to provide context for  
3 the testimony.

4 MR. REITER: But, Your Honor, if he's  
5 testifying about criticisms of the regression  
6 analysis, he can be asked questions about his  
7 understanding of that process. I don't understand the  
8 objection.

9 HEARING OFFICER DENNISON-LEONARD: Can you  
10 cite to testimony that this question relates to?

11 MR. REITER: Yes, Your Honor. It's the  
12 same one I mentioned before. This was page 20, lines  
13 8 to 10 of Exhibit BPA-22 where the data response that  
14 we're discussing was not objected to, Your Honor.  
15 That's what I'm talking about.

16 MR. PERKINS: I would just point out that  
17 his testimony on lines 8 to 10 of page 20 is talking  
18 about EQR data.

19 HEARING OFFICER DENNISON-LEONARD:  
20 Sustained.

21 BY MR. REITER:

22 Q. If you could turn to Data Request 91. Let me  
23 know when you have it in front of you.

24 A. **(Michael Linn) I have it in front of me.**

25 Q. Okay. In the table provided in your



1 response -- do you see that table below?

2 **A. (Michael Linn) Yes.**

3 Q. Do you see the 340,196 megawatt hours in the  
4 third row, last column?

5 **A. (Michael Linn) Yes.**

6 Q. Okay. Is the 340,196 megawatt hours of  
7 scheduled original NF hourly PTP into the CAISO one of  
8 the seams issues that we've been discussing over the  
9 last couple of years?

10 **A. (Michael Linn) I don't -- this schedule of**  
11 **nonfirm transmission into the CAISO isn't the seams**  
12 **issue. The seams issue is how the CAISO makes -- how**  
13 **the CAISO accepts awards and holds out inventory.**

14 Q. Yeah. I'm really trying to get into how big  
15 the seams issue is. Did all of the 340,000 megawatts  
16 in Fiscal Year '18 that you reference get in front of  
17 or interfere with the use of long-term firm rights?  
18 Do you know?

19 MR. PERKINS: Objection, Your Honor.  
20 These issues of the seams issues and Bonneville's  
21 mechanism to address them are questions that were  
22 addressed in BP-18 and outside of the scope of the  
23 proposal in BP-20.

24 MR. REITER: Your Honor, they're not  
25 outside the scope of the proposal. The proposal has

1 to justify the rates. One of their -- one of their  
2 arguments was that the seams issues were causing  
3 people -- were increasing the risk that services would  
4 not be renewed -- long-term firm services would not be  
5 renewed; so those circumstances exist today. You  
6 know, can they justify their rate proposal on the  
7 basis of the magnitude of the seams issues that  
8 prompted the problem in the first place?

9 MR. PERKINS: I would say that's  
10 incorrect, You Honor. Our proposal in BP-20 to adopt  
11 the transmission rates and the settlement is not based  
12 on the seams issues. Those were issues that were  
13 raised in BP-18 and addressed in BP-18.

14 MR. REITER: Okay. So can I take that  
15 representation of counsel that your rates are not  
16 based on addressing any seams issues? We can take  
17 that as a declaration that we can rely on as evidence  
18 in this case?

19 MR. PERKINS: I'm not here to be  
20 questioned.

21 MR. REITER: Well, you're here to make  
22 standing objections -- speaking objections, I guess.

23 Your Honor, I had a question outstanding.

24 HEARING OFFICER DENNISON-LEONARD: So this  
25 is in -- with reference to the page 20, lines 17 to 18

1 in the testimony?

2 MR. REITER: And the data requests related  
3 to that. This is a follow-up on the data --

4 HEARING OFFICER DENNISON-LEONARD: So your  
5 question about the number of hours in the table in the  
6 data response is?

7 MR. REITER: Yes. Okay.

8 BY MR. REITER:

9 Q. Did all the 340,000 megawatts you list in this  
10 chart in Fiscal '18 interfere with the use of LTF  
11 rights?

12 I don't know if you could pick that up. I  
13 had the microphone off.

14 HEARING OFFICER DENNISON-LEONARD: Yeah.  
15 I'm going to sustain the objection. That's outside  
16 the scope of both the data request and the testimony.

17 BY MR. REITER:

18 Q. If I could ask you to turn to your Data  
19 Request 92 -- or Data Response 92. You have that in  
20 front of you?

21 A. (Michael Linn) Yes.

22 Q. Okay. In your response you say that you found  
23 a 1.17 million megawatt hours out of 19.9 million  
24 megawatt hours were labeled ICE as the exchange  
25 brokerage service. Do you see that reference?

1           A.    (Michael Linn)   Yes.

2           Q.    Is it your position that an energy transaction  
3 reported on an EQR that used a brokerage service  
4 disqualifies that transaction from the pool of EQR  
5 price data for the purpose of a regression analysis?

6           A.    (Michael Linn)   It's my position that, if  
7 you're not actually -- it's my position that the data  
8 defined by JP01 isn't what they -- what they actually  
9 use is not what they represented in the testimony.

10          Q.    Do you know if excluding the 1.17 million  
11 megawatt hours would have changed any conclusions?

12          A.    (Michael Linn)   I didn't analyze the  
13 difference.    The purpose of this point of the  
14 testimony was simply to say that JP01 said they only  
15 looked at hourly transactions in a subset of their  
16 regression, and the data clearly shows that their data  
17 source blends these hourly and daily markets.

18          Q.    If I could ask you to turn to your Data  
19 Response 135, and this relates back to your testimony  
20 at page 29, lines 19 to 21.

21                   HEARING OFFICER DENNISON-LEONARD:   Can you  
22 speak up, please.

23                   MR. REITER:    I'm sorry, Your Honor.

24                   I've asked the witness to turn to Exhibit  
25 135 -- or not exhibit, Data Response 135 which relates

1 back to page 29 of their testimony at lines 19 to 21.

2 BY MR. REITER:

3 Q. You say in your response to the data request  
4 that you don't understand what sufficiently inelastic  
5 means. Do you see that reference?

6 A. (Michael Linn) Correct.

7 Q. What is your understanding of the concept of  
8 elasticity of demand?

9 A. (Michael Linn) Elasticity of demand is the  
10 percent change in demand given a percent change in  
11 price.

12 Q. Okay. So let's take an extreme example.  
13 Assume that the demand for spot market energy at Mid-C  
14 is perfectly inelastic. Do you have that assumption  
15 in mind?

16 A. (Michael Linn) Yes.

17 Q. Okay. If the supply function shifts up or  
18 down, there would be no change in the equilibrium  
19 quantity traded in those markets; isn't that right?

20 MR. PERKINS: Objection, Your Honor. The  
21 data response here responds to a question where JP01  
22 has used "sufficiently inelastic," but Bonneville has  
23 not testified to the elasticity of demand.

24 MR. REITER: Their response is to our  
25 claim, and we're testing their response, Your Honor.

1                   HEARING OFFICER DENNISON-LEONARD: Could  
2 the court reporter please read back the question.

3                   MR. PERKINS: I would just point out,  
4 while we're waiting for that, that the response points  
5 out that we don't understand what they -- Bonneville  
6 does not understand what is meant by "sufficiently  
7 inelastic."

8                   HEARING OFFICER DENNISON-LEONARD:  
9 Understood.

10 BY MR. REITER:

11           Q. Do you recall the question?

12           **A. (Michael Linn) No. I need to hear it one**  
13 **more time.**

14                   MR. REITER: Could I ask the reporter to  
15 read it back.

16                   THE COURT REPORTER: It's kind of a mess.  
17 I'm sorry. I'm struggling with reading this one back.  
18 I am sorry.

19                   MR. REITER: If you don't mind, I could  
20 just restate it. That would be easier.

21                   HEARING OFFICER DENNISON-LEONARD: Thank  
22 you.

23 BY MR. REITER:

24           Q. So I had already asked you, you know, if you  
25 could assume that the demand for spot market energy at

1 Mid-C is perfectly inelastic, and you said okay. You  
2 had the assumption in mind.

3 A. (Michael Linn) I understand the "perfectly  
4 inelastic" part. Demand for spot market energy at  
5 Mid-C is -- I think I could use some clarification  
6 what you mean by that.

7 Q. Traded in day-ahead or real time markets.

8 A. (Michael Linn) So energy volumes of  
9 transactions?

10 Q. Yeah. The total amount of kilowatt hours that  
11 would be sold.

12 A. (Michael Linn) Sold. Okay.

13 Q. Okay. So if the -- if the demand for spot  
14 market emergency that is day-ahead or real time in  
15 Mid-C is perfectly inelastic, if the supply function  
16 shifts up or down, there won't be any change in the  
17 equilibrium quantity traded in those markets; isn't  
18 that right?

19 A. (Michael Linn) This hypothetical has a lot of  
20 moving pieces to it, I think. So you said -- by  
21 "demand" you're referring to trading volume which I  
22 don't know why that would move up and down the supply  
23 curve like --

24 Q. If you have -- let me make it simpler. You  
25 have inelastic demand for a product or a service. If

1 the supply curve shifts to the right or to the left,  
2 the quantity purchased is not going to change --  
3 right? -- if you have an inelastic demand.

4 MR. PERKINS: Again, I would just object,  
5 Your Honor. I think this goes pretty far beyond the  
6 testimony.

7 MR. REITER: We'd be going a lot faster if  
8 we just let him answer the question.

9 MR. PERKINS: We haven't testified to  
10 inelasticity. That was in response to a data request  
11 from JP01, and now he's being asked to opine on  
12 something that's in the response to the data request.  
13 So he didn't understand what you meant by  
14 "sufficiently inelastic" in the request; so I'm not  
15 sure what the benefit of this testimony is going to  
16 be.

17 HEARING OFFICER DENNISON-LEONARD:  
18 Mr. Reiter?

19 MR. REITER: Their testimony in multiple  
20 places refers to the absence of quantity impacts. I  
21 mean, their experts here are testifying about economic  
22 theory. I've already asked a bunch of questions about  
23 their understanding of elasticity. This is just one  
24 last question on that. It's pretty straightforward.

25 They presented these witnesses as experts;



1 so I think I'm entitled to probe their understanding  
2 of the concepts that they discuss.

3 MR. PERKINS: I think the witnesses have  
4 testified to the analysis that JP01 has performed for  
5 purposes of this proceeding, but they haven't  
6 testified to economic theory in general.

7 MR. REITER: That's not correct, Your  
8 Honor. They testified about the absence of a quantity  
9 impact; so they have testified about economic theory.  
10 And they've said it in multiple places in their  
11 testimony.

12 HEARING OFFICER DENNISON-LEONARD: So  
13 we're talking about lines 19 to 21 where the witnesses  
14 state that power exports from the Pacific Northwest to  
15 California did not fall. There was no corresponding  
16 increase in power supplied and no reduction in prices.  
17 So their testimony -- your data request refers to that  
18 testimony, and then in Bonneville's response, they're  
19 stating that they don't understand your term.

20 MR. REITER: Yes.

21 HEARING OFFICER DENNISON-LEONARD: So the  
22 question is for you related to that data response.

23 MR. REITER: Your Honor, let's just talk  
24 about the testimony. I have a very simple question  
25 about elasticity of demand. They've already described

1 what it means.

2 BY MR. REITER:

3 Q. So my follow-up question is: If you have an  
4 inelastic demand for a product or service, if the  
5 supply curve moves to the right or the left, that  
6 won't change the quantity of service purchased; is  
7 that right?

8 A. (Michael Linn) So we're mixing -- if the  
9 supply curve is moving and it's because of the hourly  
10 rate, it's because exports had to have dropped. What  
11 other things are moving the supply curve in this  
12 example?

13 Q. I'm just talking in general about an inelastic  
14 demand for a product or service. If the demand for  
15 the product or service is inelastic -- do you have  
16 that assumption in mind?

17 A. (Michael Linn) Yes.

18 Q. Okay. So if the supply curve changes one way  
19 or the other, if the supply -- if the demand is  
20 inelastic, the amount of purchase won't change; isn't  
21 that right?

22 MR. PERKINS: Again, I'd just renew the  
23 objection. The witness has not testified in general  
24 about elasticity of demand. They responded to JP01's  
25 analysis, and this question is far beyond the scope of

1 the statement of the testimony or the data request.

2 HEARING OFFICER DENNISON-LEONARD:

3 Sustained.

4 MR. REITER: Your Honor, if I could --  
5 their testimony directly discusses economic theory.  
6 At page -- line 19 they say, "Since power exports from  
7 the Pacific Northwest to California did not fall,  
8 there was no corresponding increase in power supplies  
9 at Mid-C...." That's based on economic theory, I  
10 assume.

11 HEARING OFFICER DENNISON-LEONARD: So you  
12 need to ask your question in a way that's within the  
13 scope of what they testified.

14 MR. REITER: Okay. All right.

15 BY MR. REITER:

16 Q. So when you say that exports did not fall,  
17 there was no corresponding increase in power supplies  
18 at Mid-C, you were applying economic theory, were you  
19 not?

20 A. (Michael Linn) Yes.

21 Q. Okay. And your understanding of economic  
22 theory included an understanding of elasticity of  
23 demand, did it not?

24 A. (Michael Linn) I mean, this statement wasn't  
25 made -- I wasn't thinking about elasticity of demand

1   **when I made this statement.**

2           Q.    I wasn't asking what you were thinking about.  
3   You have an understanding of elasticity of demand;  
4   right?

5           **A.    (Michael Linn)   In general, yes.**

6           Q.    Okay.   So I'll pose my question again.   If you  
7   have a demand that is completely inelastic, perfectly  
8   inelastic, and if the supply curve changes one way or  
9   the other, the amount of quantity purchased won't  
10   change; isn't that true?

11                   MR. PERKINS:   Your Honor, I believe this  
12   is -- I believe that's the question you just ruled on.

13                   HEARING OFFICER DENNISON-LEONARD:   I  
14   sustained the objection.

15                   MR. REITER:   All right.   I have no further  
16   questions for these witnesses.

17                   HEARING OFFICER DENNISON-LEONARD:   All  
18   right.   Let's take a five-minute break before we bring  
19   the next panel.

20                           (Brief recess taken at 11:18 AM.   Resume  
21                           at 11:23 AM.)

22                   HEARING OFFICER DENNISON-LEONARD:   All  
23   right.   Let's go back on the record.

24                   Mr. Reiter, I would like you to think  
25   about how you're going to budget your time.   Maybe

1 over lunch you can consider what to do in terms of the  
2 time constraints that we're looking at.

3 MR. REITER: Yes, I understand, Your  
4 Honor.

5 HEARING OFFICER DENNISON-LEONARD: Thank  
6 you.

7 And we will break for lunch around noon.  
8 Whether the cross-examination of this panel is  
9 complete or not, we'll take a break right around noon.

10 So let's swear in this panel.

11 (Panel sworn.)

12 HEARING OFFICER DENNISON-LEONARD:  
13 Mr. Perkins, would you like to introduce the panel.

14 MR. PERKINS: Yes. Thank you, Your Honor.

15 This is Bonneville's panel about direct  
16 testimony entitled "Power and Rate Transmission  
17 Policy." It was No. BP-20-E-BPA-19.

18 If the witnesses could please state your  
19 name for the record.

20 MR. SWEET: Jason Sweet.

21 MR. FISHER: Daniel Fisher.

22 MS. FREDRICKSON: Rebecca Fredrickson.

23 MR. PERKINS: And your qualifications  
24 statements appear at BP-20-Q-BPA-10, -08 and -37?

25 MR. SWEET: Yes.

1 MR. FISHER: Yes.

2 MS. FREDRICKSON: Yes.

3 MR. PERKINS: And did you co-sponsor the  
4 direct testimony in BP-20-E-BPA-19 along with the  
5 attachments and the errata to that testimony in -E01?

6 MR. SWEET: Yes.

7 MR. FISHER: Yes.

8 MS. FREDRICKSON: Yes.

9 MR. PERKINS: And aside from the errata  
10 corrections filed previously, do you have any other  
11 corrections to your testimony at this time?

12 MR. SWEET: No.

13 MR. FISHER: No.

14 MS. FREDRICKSON: No.

15 MR. PERKINS: And is your testimony true  
16 and correct to the best of your knowledge and belief?

17 MR. SWEET: Yes.

18 MR. FISHER: Yes.

19 MR. FREDRICKSON: Yes.

20 MR. PERKINS: Mr. Reiter, the panel is  
21 available for cross-exam.

22 MR. REITER: Thank you.

23 CROSS-EXAMINATION

24 BY MR. REITER:

25 Q. Good morning.

1 HEARING OFFICER DENNISON-LEONARD: Is your  
2 microphone on, sir?

3 MR. REITER: Oh, I keep forgetting. I  
4 apologize.

5 BY MR. REITER:

6 Q. Ms. Fredrickson was on the earlier panel, but  
7 I don't know if the other two of you were in the room  
8 where I described the three different binders.

9 Is that affirmative so I don't have to  
10 explain that again?

11 A. (Jason Sweet) Yes.

12 Q. Okay. If you could turn to page 2 of your  
13 testimony. And I'm looking at line 13 in particular.  
14 Let me know when you're there.

15 Do you have that?

16 So you say that the purpose of your  
17 testimony is to address rate making and policy issues  
18 that affect transmission and power services. And then  
19 you go on to say as part of that purpose you're  
20 providing an overview of the rate settlement  
21 agreement.

22 So what are the policy and rate-making  
23 issues that are addressed by the settlement with  
24 respect to the rates for hourly service on the  
25 Southern Intertie?

1           **A. (Rebecca Fredrickson) There are none.**

2           Q. Okay. I want to ask you a little bit about  
3 your understanding of the settlement agreement which  
4 you describe in a response to the question on line 17.  
5 You have a copy of the settlement agreement; right? I  
6 think it's attached to your testimony.

7           **A. (Rebecca Fredrickson) Are you referring to**  
8 **the BP --**

9           Q. The rate settlement.

10          **A. (Rebecca Fredrickson) Yeah. Yes.**

11          Q. So if I could ask you to look at paragraph  
12 7(b). I think it's on page 2 of 5 of your attachment  
13 A-2.

14                       Do you have that in front of you?

15          **A. (Mr. Fisher) Yeah. Is it the one that starts**  
16 **"The Parties agree to waive their rights"?**

17          Q. Yes. Yeah.

18                       Now, I want to ask you your understanding  
19 of that provision. The settlement says that the  
20 signatories can't submit data requests or  
21 cross-examine -- or conduct cross-examination except  
22 to respond to someone opposing the settlement.

23                       Now, supposing the party who signed the  
24 settlement changed its mind about whether the  
25 settlement was a good idea or not. Is it your



1 understanding -- I'm not asking for a legal  
2 conclusion, but is it your understanding that such a  
3 party could not turn around and file testimony  
4 opposing the settlement under the terms of the  
5 agreement?

6 MR. PERKINS: Your Honor, objection. I  
7 guess I don't understand how that wouldn't call for a  
8 legal conclusion. I'm not sure how speculating in  
9 response to a hypothetical about what might have  
10 happened is really going to add to the record in this.

11 MR. REITER: I'm asking their  
12 understanding. In fact, I think, if it wasn't  
13 Mr. Perkins, it may have been one other counsel, who  
14 responded to some other motion to strike pointing out  
15 that under Bonneville's rules witnesses often do, and  
16 they did in this case, offer explanations of their  
17 understanding without testifying as to law.

18 So this -- their whole testimony where  
19 they're asked to describe the settlement involves an  
20 understanding of what the terms mean.

21 HEARING OFFICER DENNISON-LEONARD: Can you  
22 point to the testimony where they address this  
23 subject?

24 MR. REITER: Yes, Your Honor. That's the  
25 whole "please describe the proposed settlement." So

1 their answer is describing the settlement. And I'm  
2 asking them specifically about one provision which is  
3 attached to their testimony as an exhibit. So I'm  
4 asking about the exhibit -- page 2 of 5 of the exhibit  
5 and their understanding of that term which they've  
6 attached to their testimony. So I assume that they're  
7 testifying about it.

8 MR. PERKINS: Your Honor, the witnesses  
9 have testified to the proposed rates in the  
10 settlement, but they have not testified to any  
11 particular provision of the proposed settlement or the  
12 operation of that provision.

13 HEARING OFFICER DENNISON-LEONARD: So,  
14 Mr. Reiter, can you point to where in their testimony  
15 they discuss the terms -- the term you're asking them  
16 to interpret?

17 MR. REITER: They don't specifically  
18 reference that, but they attach it as an exhibit, Your  
19 Honor. I think I can ask them about exhibits to their  
20 testimony. Isn't that normal?

21 HEARING OFFICER DENNISON-LEONARD: Except  
22 you were asking them to interpret a legal term.

23 MR. REITER: No, Your Honor. I'm asking  
24 what their understanding is. And the Bonneville rules  
25 specifically say that you can ask a witness their

1 understanding. It's not asking for a legal  
2 conclusion. That we can all argue on briefs.

3 I'm trying to get -- they're testifying  
4 that this settlement is justification for approving  
5 the rates. That's their testimony. That's the  
6 essence of their testimony. So I'm asking about how  
7 that settlement operates, how they understand it to  
8 operate.

9 MR. PERKINS: I would just point out there  
10 are no provisions -- is no provision in the Bonneville  
11 rules that says you can ask witnesses about their  
12 understanding of the law. There's a provision that  
13 asks -- requires witnesses to state their testimony is  
14 based on their understanding.

15 MR. REITER: So a witness can testify  
16 about their understanding, but you can't ask them  
17 about their understanding. That's --

18 HEARING OFFICER DENNISON-LEONARD:  
19 Mr. Reiter, the witnesses didn't testify to their  
20 understanding of the provision you're asking. If you  
21 want to ask them about what they testified in their  
22 testimony --

23 MR. REITER: But, Your Honor, they  
24 attach --

25 HEARING OFFICER DENNISON-LEONARD: I

1 understand that.

2 Sustained.

3 BY MR. REITER:

4 Q. If you could turn to your Data Response 73.  
5 And in your response you talk about Bonneville's  
6 finding "...that non-rate alternatives would have the  
7 effect of making hourly service unavailable at any  
8 price, which would have [been] a more negative impact  
9 than [Bonneville's] decision to increase the rate."

10 Do you see that reference in your -- in  
11 your data response?

12 A. (Rebecca Fredrickson) Yes.

13 Q. And then you say, "Given this finding and  
14 [Bonneville's] monitoring of the information...in  
15 response to JP01-BPA-28-6, BPA Staff has no plans to  
16 take 'non-rates action' in [Fiscal '19]."

17 Hasn't the circumstance that you  
18 referenced changed under the settlement?

19 Let me be more specific. Doesn't the  
20 tariff -- I mean, under settlements that -- let me  
21 back up.

22 Hasn't that circumstance changed in that,  
23 under the tariff condition settlement, Bonneville will  
24 begin limiting hourly firm products beginning July 1  
25 of this year, and that beginning in 2020 firm hourly

1 service will not be available in real time?

2 MR. PERKINS: Objection, Your Honor. I  
3 would say two grounds. That question is outside the  
4 scope of the proceeding.

5 First, the terms and conditions of  
6 transmission service are explicitly excluded from the  
7 scope of the proceeding under the Federal Register  
8 Notice for BP-20.

9 Aside from that, as the objection to the  
10 data request notes, it's outside the scope of the  
11 proceedings because non-rates alternatives are not  
12 within the scope of BP-20 which addresses rates.

13 MR. REITER: Your Honor, if I could  
14 briefly address that. I know that Mr. Perkins made  
15 that objection as a predicate to virtually half of the  
16 data responses they provided but saying we're going to  
17 answer anyway. And they say, well, if we didn't  
18 testify about it, it's not an issue in the proceeding.

19 Your Honor, this proceeding is about  
20 Bonneville's hourly rates and whether they satisfy the  
21 standards of the Northwest Power Act. And that  
22 includes whether there's substantial evidence to  
23 support those rates or whether the rates are  
24 arbitrary, whether the rates are the lowest possible  
25 consistent with sound business principles. And that

1 would include consideration of non-rate alternatives  
2 and would include consideration of whether the  
3 proposition on which they rested previously still is  
4 in effect. Does the settlement address that?

5 HEARING OFFICER DENNISON-LEONARD: Can you  
6 cite the testimony where these witnesses discuss  
7 non-rate alternatives?

8 MR. PERKINS: And I would just add --

9 MR. REITER: My point, Your Honor, is that  
10 they didn't. All they said was there was a settlement  
11 and lots of people liked it; so that's good enough.

12 And I think I'm entitled to probe whether  
13 that's good enough under that statute, the issues in  
14 this proceeding are broad enough. That's their  
15 argument. That's their testimony, and I think we're  
16 entitled to probe it.

17 Is the -- are the conditions that justify  
18 the rate increase in the last case still existent?

19 HEARING OFFICER DENNISON-LEONARD: Except  
20 that the cross-examination rules say that it was  
21 limited to issues relevant to the prefiled testimony  
22 and exhibits; so --

23 MR. REITER: Yes, Your Honor, and it is.  
24 Their testimony says that this settlement itself is  
25 good enough evidence that the rates are reasonable.

1 And we're entitled to probe that on cross-examination.

2 MR. PERKINS: Your Honor, I would just  
3 add, in the context of the disputes about the Southern  
4 Intertie in BP-18, which, again, is outside of scope  
5 of this proceeding --

6 HEARING OFFICER DENNISON-LEONARD:  
7 Microphone.

8 MR. PERKINS: I would just add in the  
9 context of the dispute about the hourly rate in BP-18  
10 which, again, is outside the scope of this proceeding.  
11 The administrator specifically found in the BP-18 ROD  
12 that non-rates alternatives were outside of the scope  
13 of the rates proceeding.

14 HEARING OFFICER DENNISON-LEONARD:  
15 Sustained.

16 MR. REITER: Your Honor, is it your ruling  
17 that I'm not entitled to ask any question that doesn't  
18 specifically refer to some words in the testimony of  
19 the witness even if it relates to the general subject  
20 matter?

21 HEARING OFFICER DENNISON-LEONARD: No,  
22 that's not my ruling. My ruling is that question  
23 about non-rates alternatives is outside the scope of  
24 this panel's testimony.

25 MR. REITER: Okay. Well, Your Honor, I'm

1 not asking specifically non-rates alternatives. I'm  
2 asking about their reason for rejecting -- or deciding  
3 not to take non-rates action in Fiscal '19 which is in  
4 their data response, the rationale for the rate  
5 increase in the last case.

6 And I'm probing whether it's still valid  
7 today is that -- the commission had said in the last  
8 case, well, you know, you would rather have hourly  
9 service at a high rate than not at all.

10 So what I want to ask about is, isn't it  
11 true that under the settlement that the -- the other  
12 settlement that's been approved, you can't get hourly  
13 service in real time anymore starting January 1? And  
14 doesn't that affect whether your reason for raising  
15 the rates is still necessary?

16 HEARING OFFICER DENNISON-LEONARD: So what  
17 I see in the data response is that Bonneville states  
18 that it's monitoring information and they have no  
19 plans to make non-rates action. The BP -- TC-20 terms  
20 are outside the scope explicitly.

21 MR. REITER: I'm not litigating the TC-20  
22 terms or challenging them. I'm saying those are  
23 facts that -- the fact is under that settlement, which  
24 is uncontested and has been approved, that hourly  
25 service will no longer be available in real time.



1 Does that affect their decision whether the settlement  
2 rates -- whether the increase in the hourly rate is  
3 still necessary?

4 HEARING OFFICER DENNISON-LEONARD:  
5 Mr. Perkins?

6 MR. PERKINS: There's a lot there. I  
7 would just say I don't even think that accurately  
8 portrays the TC-20 settlement which, again, is outside  
9 the scope of this proceeding.

10 MR. REITER: Are you contesting that the  
11 BP-20 settlement doesn't say that hourly service in  
12 real time will no longer be available after January 1,  
13 2020?

14 MR. PERKINS: Again, I'm not here to  
15 answer the questions today.

16 MR. REITER: But you just made an  
17 allegation.

18 Your Honor, I think I'm entitled to know  
19 whether he thinks that allegation is correct or not.  
20 He's using that as grounds to --

21 HEARING OFFICER DENNISON-LEONARD: So  
22 let's get back to questions. And if you have a  
23 question related to the testimony of these witnesses  
24 in terms of -- in the answer to the data request which  
25 was prefaced with an objection said, based on the

1 monitoring, the staff had no plan to take non-rates  
2 action. If you have questions on that --

3 MR. REITER: Yes, Your Honor. And I --  
4 and they pointed out that what they found was after  
5 the judge -- after the administrator issued his  
6 decision, he said that -- that hourly customers would  
7 rather take service at the higher rate than not  
8 have -- have it available -- available at all.

9 And so I'm asking, isn't it true that  
10 hourly customers seeking service in real time won't  
11 have it available at all starting January 20 --  
12 January 1, 2020?

13 HEARING OFFICER DENNISON-LEONARD: So I'm  
14 ruling that that's outside the scope of this -- this  
15 panel's testimony.

16 MR. REITER: Okay. Bear with me, Your  
17 Honor, just a moment. I'm trying to shorten this up.

18 HEARING OFFICER DENNISON-LEONARD:  
19 Absolutely.

20 MR. REITER: Well, the extra time was  
21 worth it, Your Honor. I have no further questions of  
22 this panel.

23 HEARING OFFICER DENNISON-LEONARD: Thank  
24 you.

25 This panel is excused.

1 I think that it's -- even though we did  
2 finish a little before noon, rather than begin the  
3 next one -- you had requested 60 minutes for the next  
4 panel, I believe. I think it makes sense for us to  
5 break for lunch and then come back if we can return at  
6 12:45.

7 Is an hour sufficient time for folks?

8 Okay. We will resume at 12:45.

9 We're off the record.

10 (Recess taken at 11:41 AM. Resume at  
11 12:48 PM.)

12 HEARING OFFICER DENNISON-LEONARD: All  
13 right. Let's bring up the next panel. We are on the  
14 record.

15 MR. OLIVE: The plan was -- two of the  
16 witnesses on this panel are also on the next panel; so  
17 if it works for Mr. Reiter and JP01, we'll just  
18 introduce them and qualify both panels simultaneously.

19 MR. REITER: Sure, yeah.

20 MR. OLIVE: Okay. So that will be panel  
21 25 and 13, and I'll qualify them one after the other.

22 HEARING OFFICER DENNISON-LEONARD: Thank  
23 you.

24 Let's go ahead -- and before I swear in  
25 the witnesses, let's just -- just a reminder we all

1 should continue to do our best to speak slowly and  
2 clearly and make it easy for the court reporter to  
3 understand us. I think, if you have name cards, then  
4 -- and she can see them, I don't think it's necessary  
5 for you to spell your last name when you introduce  
6 yourself.

7 All right. Is the panel ready?

8 MR. LINN: Yes.

9 (Panel sworn.)

10 HEARING OFFICER DENNISON-LEONARD: All  
11 right. Mr. Olive, if you would like to introduce the  
12 panel.

13 MR. OLIVE: Thank you.

14 So good afternoon. My name is Courtney  
15 Olive representing Bonneville Power Administration.  
16 The first panel that I will qualify, this is the panel  
17 that filed rebuttal titled, quote, "Southern Intertie  
18 Hourly Rate: Response to Economic Analysis of Joint  
19 Party 1" and numbered BP-20-E-BPA-25.

20 Will the three of you please state your  
21 names for the record.

22 MR. LINN: Michael Linn.

23 MR. GRAESSLEY: Eric Graessley,  
24 G-r-a-e-s-s-l-e-y.

25 MR. VANDEN BOS: James Vanden Bos,

1 V-a-n-d-e-n, space, capital, B-o-s.

2 MR. OLIVE: Thank you. And based on the  
3 order of witness names stated in your direct  
4 testimony, do your qualification statements appear at  
5 BP-20-Q-BPA-13 and -24 and -20 -- excuse me, -39  
6 respectively?

7 MR. GRAESSLEY: Yes, sir.

8 MR. LINN: Yes.

9 MR. VANDEN BOS: Yes.

10 MR. OLIVE: Thank you.

11 And did you co-sponsor the rebuttal  
12 testimony in BP-20-E-BPA-25 along with the  
13 attachments, BP-20-E-BPA-25-AT01 and -AT02?

14 MR. LINN: Yes.

15 MR. GRAESSLEY: Yes.

16 MR. VANDEN BOS: Yes.

17 MR. OLIVE: Thank you.

18 Now, this is with regard to just Panel 13.

19 Mr. Graessley and Mr. Vanden Bos, did you  
20 co-sponsor the direct testimony titled, quote, "Market  
21 Price and Natural Gas Price Forecasts" in  
22 BP-20-E-BPA-13 along with the errata  
23 BP-20-E-BPA-13-E01 and -E02 and the power market price  
24 study and documentation at BP-20-E-BPA-04 along with  
25 the errata BP-20-E-BPA-04-E01?

1 MR. GRAESSLEY: Yes.

2 MR. VANDEN BOS: Yes.

3 MR. OLIVE: Thank you for bearing with me  
4 on those many dashes.

5 Aside from the errata corrections filed  
6 previously, do you have any corrections to your  
7 testimony at this time?

8 MR. GRAESSLEY: No.

9 MR. VANDEN BOS: No.

10 MR. OLIVE: And then for Panel 25, do any  
11 of you have corrections to your testimony?

12 MR. LINN: No.

13 MR. GRAESSLEY: No.

14 MR. VANDEN BOS: No.

15 MR. OLIVE: Okay. For both panels is your  
16 testimony true and correct to the best of your  
17 knowledge and belief?

18 MR. LINN: Yes.

19 MR. GRAESSLEY: Yes.

20 MR. VANDEN BOS: It is.

21 MR. OLIVE: Your Honor, Panels 25 and 13  
22 are available for cross-examination. And Bonneville  
23 intends to move all of its prefiled testimony and  
24 exhibits into the record through written declarations  
25 filed after the conclusion of cross.

1 CROSS-EXAMINATION

2 BY MR. REITER:

3 Q. Good afternoon.

4 Mr. Linn, you're familiar with the  
5 different binders.

6 Mr. Graessley and Mr. Vanden Bos, were you  
7 here earlier when I described what was in those  
8 binders?

9 A. (Eric Graessley) Yes.

10 Q. Okay. So we can save a little time there.

11 Could you turn to page 5 of your  
12 testimony. This is the BPA-25.

13 Do you have that in front of you?

14 A. (Eric Graessley) Yes.

15 Q. Okay. So you testified that it would be  
16 reasonable to expect that increasing flows into  
17 California from the Pacific Northwest would result in  
18 increasing prices and that JP01's theory fails to  
19 explain how Mid-C prices would decline without any  
20 meaningful change in export flows. So I want to ask  
21 questions about that general subject.

22 You stated that, since flows using hourly  
23 original service have declined and the total flows on  
24 the Southern Intertie have increased, that means that  
25 the customers formerly using original hourly service

1 have moved to substitute transmission products. Do I  
2 understand that generally to be correct? That's the  
3 essence of your position?

4 **A. (Eric Graessley) That's correct.**

5 Q. Okay. So if you could turn to -- to Data  
6 Response 118. And there I'm going to refer you to  
7 your last sentence of Subpart (a) where you say,  
8 "Given that hourly reservations declined, the increase  
9 in volume is likely due to long-term firm [service]  
10 customers increasing their utilization."

11 And then I think you said, "...the  
12 increase in BPA's hourly rate should shift reliance in  
13 favor of other transmission products on the Southern  
14 Intertie..."

15 So I want to ask: Is one reason that  
16 customers would shift from original hourly service is  
17 that the other alternatives would be less expensive  
18 for them?

19 **A. (Eric Graessley) That is correct. Just that**  
20 **they'd be less expensive in relative terms not in**  
21 **absolute.**

22 Q. Okay. So when you say "relative rather than  
23 absolute," so if they had to pay, let's just say,  
24 \$10.00 for hourly rate -- we'll just use that as the  
25 number. I don't remember what the exact number is.



1 Just assume it was 10, and we'll just say around 3.50  
2 was the rate before the rate increase.

3 So if they substitute original hourly  
4 service that was -- would be priced at \$10.00 for  
5 something cheaper, that cheaper alternative might  
6 still be more expensive than the 3.50 they used to pay  
7 under the pre-BP-18 rate. That's one possibility;  
8 right?

9 A. (Eric Graessley) I think that's correct. One  
10 possibility is that it could be more, but there are  
11 also other possibilities it could be less.

12 Q. Okay. At page 5 -- again at page 5 of your  
13 testimony, lines 4 to 7, you mention that the marginal  
14 cost for long-term firm holders to move power into  
15 California from the Pacific Northwest is zero or near  
16 zero. Do you see that reference?

17 A. (Eric Graessley) Yes, I do.

18 Q. And that would have been true even before the  
19 increase in the hourly rate that was adopted in the  
20 BP-18 proceeding; is that right?

21 A. (Eric Graessley) Yes. Over the long-term  
22 transmission; that's correct.

23 Q. So with a zero marginal cost to move power  
24 into California using their long-term firm rights, the  
25 long-term firm rights holders already had an incentive

1 to maximize their use of long-term firm rights before  
2 the BP-18 rate increase; isn't that true?

3 **A. (Eric Graessley) I think that's correct.**  
4 **Any -- any holder with long-term rights is going to**  
5 **try to maximize their use.**

6 Q. And I think, Mr. Linn, on the earlier panel,  
7 you had said that one way of utilizing your long-term  
8 firm rights would be to purchase electricity Mid-C and  
9 then move it into California over their long-term firm  
10 rights. Do you remember that?

11 **A. (Michael Linn) Yes.**

12 Q. Okay. So, in fact, since the volume of hourly  
13 resales of long-term firm don't fully replace the  
14 original hourly sales level from Fiscal '17, isn't it  
15 likely that at least some of that difference between  
16 the volume of hourly -- original hourly service in  
17 that case and the current -- and the Fiscal '18 level  
18 would be accounted for by long-term rights holders  
19 purchasing energy at Mid-C and then moving it down to  
20 California? That would account for some of the volume  
21 likely, wouldn't it?

22 **A. (Michael Linn) Yeah. I'm not sure that's the**  
23 **case because one is a transmission reservation, and**  
24 **you seem to be mixing the idea of a transmission**  
25 **reservation with generation.**

1 Q. Well, what I'm saying is that -- you just said  
2 that the long-term rights holders are trying to  
3 maximize its use so they've got zero marginal cost.  
4 So if I'm somebody who used to pay \$3.50 for original  
5 hourly service and now that wouldn't be profitable for  
6 me to pay that and then sell into California, I could  
7 sell my energy at Mid-C to the long-term firm rights  
8 holder, and they could move that into California. You  
9 mentioned that's a possibility; right?

10 A. (Michael Linn) That's a possibility.

11 Q. Okay. And if they did that, that would  
12 explain some of the substitution of original hourly  
13 service for just selling at Mid-C. That's a  
14 substitute for them to do that, isn't it?

15 A. (Eric Graessley) I think it's more of a  
16 substitute for transporting the energy not a  
17 substitute for the energy itself.

18 Q. So, yes. So it's a substitute for  
19 transporting the energy from that former user of  
20 original hourly service. They said, instead of  
21 transporting it, I'm just going to dump it off at  
22 Mid-C to the long-term firm rights holder. That's  
23 something that likely happens to some degree, isn't  
24 it?

25 A. (Eric Graessley) It's something that

1 **certainly could happen.**

2 Q. Okay. In fact, isn't it likely to happen?  
3 Because you've seen a decline in original hourly  
4 sales, maybe for those people it's not profitable to  
5 purchase original hourly service.

6 MR. OLIVE: So objection. Asked and  
7 answered.

8 HEARING OFFICER DENNISON-LEONARD:  
9 Sustained.

10 MR. REITER: Your Honor, I think he said  
11 "could." I was asking -- my question was isn't it  
12 likely.

13 MR. OLIVE: You asked isn't it likely two  
14 times, and the first time you said it could happen,  
15 and you asked the question again.

16 MR. REITER: Well, I've asked him more  
17 specifically isn't it likely rather than isn't it just  
18 a possibility.

19 HEARING OFFICER DENNISON-LEONARD:  
20 Mr. Olive?

21 MR. OLIVE: I continue to -- I heard two  
22 questions of isn't it likely. And the first answer I  
23 heard was it could happen.

24 MR. REITER: And then I followed, Your  
25 Honor, saying, well, isn't it likely, not just a mere

1 possibility.

2 HEARING OFFICER DENNISON-LEONARD: So  
3 you're asking for the witness' opinion?

4 MR. REITER: Yes.

5 MR. OLIVE: I'll withdraw the objection.

6 MR. GRAESSLEY: So I think we're not going  
7 to weigh in on our expectation of which is the most  
8 likely substitute people are going to use. We would  
9 say that our expectation is that the increase in  
10 hourly rate is likely to increase reliance on other  
11 products or other ways of getting energy across the  
12 lines.

13 BY MR. REITER:

14 Q. Okay. Well, to the extent one possibility is  
15 that the former -- someone who was formerly using  
16 original hourly service, in fact, sells the energy at  
17 Mid-C, that -- all else being equal, that would  
18 increase the amount of energy sold at Mid-C; correct?

19 A. (Eric Graessley) Only if it didn't actually  
20 leave the region. So the kind of behavior that we're  
21 talking about is that it would get sold to somebody  
22 with the long-term rights, and they would sell the  
23 energy south.

24 Q. So I think I'm correct -- and I think you may  
25 have answered this before, Mr. Linn, but forgive me if

1 I'm -- if it's duplicating something I asked you when  
2 you were on your earlier panel. But I think you said  
3 that you haven't studied the extent to which customers  
4 who formerly purchased original hourly service to sell  
5 electricity to California at the pre-BP-18 rates are  
6 now under the rates that went into effect in BP-18  
7 instead of selling their electricity at Mid-C to  
8 long-term firm rights holders. You haven't studied  
9 that. Is that your recollection?

10 **A. (Michael Linn) I haven't studied customers**  
11 **who purchased hourly whether or not their sales in**  
12 **Mid-C increase.**

13 **Is that the question?**

14 Q. Yes. Yeah.

15 If I can ask you to turn to page 4 of your  
16 testimony, and I'm also going to ask you a question  
17 about Data Response 103. So maybe pull both of those  
18 up at the same time.

19 Let me know when you have that available.

20 **A. (Eric Graessley) I've got it.**

21 Q. Okay. So at page 4, lines 1 to 5, you state  
22 that, because the hourly rate applies to only a very  
23 small percentage of transmission usage on the Southern  
24 Intertie, JP01 has overstated the potential barrier  
25 effect of the hourly rate increase on energy flows

1 from the Pacific Northwest to California. Do you see  
2 that?

3 **A. (Eric Graessley) I do see that.**

4 Q. Okay. And if you could turn to 103. I think  
5 you're adding another point. You're saying that the  
6 impact of the hourly rate would be small for that  
7 reason -- that is, it's a only a small percentage of  
8 transmission usage -- and because of the availability  
9 of substitute transmission products. Do you see that?

10 **A. (Eric Graessley) Yes.**

11 Q. Okay. With regard to your second stated  
12 reason, did you study the -- the extent to which  
13 hourly service customers were substituting their  
14 original hourly service for something else? either  
15 transmission or some other alternative.

16 **A. (Eric Graessley) So we didn't conduct an**  
17 **exact study of which products were being used, but it**  
18 **is apparent from the changes in behavior that we**  
19 **observed after analyzing the data in FY '18.**

20 Q. If you could turn to page 7 of your testimony.

21 HEARING OFFICER DENNISON-LEONARD:

22 Mr. Reiter, is your microphone still on?

23 MR. REITER: Oh, I'm really having trouble  
24 remembering this, Your Honor. I apologize.

25 ///

1 BY MR. REITER:

2 Q. You heard me ask about turning to page 7?

3 A. (Eric Graessley) Yes.

4 Q. Okay. So if you could look at lines -- the  
5 paragraph starting on line 22. And I think you're  
6 saying that including too many variables that are  
7 highly correlated with one another can distort model  
8 results. Is that, in essence, the point you're  
9 making?

10 A. (Eric Graessley) That's correct, yes.

11 Q. Okay. When we asked you which of the  
12 variables in the -- let me ask you to turn to Data  
13 Response 105.

14 So when we asked you which of the  
15 variables in the JP01 study met this description --  
16 that is, that they were highly correlated but there  
17 were too many -- you provided a table in response.  
18 The table in response shows correlation coefficients;  
19 is that correct?

20 A. That's correct.

21 Q. How high does a correlation coefficient have  
22 to be before you would eliminate the variable?

23 A. (Eric Graessley) I'd say there isn't an exact  
24 value of correlation where you would say it should or  
25 should not be included. However, just the ones we



1 selected were extraordinarily high and these are --

2 Q. Would you eliminate solely based on a high  
3 correlation?

4 A. (Michael Linn) It's not just including or  
5 excluding variables. The paragraph is making the  
6 point that, when this type of correlation exists, the  
7 estimators are no longer efficient. So the regression  
8 has issues whether -- when these are included.

9 Q. So if I understand you correctly, you're not  
10 saying you would eliminate based solely on  
11 correlation.

12 A. (Michael Linn) This isn't our regression.  
13 We're just pointing out what we see as issues with  
14 this regression.

15 Q. But if you were doing a regression analysis,  
16 you wouldn't eliminate based solely on correlation;  
17 right?

18 A. (Michael Linn) I would -- there's techniques  
19 to deal with this type of issue.

20 Q. Is the answer no?

21 A. (Michael Linn) The answer is I would  
22 seriously consider addressing this through some means.  
23 I don't know if it's inclusion or exclusion.

24 Q. Okay. Do you know -- if you could turn to  
25 page -- or I mean to Data Response 107. And you were

1 asked about your understanding of Granger causality.  
2 Could you give me a definition of what Granger  
3 causality is?

4       **A. (Eric Graessley)** So our definition of Granger  
5 causality is a statistical test used to evaluate  
6 whether lag values of particular variables are  
7 informative in evaluating values of a future variable.

8       Q. And give me a simple example where you would  
9 want to use a Granger causality analysis or test.

10       **A. (Eric Graessley)** I would generally not use a  
11 test like that.

12       Q. What would be the circumstances where someone  
13 would want to use it?

14               MR. OLIVE: So, Your Honor, I'm going to  
15 object and say the question is quite vague. I mean,  
16 the circumstances for someone wanting to use a Granger  
17 causality test for what? Whether the sky is blue?

18 BY MR. REITER:

19       Q. You understand the question?

20       **A. (Eric Graessley)** I do understand the  
21 question.

22               MR. OLIVE: You can answer.

23               MR. GRAESSLEY: So I think a general case  
24 that's used in the textbooks is just evaluating  
25 whether or not you want to include a particular

1 variable to include in forecasting.

2 BY MR. REITER:

3 Q. So you were saying you wouldn't use Granger --  
4 I'm looking at your response. You're saying it's not  
5 necessary to conduct a Granger causality test  
6 regarding the link between natural gas prices and  
7 electricity prices. That's your -- that's your  
8 opinion?

9 A. (Eric Graessley) Can you repeat the question.  
10 I'm sorry.

11 MR. REITER: Could I ask that you reread  
12 it.

13 (Page 131, line 3 through page 131, line 8  
14 was read as requested.)

15 MR. GRAESSLEY: So that's correct. And it  
16 is because of the relationship between natural gas  
17 prices and electricity prices we expect where there's  
18 more of a simultaneous relationship. And it's not  
19 necessarily about lag values of the gas prices that is  
20 causing it. It's electricity prices.

21 BY MR. REITER:

22 Q. If you could turn to your testimony at page 7.  
23 Excuse me.

24 HEARING OFFICER DENNISON-LEONARD: Is your  
25 microphone on?

1                   MR. REITER: It is now. So when I  
2 answered, yes.

3 BY MR. REITER:

4           Q. And I'm looking at lines 16 to 21. You  
5 testified there on the risk of omitted variable bias;  
6 correct?

7           A. (Eric Graessley) That's correct.

8           Q. Now, I'm correct, am I not, that the inverse  
9 could also happen? that you can have irrelevant  
10 available bias.

11          A. (Michael Linn) If you include too many  
12 irrelevant variables, they won't bias the results.

13          Q. But you can have irrelevant variable bias;  
14 correct?

15          A. (Michael Linn) No, you can't. Including  
16 additional variables will not bias your estimates.

17          Q. If you could turn to page 17. And I'm looking  
18 at lines 5 to 6 of your testimony there. Is it your  
19 understanding that JP01 did not use Mid-C prices?

20          A. (Eric Graessley) Our understanding is that  
21 you used EQR data and not Mid-C price index.

22          Q. What was the basis for that conclusion? What  
23 was the basis for that conclusion?

24          A. (Eric Graessley) I think the basis for that  
25 was primarily the observation that in your direct case

1 JP01 stated that you used EQR data and made some  
2 modifications to that. And we're just noting that EQR  
3 data is not the same thing as the Mid-C price index.

4 Q. What do you mean by Mid-C price, then?

5 A. (Eric Graessley) Just ICE for day-ahead and  
6 Powerdex prices.

7 Q. If you could turn to page 17 -- actually, stay  
8 on page 17. I'm looking at line 17 where you're  
9 talking about heteroscedasticity. Excuse me. That's  
10 a tough one.

11 THE COURT REPORTER: Would you mind  
12 spelling that?

13 HEARING OFFICER DENNISON-LEONARD: I was  
14 going to ask. Maybe we should spell that because that  
15 really is a mouthful.

16 MR. REITER: Yeah.  
17 H-e-t-e-r-o-s-c-e-d-a-s-t-i-c-i-t-y. It just rolls  
18 off the tip of the tongue.

19 BY MR. REITER:

20 Q. Where did you get the understanding that that  
21 term I just mentioned tests normality in a  
22 regression -- in a regression's error terms?

23 A. (Eric Graessley) Are you asking for the  
24 source of the definition of heteroscedasticity or --

25 Q. Let me back up. If you could look at Data

1 Response 131. Wait a minute. I don't have that here.  
2 No. I'm sorry. That's not in your book.

3 I would ask you, if you could, turn to  
4 page 10, lines 4 to 7 of your testimony. And then if  
5 you could refer to your Data Response 108. In your  
6 data response, you say that you don't have an  
7 exhaustive list of all things that happened in Fiscal  
8 Year 2018 that correlated with Mid-C prices but not  
9 controlled for in JP01's regression analysis. Do you  
10 see that reference?

11 **A. (Eric Graessley) Yes.**

12 Q. In your own experience, is it standard  
13 practice to identify every variable that is  
14 potentially relevant in conducting a regression  
15 analysis?

16 **A. (Eric Graessley) I think we just want to do**  
17 **our best to capture the significant ones.**

18 Q. Okay. If you could turn to your Data Response  
19 110. And this relates back to your -- excuse me --  
20 your testimony at page 12, lines 11 to 13. Your  
21 response -- I'm sorry. Let me give you a chance to  
22 get there. Let me -- tell me when you have it in  
23 front of you.

24 **A. (Eric Graessley) That was page 12, lines 11**  
25 **and 13 again?**

1 Q. Actually, it's Data Response 110.

2 A. (Eric Graessley) Yep.

3 Q. Okay. So your response states that 1751  
4 megawatts of wind and 1636 megawatts of coal left the  
5 Bonneville Balancing Authority. Do you see that  
6 reference?

7 A. Yes.

8 Q. Do you know of the wind capacity that left --  
9 what the total wind capacity in the Northwest is? Do  
10 you know what the total wind capacity that left the  
11 Northwest is?

12 A. (Eric Graessley) We don't know the exact  
13 number, but it's a fairly large amount.

14 Q. Did you calculate how much the exiting wind  
15 capacity would affect wind output in the Bonneville  
16 balancing area?

17 MR. OLIVE: I'm going to object because  
18 this isn't in the testimony, and it's asking if they  
19 calculated. I don't see anything in the data response  
20 that indicates the relevance of this.

21 MR. REITER: I'm asking about -- they're  
22 saying this is significant so I'm asking about what --  
23 what that -- you know, what that significance was.

24 HEARING OFFICER DENNISON-LEONARD:  
25 Mr. Reiter, so -- so they need to know the total in

1 addition to what they -- what departed and then that  
2 starts to feel like it's heading towards a  
3 calculation. So you can you ask your question. So  
4 they told you it's significant; so what further  
5 information are you seeking?

6 MR. REITER: Well, that was the amount  
7 that -- I asked it somewhat separately. You're  
8 talking about the wind output which would be different  
9 from the capacity. So it's just a slightly different  
10 question.

11 HEARING OFFICER DENNISON-LEONARD: You're  
12 wanting to distinguish between capacity and output?

13 MR. REITER: Yes.

14 HEARING OFFICER DENNISON-LEONARD: Okay.  
15 Maybe frame your question again so that we can  
16 understand it.

17 BY MR. REITER:

18 Q. Did you calculate -- did you calculate -- I'm  
19 not asking you to do any new calculation -- how much  
20 the exiting wind capacity would affect wind output in  
21 the Bonneville Balancing Authority?

22 A. (Michael Linn) We haven't included any  
23 explicit capacity factors, but, I mean, just the  
24 nature of wind, it's going to vary between zero and  
25 probably 1750 during different days over the whole



1 sample period.

2 Q. Did you calculate how much of the values of  
3 the daily nondispatchable generation would change due  
4 to the exit of wind capacity from the Bonneville  
5 Balancing Authority?

6 A. (Eric Graessley) So I think it's important to  
7 point out that it's not the generation values that are  
8 changing. It's the values in the regression that  
9 you're using to represent those -- that amount of  
10 generation.

11 MR. REITER: I've forgotten what my -- if  
12 I could have my question reread because I don't think  
13 that answered my question.

14 (Page 137, line 2 through page 137, line 5  
15 was read as requested.)

16 MR. GRAESSLEY: And our answer was to  
17 illustrate the point that values of the wind output  
18 are not going to change whether or not it's in the  
19 balancing authority or not.

20 BY MR. REITER:

21 Q. Did you test whether correcting for wind  
22 capacity that left the -- excuse me. Did you test  
23 whether correcting for wind capacity that left the  
24 Bonneville Balancing Authority made any difference to  
25 JP01's results or conclusions?

1       A.   (Eric Graessley)   So our testimony doesn't try  
2 to parse out exactly how flawed each of these mistakes  
3 makes the overall regression analysis. We're making a  
4 couple of points about how some significant flaws  
5 combine to make the overall regression analysis not  
6 persuasive.

7       Q.   So it's fair to say you don't know whether  
8 this specific flaw that you cited made any difference  
9 at all in the regression analysis.

10       A.   (Eric Graessley)   So we haven't gone through  
11 the regressions and tried to parse out exactly which  
12 mistake is contributing to how much of a flawed  
13 interpretation on each of the variables.

14       Q.   You also talked about the exit of coal  
15 capacity from the Bonneville Balancing Authority. Is  
16 it your understanding that the output of coal plants  
17 is responsive to daily and hourly spot market prices  
18 of energy?

19       A.   (Michael Linn)   So coal might not be ramping  
20 up and down day to day because of the spot market  
21 price, but it surely being on or off is changing the  
22 marginal generator which is setting the price.

23       Q.   What is your experience that indicates to you  
24 that coal is on the margin?

25       A.   (Michael Linn)   I didn't say that coal was on

1 the margin. I said coal can affect which generator is  
2 on the margin.

3 The larger point on all of this isn't that  
4 this plant is affecting the prices. It's that your  
5 regression thinks close to 3,000 megawatts of  
6 generation just disappeared when, surely, at some  
7 point during the data set, that generation was there.  
8 The point isn't -- that's the point.

9 Q. If I could ask you to turn to your Data  
10 Response 120 and looking specifically at response to  
11 Subpart (b). You state that the monthly dummy  
12 variables could capture some of the impacts of the  
13 missing variables. Do you see that?

14 A. (Eric Graessley) Yes.

15 Q. What are the missing variables to which you're  
16 referring?

17 A. (Eric Graessley) So we have not specified all  
18 of the missing variables. We have made the general  
19 point that we think there are important variables that  
20 are missing, and those are likely correlated with  
21 seasonal patterns. So including seasonal variables  
22 should reflect some of those missing variables. It  
23 impacts some of the missing variables.

24 Q. Are your monthly dummy variables instruments  
25 for missing variables?

1       A.   (Eric Graessley)   They are not instrument  
2 variables.   They are simply dummy variables  
3 representing monthly changes.

4       Q.   Did you check the correlations between the  
5 values of the missing variables and the monthly  
6 dummies or dummy variables?

7       A.   (Eric Graessley)   Could you rephrase the  
8 question, please?

9       Q.   Do you want me to just repeat it?

10      A.   (Michael Linn)   Is it possible to ask it a  
11 different way?

12      Q.   I don't think so.   Not for me, anyway.

13      A.   (Michael Linn)   Can you repeat it, then?

14           MR. REITER:   Could I ask you to repeat  
15 that?

16           (Page 140, line 4 through page 140, line 6  
17 was read as requested.)

18           MR. GRAESSLEY:   So I think as we've  
19 answered, we did not specify which variables are  
20 missing.   Just that we thought those missing variables  
21 had seasonal patterns and, including the seasonal  
22 variables would pick up some of those effects.   So we  
23 can't test variables that we're not actually pulling  
24 out and specifying.

25   ///

1 BY MR. REITER:

2 Q. So did you collect any information on the  
3 relationship between the missing variables and the  
4 monthly dummy variables?

5 A. (Eric Graessley) So the primary information  
6 that we received is by including those variables in  
7 the JP01 regressions and seeing how significantly the  
8 other estimates changed, particularly the estimate of  
9 impacts to the hourly rate change.

10 Q. Can you point to any economic -- econometrics  
11 textbook or other scholarly source that recommends the  
12 use of dummy variables to capture the impact of  
13 missing variables?

14 A. (Michael Linn) I mean, almost every  
15 econometric book I've ever opened has a page on  
16 modeling seasonality with monthly dummy variables.  
17 Greene, Wooldridge.

18 Q. I think that's -- I think you missed my  
19 question. I asked you can you point to an  
20 econometrics textbook that recommends use of dummy  
21 variables to capture the impact of missing variables.

22 A. (Michael Linn) I think the inclusion of  
23 monthly seasonality dummy variables is meant to  
24 capture things that aren't explicit in the model when  
25 there's clear seasonal trends. You're asking for a

1 **specific reference or a textbook.**

2 Q. If you could turn to your Exhibit AT02.

3 MR. OLIVE: Mr. Reiter, do you mean  
4 Attachment AT02?

5 MR. REITER: Yes. I'm sorry.

6 MR. OLIVE: And then the page?

7 MR. REITER: Your Honor, if I could just  
8 take a minute here. This might speed it up a little  
9 if I --

10 HEARING OFFICER DENNISON-LEONARD: Please  
11 do.

12 (Pause in the proceedings.)

13 BY MR. REITER:

14 Q. So if I could refer you to Subpart (a) of your  
15 response to No. 120, you say that "...a constant  
16 change in hourly rates will have different impacts on  
17 prices during different times of the year..." Do you  
18 see that?

19 **A. (Eric Graessley) Yes.**

20 Q. Now, in this sentence you meant hourly  
21 transmission rates and energy prices; correct?

22 **A. (Eric Graessley) That's correct.**

23 Q. What were your expectations about the  
24 direction and magnitude of these different impacts on  
25 energy prices at different times of the year?

1       A.   (Eric Graessley)   So I'm going to just give a  
2   single example of one particular season, and that's in  
3   winter perhaps under low hydro conditions where the  
4   region is importing energy from the south.  In that  
5   case we would expect an hourly transmission rate -- a  
6   change in hourly transmission rates to not have a  
7   substantial impact on prices.

8               I'm not going to go into exhaustively all  
9   the different possibilities and all the different  
10   expectations, but it's dependent on the season and  
11   conditions.

12       Q.   If you could turn back to the AT02 attached to  
13   your testimony.  If you could turn to page 4.  Do you  
14   have that in front of you?

15       A.   (Eric Graessley)   Yes.

16       Q.   Could you point to the rows in this output  
17   table that show the impact of the change in hourly  
18   transmission rates on energy prices -- that show the  
19   impact of the change in hourly transmission rates on  
20   energy prices varies by month?

21       A.   (Eric Graessley)   This regression does not  
22   show that effect.

23       Q.   Okay.  Are the monthly dummy variables  
24   independent of the transmission rate increase  
25   variable?

1       A.   (Eric Graessley)   Could you clarify what you  
2 mean by "independent"?

3       Q.   Not correlated.

4       A.   (Eric Graessley)   Just in the context of this  
5 regression, it's not showing up as correlated.

6       Q.   On the same attachment if you could turn to  
7 page 5.

8                   On the same attachment if you could turn  
9 to page 5.   Would it be correct to say that the rows  
10 in this output table do not show the impact of the  
11 change in hourly transmission rates on energy prices  
12 varies by month?

13       A.   (Eric Graessley)   Just by the nature of these  
14 regressions, they're looking at impacts at Mid-C.   And  
15 by including these seasonal variables we're capturing  
16 the impacts of the seasonal variable on Mid-C not how  
17 they relate to BPA hourly transmission other than the  
18 fact that they are likely catching what we believe are  
19 omitted variables.

20       Q.   So just to be clear, there's nothing on this  
21 page 5 -- there's no row on there -- the output table  
22 that shows the impact of the change in hourly  
23 transmission rates on energy prices varies by month.

24       A.   (Eric Graessley)   That's correct.   That's not  
25 how this regression is set up; however, it does



1 demonstrate the fact that on an annual basis there is  
2 no statistically significant impact of the  
3 transmission rate after accounting for that  
4 seasonality.

5 MR. REITER: Your Honor, that's all the  
6 questions I have for this panel, at least for a couple  
7 of people on this panel.

8 HEARING OFFICER DENNISON-LEONARD: All  
9 right. We have one witness who -- is it Mr. Linn?

10 Okay. Mr. Linn, you're excused.

11 MR. LINN: Thank you.

12 HEARING OFFICER DENNISON-LEONARD:  
13 Mr. Reiter, before we begin, do you have a sense of  
14 time? because it's just a question of whether now is a  
15 good time to take a break or whether we should  
16 continue.

17 MR. REITER: Actually, a break would be  
18 okay now. I don't think the panel for 13 or 18 is  
19 going to take very long. Whatever your preference is,  
20 Your Honor.

21 MR. OLIVE: I might propose that given  
22 that 13 is up here that we --

23 HEARING OFFICER DENNISON-LEONARD: Just go  
24 ahead.

25 MR. REITER: It's fine with me. Whatever

1 your preference.

2 HEARING OFFICER DENNISON-LEONARD: Court  
3 reporter?

4 THE COURT REPORTER: I'm good.

5 HEARING OFFICER DENNISON-LEONARD: Thank  
6 you.

7 Please continue.

8 CROSS-EXAMINATION

9 BY MR. REITER:

10 Q. If you could turn to page 2 of your testimony  
11 which would be BPA-13. And there you describe AURORA®  
12 as a production cost model to forecast spot market  
13 energy prices. Do you see that?

14 A. (Eric Graessley) Generally, yes.

15 Q. And it has a number of inputs that it -- one  
16 of which is an assumed wheeling rates; is that right?

17 A. (Eric Graessley) That's correct.

18 Q. Now, you state at page -- that same page 2,  
19 line 22 that you made a number of changes to the  
20 models and assumptions. Do you see that?

21 A. (Eric Graessley) Yes.

22 Q. And then you go on to list the changes you  
23 made to the assumptions. Are these changes from the  
24 final studies in BP-18?

25 A. (Eric Graessley) Those changes are relative

1 to what we had in the proposal for BP-18.

2 Q. So would it be accurate to say you didn't  
3 change assumptions about wheeling rates when you  
4 conducted the -- when you used the AURORA® production  
5 cost model?

6 A. (Eric Graessley) That's correct.

7 Q. If you could turn to Data Response No. 66.  
8 Do you have that in front of you?

9 A. (Eric Graessley) Yes.

10 Q. Okay. You say in that response that the  
11 AURORA® wheeling rates are intended to roughly  
12 approximate the marginal cost of using the Southern  
13 Intertie based on the expected mix of firm, non-firm,  
14 and resale capacity products and that a change in one  
15 category of transmission products will not necessarily  
16 have a one-for-one impact on the associated AURORA®  
17 wheeling rate. Do you see that?

18 A. (Eric Graessley) Yes.

19 Q. Am I correct that, if you assume an increase  
20 in the AURORA® wheeling rate, it would predict, all  
21 else being equal, a decline in electricity prices at  
22 Mid-C?

23 A. (Eric Graessley) So if you assume all of the  
24 rates on the transmission line are increasing and you  
25 make an increase in AURORA® to reflect that, then,

1 yes, you would have a following expectancy of  
2 reduction in overflows and a reduction in prices at  
3 Mid-C.

4 Q. When you say all of -- AURORA® is kind of a  
5 composite wheeling rate; right?

6 A. (Eric Graessley) It has a single wheeling  
7 rate --

8 Q. Yeah.

9 A. (Eric Graessley) -- to reflect the expected  
10 mix of products.

11 Q. Okay. If some of the mix of products stayed  
12 the same and others went up, then the overall wheeling  
13 rate -- AURORA® wheeling rate would be higher; right?

14 A. (Eric Graessley) So this might be possible;  
15 however, it is not consistent with our expectation  
16 that, as the hourly rate increases, we expect others  
17 to substitute other products with lower marginal  
18 costs. Our expectation is that overall it won't be a  
19 significant impact; so we wouldn't make changes to the  
20 rate.

21 Q. Okay. If you could turn to your Data Response  
22 23.

23 HEARING OFFICER DENNISON-LEONARD:

24 Mr. Reiter, could you repeat that? I'm sorry. I  
25 couldn't hear you.

1                   MR. REITER: Yes. Your Honor, I'm sorry.  
2 I asked the witness -- witnesses if they could turn to  
3 their Data Response 23.

4                   HEARING OFFICER DENNISON-LEONARD: Thank  
5 you.

6 BY MR. REITER:

7           Q. Let me know when you have that.

8           A. **(Eric Graessley) Got it.**

9           Q. If you look at the last paragraph of your  
10 response, you state that BPA uses monthly HLH, or  
11 heavy load hour, and LLH, or low load hour,  
12 electricity prices to project revenues and costs  
13 associated with secondary energy sales and balancing  
14 power purchases; correct?

15          A. **(Eric Graessley) That's generally correct,**  
16 **yes.**

17          Q. Does AURORA® project only monthly HLH and LLH  
18 prices?

19          A. **(Eric Graessley) AURORA® is -- the way we run**  
20 **it is on an hourly basis; so it calculates hourly**  
21 **forecast values. Those are aggregated up into monthly**  
22 **heavy and light load hour prices and use aggregates**  
23 **for the price forecast and revenue forecast.**

24                   MR. REITER: Your Honor, that's all the  
25 questions I have for -- that's all the questions I

1 have for Panel 13.

2 And I think, rather than go to a break, I  
3 have a very short examination for Panel 18. We can  
4 finish them up before the break.

5 HEARING OFFICER DENNISON-LEONARD: Thank  
6 you. That sounds like a good plan. We'll do that.

7 And then when we're done with panel -- is  
8 it is 18?

9 MR. REITER: Yeah.

10 HEARING OFFICER DENNISON-LEONARD: We will  
11 take a ten-minute break.

12 So before we begin, let's make sure that  
13 you have enough books among you so maybe one to every  
14 two people, that you have -- you can refer to the text  
15 you need to review. So can we make sure that everyone  
16 has the references they need.

17 MR. REITER: I'm only going to be asking  
18 about Data Request 75, Your Honor.

19 HEARING OFFICER DENNISON-LEONARD: Oh,  
20 great. Okay. Thank you.

21 So Data Request 75 is the sole document  
22 they need access to?

23 MR. REITER: Yes.

24 HEARING OFFICER DENNISON-LEONARD: Okay.  
25 I just want to check -- we'll swear them in in a

1 moment, but I want to make sure they all have access  
2 to the text they need to refer to.

3 MR. REITER: That would be in the one  
4 called Binder 1.

5 HEARING OFFICER DENNISON-LEONARD: All  
6 right. Let's swear the panel it.

7 (Panel sworn.)

8 HEARING OFFICER DENNISON-LEONARD: Who's  
9 -- Mr. Perkins?

10 MR. PERKINS: Yeah. Again, this is Matt  
11 Perkins for Bonneville Power Administration. This is  
12 the witness panel that filed direct testimony titled,  
13 "Power and Transmission Risk Study," No.  
14 BP-20-E-BPA-18.

15 If the witnesses would please state their  
16 names for the record.

17 MS. TRAETOW: Emily Traetow.

18 MR. CHEN: Danny Chen.

19 MR. LINN: Michael Linn.

20 MR. MANDELL: Zach Mandell.

21 MR. GERMER: Matthew Germer.

22 MR. VANDEN BOS: James Vanden Bos.

23 MS. KELLY: Margo Kelly.

24 MR. PERKINS: Based on the order that your  
25 names appear in the direct testimony, do your

1 qualification statements appear at BP-20-Q-BPA-26,  
2 -03, -12, -18, -23, and -39?

3 MS. TRAETOW: Yes.

4 MR. CHEN: Yes.

5 MR. LINN: Yes.

6 MR. MANDELL: Yes.

7 MR. GERMER: Yes.

8 MR. VANDEN BOS: Yes.

9 MS. KELLY: Yes.

10 MR. PERKINS: We're going to keep going.

11 And did you co-sponsor the direct  
12 testimony at BP-20-E-BPA-18 and the errata to that  
13 testimony at -E01, -E02, -E03, the "Power and  
14 Transmission Risks Study" at BP-20-E-BPA-05, a  
15 conformed copy of that study at -CC01 and the "Power  
16 and Transmission Risk Study" documentation at  
17 BP-20-E-BPA-05A, a conformed copy of that  
18 documentation at -CC01 and the errata to the  
19 documentation at -CC01, E01?

20 MS. TRAETOW: Yes.

21 MR. CHEN: Yes.

22 MR. LINN: Yes.

23 MR. MANDELL: Yes.

24 MR. GERMER: Yes.

25 MR. VANDEN BOS: Yes.



1 MS. KELLY: Yes.

2 MR. PERKINS: And aside from -- aside from  
3 the errata corrections filed previously, do any of you  
4 have any corrections to the testimony at this time?  
5 One "Yes" might be sufficient.

6 MS. TRAELOW: Well, wait. That's a "No."

7 MR. PERKINS: Sorry. One answer, sorry.

8 MR. GERMER: No.

9 MR. LINN: No.

10 MR. PERKINS: This is hard.

11 And is your testimony true and correct to  
12 the best of your knowledge and belief?

13 MS. TRAELOW: Yes.

14 MR. CHEN: Yes.

15 MR. LINN: Yes.

16 MR. MANDELL: Yes.

17 MR. GERMER: Yes.

18 MR. VANDEN BOS: Yes.

19 MS. KELLY: Yes.

20 MR. PERKINS: Thank you.

21 The panel is available for cross.

22 MR. REITER: Thank you.

23 CROSS-EXAMINATION

24 BY MR. REITER:

25 Q. You sponsored Exhibit 05; correct? And that's

1 the exhibit, the risks study; right?

2 **A. (Michael Linn) Yes.**

3 Q. Okay. And one of the things you observe in  
4 that study is, since the change in the Southern hourly  
5 transmission rate design for BP-18, rather, all  
6 customers have renewed service. Do you recall that  
7 observation in the study?

8 **A. (Michael Linn) Is there a cite to this?**

9 Q. I thought I had the correct cite. Just give  
10 me a second.

11 I'm sorry. If you look at your data  
12 response, the last line of the data response, you say  
13 that "Since the change in the Southern...hourly  
14 transmission rate design for BP-18, all customers have  
15 renewed service."

16 I apologize for the confusion.

17 **A. (Michael Linn) I see that.**

18 Q. Okay. And isn't it correct that BPA had a  
19 nearly 100 percent renewal rate in the years before  
20 the BP-18 rate increase?

21 **A. (Michael Linn) No. And I think in -- I don't**  
22 **have the document, but in Fiscal Year '15, 31 percent**  
23 **of the transmission that was up for renewal did not**  
24 **renew.**

25 Q. Over the last, say, eight or nine years,

1 hasn't the renewal rate been well over 90 percent?

2       **A. (Michael Linn) Is that a -- I haven't done**  
3 **that calculation in my head.**

4       Q. I'm asking if you recall if that's true. Will  
5 you accept that subject to check?

6       **A. (Michael Linn) I would say that prior to the**  
7 **Fiscal Year '15 it generally had been high.**

8       Q. Okay. And would it be correct to say that  
9 you've not studied whether the lower hourly rate  
10 caused any change in the renewal rates for long-term  
11 firm service in this risk study?

12       **A. (Michael Linn) No. There's -- there's no**  
13 **study in here of the effect.**

14               MR. REITER: Okay. Thank you. I have no  
15 further questions. So I think I averaged about one  
16 eighth of a question per witness on this one.

17               HEARING OFFICER DENNISON-LEONARD: All  
18 right. So we will take a ten-minute break.

19               We're off the record.

20               (Brief recess taken at 2:04 PM. Resume at  
21 2:14 PM.)

22               HEARING OFFICER DENNISON-LEONARD: All  
23 right. We're back on the record.

24               Mr. Deen, are you ready?

25               MR. DEEN: I am ready.

1 (Panel sworn.)

2 HEARING OFFICER DENNISON-LEONARD:

3 Ms. Scruggs, would you like to introduce the witness?

4 MS. SCRUGGS: Sure. Thank you, Your  
5 Honor.

6 Mr. Deen, could you please state your name  
7 and spell your last name for the record?

8 MR. DEEN: Yes. Michael Deen and that is  
9 spelled D-e-e-n.

10 MS. SCRUGGS: And did you sponsor the  
11 rebuttal testimony of the Public Power Council on the  
12 subject of "BPA Southern Intertie Hourly Rates"  
13 labeled as Exhibit No. BP-20-E-PP-02 including the  
14 three attachments that were filed with the testimony?

15 MR. DEEN: Yes.

16 MS. SCRUGGS: Do you have any corrections  
17 to the testimony at this time?

18 MR. DEEN: I have no corrections at this  
19 time.

20 MS. SCRUGGS: Thank you, Mr. Deen.

21 Your Honor, the witness is available to  
22 proceed.

23 CROSS-EXAMINATION

24 BY MR. REITER:

25 Q. Good afternoon, Mr. Deen.

1       **A. (Michael Deen) Good afternoon.**

2       Q. There are -- I don't know if you were -- you  
3 were here earlier; so you know what the three  
4 different volumes contain?

5       **A. (Michael Deen) I believe so, yes.**

6       Q. Okay. If you could turn to page 3 of your  
7 testimony. And you say there that the Southern  
8 Intertie is fully subscribed so there's no -- there's  
9 zero marginal costs or hurdle rate for exports. Do  
10 you see that testimony at the top of the page?

11       **A. (Michael Deen) I do.**

12       Q. That's not true, is it?

13       **A. (Michael Deen) So I think we clarified this**  
14 **in the data request; so I don't know if I have much to**  
15 **add to that. But the statement is in reference to the**  
16 **use of the facilities, not any potential party that**  
17 **might use the facilities. So in other words,**  
18 **long-term firm rights holders have no marginal costs**  
19 **for using the Southern Intertie. Someone who has not**  
20 **paid for long-term service, then they would have to**  
21 **incur an incremental cost to use those facilities.**

22       Q. And that's still the case. There's still  
23 people using hourly service; so they pay an  
24 incremental cost; right?

25       **A. (Michael Deen) They do. However, as I said,**

1 the full capacity can be utilized at zero marginal  
2 cost.

3 Q. I understand it can be, but it's not; right?

4 A. (Michael Deen) Well, it's over 99 percent of  
5 the time.

6 Q. Okay. And customers who have hourly -- who  
7 had original hourly service pay for that service; so  
8 there's a marginal cost to them; right?

9 A. (Michael Deen) There is a marginal cost to  
10 those customers.

11 Q. And if they buy capacity that's resold by a  
12 long-term firm rights holder, they pay a marginal cost  
13 to move it into California; correct?

14 A. (Michael Deen) That is correct. I should  
15 add, however, again, the context of that conclusion is  
16 that, although there is a marginal cost for those  
17 customers on the whole, the hourly rates do not  
18 constitute a barrier to trade.

19 Q. I understand that's your testimony.

20 Now, besides reselling their capacity,  
21 long-term firm rights holders also have an incentive  
22 to make other transactions using their rights;  
23 correct?

24 A. (Michael Deen) Yes. That's correct. If you  
25 have a full -- if your -- the sunk transmission cost,

1 you have the incentive to fully utilize that or to  
2 resell it to others.

3 Q. And I think if you were here this morning, you  
4 heard that one of the ways that might happen is that  
5 they would purchase energy at Mid-C from someone who  
6 formerly used hourly service and then use their  
7 long-term firm transmission rights to move that  
8 electricity into California; right?

9 A. (Michael Deen) I did hear some discussion of  
10 that this morning.

11 Q. Okay. I take it you haven't studied the  
12 degree to which that occurs.

13 A. (Michael Deen) I have not studied the  
14 specific degree to which that occurs. However, I have  
15 examined a fair amount of data in this case including  
16 BPA's Southern Intertie hourly data report which  
17 showed an increase in usage of the Intertie facilities  
18 from --

19 Q. I understand that. That's in your testimony.  
20 I didn't ask you about that.

21 But you don't know the degree to which the  
22 current volumes reflect purchases by long-term firm  
23 rights holders from sellers at Mid-C and then they use  
24 those rights to move the power into California. You  
25 don't know; right?

1       **A. (Michael Deen) I haven't quantified that**  
2 **specifically, nor does it affect my conclusions.**

3       Q. You said "specifically." You haven't  
4 quantified it generally either; correct?

5       **A. (Michael Deen) I have not, nor does it affect**  
6 **my conclusions.**

7       Q. I understand.

8                   On page 3 of your testimony -- again, on  
9 page 3 I'm referring to line 7, you say that "To the  
10 extent there's any net margin between the Pacific  
11 Northwest and the California markets, long-term firm  
12 customers on the segment are incented to either make  
13 transactions using their rights or to resell them to  
14 another party." You see that?

15       **A. (Michael Deen) Yes.**

16       Q. So if we were to purchase energy at Mid-C that  
17 was formerly -- where the customers were formerly  
18 using original hourly service at the pre-BP-18 rate,  
19 the long-term firm customers would capture the full  
20 net margin if they purchased at Mid-C and then resold  
21 it to California; correct?

22       **A. (Michael Deen) Could you repeat the question**  
23 **or read it back one more time?**

24       Q. Yeah. I'll break it down. So you're  
25 referring to the net margin between the Pacific



1 Northwest and the California markets. Okay. And  
2 you -- and when a -- when a seller using long-term  
3 firm service sells it to California, there's no  
4 marginal cost to it -- to move the electricity into  
5 California.

6 So they would capture the full margin  
7 between their costs and the -- and the price in  
8 California; right? That's essentially what you're  
9 saying.

10 A. (Michael Deen) In -- in this example, yes,  
11 where a long-term firm rights holder purchased energy  
12 at the Mid-C and then sold it to California, net of  
13 any losses or other transaction costs they might  
14 incur, that is the net value they would receive from  
15 that transaction.

16 Q. Let's say that there was -- well, let me  
17 strike that.

18 Prior to the BP-18 rate increase, there  
19 was a higher volume of original hourly service --  
20 correct? -- than in Fiscal '18.

21 A. (Michael Deen) Is that a -- is that a  
22 question or is that a statement or am I -- are you  
23 asking me to assume that?

24 Q. I'm asking you if you agree.

25 A. (Michael Deen) I would have to look at the --

1 look at the data. I don't have that answer right off  
2 the top of my head.

3 Q. Would you accept that subject to check? I  
4 think we heard testimony earlier today to that effect.

5 A. (Michael Deen) Yeah. We can assume that  
6 subject to check.

7 Q. Okay. Now --

8 A. (Michael Deen) Although -- excuse me. I  
9 should -- I should add one thing. Again, just because  
10 the volume of original hourly firm service may have  
11 been reduced, that does not mean the overall usage of  
12 the Intertie on an hourly basis was reduced. That's  
13 an important distinction that I don't want to get lost  
14 here.

15 In other words, the fact that hourly --  
16 original hourly firm transactions may have been  
17 reduced does not support the theory that the change in  
18 hourly rate constitutes a barrier to trade.

19 Q. Okay. I understand that that's your  
20 testimony. You've said that a couple of times.

21 MS. SCRUGGS: Mr. Reiter, are you asking  
22 the witness to make that assumption for purposes of  
23 the next question --

24 MR. REITER: Yes.

25 MS. SCRUGGS: -- regarding the sales --

1 okay. I'll wait for the next question. Thank you.

2 BY MR. REITER:

3 Q. If a -- just logically, if you were someone  
4 who has energy to sell and you could sell it at Mid-C  
5 and you could get a higher price by selling your  
6 energy to a long-term firm rights holder at Mid-C,  
7 then the net margin you would earn if you purchased  
8 original hourly service and then sold it to  
9 California, logically, that Northwest seller would  
10 presumably sell the energy to the long-term firm  
11 rights holder all else being equal; correct?

12 MS. SCRUGGS: Objection. Calls for  
13 speculation. If Mr. Deen is comfortable answering,  
14 I'm fine with that.

15 MR. DEEN: So are you asking if -- under  
16 the circumstance where there's a seller in the  
17 Northwest that does not have long-term firm rights --

18 BY MR. REITER:

19 Q. Right.

20 A. (Michael Deen) -- they would choose to sell  
21 their energy at the best opportunity? Is that  
22 essentially what you're asking?

23 Q. Yeah, yeah.

24 A. (Michael Deen) In general terms I would  
25 assume that they would be seeking to maximize their

1 **revenues.**

2 Q. If you could turn to line 16 to 19 on page 3  
3 of your testimony.

4 **A. (Michael Deen) I'm there.**

5 Q. You say that the BPA rate design did not  
6 create a barrier to trade. And then you say  
7 "By...incenting investment in long-term firm, the rate  
8 change increased the probability of full subscription  
9 of the segment, which minimizes the amount of  
10 transactions that would face an incremental  
11 transmission cost."

12 The Southern Intertie has been fully  
13 subscribed in the past; isn't that true?

14 **A. (Michael Deen) Yes, it has been fully**  
15 **subscribed at times in the past.**

16 Q. Okay. When it's been fully subscribed,  
17 nonetheless, there would have been transactions that  
18 faced an incremental transmission cost; right?

19 **A. (Michael Deen) Historically, yes, there has**  
20 **been usage of original hourly service and resales on**  
21 **the Intertie facilities.**

22 Q. So in the past full subscription of the  
23 Intertie already minimized the incremental  
24 transmission costs in those years when you had full  
25 subscription; isn't that true?

1           **A.   (Michael Deen)   I'm sorry.   Can you just**  
2 **repeat the question?**

3                   MR. REITER:   Could you reread it.

4                   (Page 164, line 22 through page 164, line  
5                   25 was read as requested.)

6                   MR. DEEN:   So to the extent that the  
7 Intertie has been fully subscribed, my view is that  
8 the incentive to use the facilities has been maximized  
9 because the full capacity can be used at zero  
10 incremental cost.

11                   I think the issue here is whether -- or  
12 the issue in the past several cases has been whether  
13 the rate change that was adopted in BP-18 was  
14 necessary to maintain the incentive to maintain that  
15 full subscription.

16 BY MR. REITER:

17           Q.   You really don't have to repeat your direct  
18 testimony.   If you would just answer the question I  
19 have asked, you know, we can --

20           **A.   (Michael Deen)   Mr. Reiter, I'm trying to**  
21 **provide full answers to your questions.   I'd**  
22 **appreciate the opportunity to do so.**

23           Q.   If you could turn to page 4 of your testimony,  
24 and I'm looking at line 15.   You say -- you refer  
25 there that there's not a valid economic reason for the

1 hourly rate change to have a substantial effect on the  
2 dependent variables. Do you see that reference?

3 **A. (Michael Deen) Yes.**

4 Q. Okay. One of the reasons Bonneville had for  
5 raising the hourly rates in BP-18 was that, when the  
6 hourly rates were around 3.50 a megawatt hour,  
7 long-term firm customers might substitute hourly  
8 service for long-term firm service and not renew their  
9 long-term agreements; correct?

10 MS. SCRUGGS: Objection. Calls for  
11 speculation. If that is the conclusion that  
12 Bonneville came to in the final record of decision in  
13 BP-18, then that's a stated fact.

14 MR. REITER: He discusses -- I'm asking  
15 the witness if he recalled -- that's --

16 BY MR. REITER:

17 Q. You discuss that point in your testimony;  
18 right?

19 MS. SCRUGGS: Mr. Reiter, you can ask the  
20 witness if that is his understanding. The witness is  
21 not here to testify about the BP-18 ROD. But if that  
22 is -- if you want to ask him about his understanding,  
23 I have no objection to that.

24 BY MR. REITER:

25 Q. Let's treat that last question as asking for

1 your understanding. Okay?

2 A. (Michael Deen) Okay. So could you repeat the  
3 exact topic you're seeking my understanding of.

4 Q. Yeah. Is it your understanding that one of  
5 the reasons Bonneville had for raising the hourly  
6 rates in BP-18 was that, when the hourly rates were  
7 around 3.50 a megawatt hour, long-term firm customers  
8 might substitute hourly service for long-term firm  
9 service and not renew their long-term firm agreements?

10 A. (Michael Deen) So in general terms my  
11 understanding of the rationale for the adoption of the  
12 rate change in BP-18 was twofold, first, to continue  
13 the incentive to invest in long-term firm service and  
14 ensure that the full capacity remains subscribed. And  
15 then the second piece was to ensure fair sharing of  
16 costs between different customer classes using the  
17 facilities.

18 Q. I understand. My question was asking only for  
19 one of those reasons. And you've answered both.  
20 Okay.

21 So for the concern about customers not  
22 renewing to have been significant, would you agree  
23 that it's your understanding that Bonneville must have  
24 assumed that the risk of shifting to hourly service  
25 was substantial enough to threaten long-term cost

1 recovery on the Intertie?

2 **A. (Michael Deen) Yes, I believe that's correct.**

3 Q. At page -- again, at page 4 I'm looking at  
4 lines 12 to 21, you were asked about whether the  
5 hourly rate change adopted in BP-18 was a plausible  
6 explanatory valuable -- variable, excuse me. And you  
7 state that it isn't because it has no causal meaning.  
8 Do you see that reference?

9 MS. SCRUGGS: Are you -- are you talking  
10 about the explanatory variable in the regressions  
11 conducted by Joint Party 01?

12 MR. REITER: Yes.

13 MR. DEEN: So you're referring more  
14 specifically to lines about 15 to 17 there? Is that  
15 where you're looking?

16 BY MR. REITER:

17 Q. Yeah. That's probably more accurate, yeah.

18 **A. (Michael Deen) Okay. I see lines 15 to 17.**

19 Q. Okay. If I understand your testimony  
20 correctly, you believe that JP01 witnesses conflated  
21 correlation and causation; is that correct?

22 **A. (Michael Deen) That is correct.**

23 Q. So if I understand that general theory, so if  
24 someone had demonstrated that most baseball players  
25 who had won a World Series had brown eyes and then you



1 concluded that having brown eyes gave a ball player a  
2 better chance of winning the World Series, that would  
3 be an example of confusing correlation with causation.  
4 Would that be a fair statement?

5 **A. (Michael Deen) Assuming we had no underlying**  
6 **reason to believe that brown eyes gave performance**  
7 **advantage in the context of World Series performance.**

8 Q. Do you agree with the Bonneville conclusions  
9 from its Southern Intertie data report?

10 MS. SCRUGGS: Are there specific  
11 conclusions you're talking about or in general?

12 MR. REITER: Just generally.

13 MR. DEEN: So I guess it's a little  
14 difficult for me to answer. The report is structured  
15 as a collection of data. It does not contain specific  
16 conclusions.

17 BY MR. REITER:

18 Q. That's fine.

19 If you could turn to page 2 of your  
20 testimony. On lines 8 to 9 you say that "The economic  
21 theory that tariffs on exports are barriers to  
22 trade...has no relevance to [Bonneville's] Southern  
23 Intertie rates." Do you see that?

24 **A. (Michael Deen) Yes, on lines 8 to 9.**

25 Q. Yeah. So you're referring there to the

1 economic theory that tariffs on exports are barriers  
2 to trade. Could you explain why economic theory says  
3 that tariffs on exports are barriers to trade?

4 **A. (Michael Deen) Just in very -- in general**  
5 **terms?**

6 Q. Yes. Yes.

7 **A. (Michael Deen) Well --**

8 MS. SCRUGGS: So -- excuse me for a  
9 minute.

10 So I'm going to register an objection.

11 That specific testimony says that that  
12 theory cited by Joint Party 01 as the basis for Joint  
13 Party 01's analysis has no application in this  
14 particular case. Mr. Deen did not talk about the  
15 general theory of barriers to trade. It was in  
16 relation to a response to Joint Party 01. It was in  
17 relation to response to Joint Party --

18 MR. REITER: That's a mischaracterization  
19 of testimony, Your Honor. It plainly says that that  
20 theory doesn't apply to these facts. So I'm asking  
21 him about the theory so we can test that.

22 He's saying that there is this theory --  
23 economic theory that tariffs on exports are barriers  
24 to trade.

25 ///

1 BY MR. REITER:

2 Q. Isn't that true? You think there's an  
3 economic theory that tariffs on exports are barriers  
4 to trade.

5 A. (Michael Deen) So I do think -- excuse me. I  
6 do believe that that is an economic theory. I do not  
7 believe it is applicable in this context --

8 Q. That I understand.

9 A. (Michael Deen) -- specifically because the  
10 hourly rate does not constitute a tariff or a tax or a  
11 barrier to trade.

12 Q. I know. You say that plenty of times.

13 My question, though, was why economic  
14 theory says tariffs on exports are barriers to trade.

15 MS. SCRUGGS: Your honor, I would really  
16 appreciate it if Mr. Reiter would allow the witness to  
17 finish answering the question that he has asked of the  
18 witness even if he does not like the answer he's  
19 getting.

20 MR. REITER: I didn't get an answer. You  
21 objected.

22 HEARING OFFICER DENNISON-LEONARD: All  
23 right. Let's try to slow down a little bit so that  
24 each person can finish talking before we ask another  
25 question or answer.

1           So you're asking about the statement on  
2 lines 8 to 9 talking about what was cited JP01's  
3 testimony. And then you're asking Mr. Deen about his  
4 understanding of export barriers?

5           MR. REITER: Yes. He -- he said that  
6 economic theory is that tariffs on exports are  
7 barriers to trade.

8 BY MR. REITER:

9           Q. And then my question is: Why is that?

10          A. (Michael Deen) So in very general terms, if a  
11 tariff or a tax is applied to, say, steel, for  
12 example, to all steel imports of a country, that would  
13 make those imports more expensive relative to other  
14 sources of supply and, therefore, less attractive for  
15 buyers to purchase.

16                   Again, however, that is not applicable in  
17 this context.

18          Q. Okay. It's funny because my question was  
19 going to -- maybe I'll read the question anyway  
20 because you have -- you anticipated it.

21                   I was going to ask, purely hypothetically,  
22 let's say the President of the United States were to  
23 impose a tariff on imports of steel from Canada, just  
24 hypothetically, but not from other countries. That  
25 would constitute a barrier to trade under the economic

1 theory that you reference; isn't that true?

2       **A. (Michael Deen) Yeah. That would make**  
3 **Canadian steel in that example less attractive all**  
4 **else being equal, of course, to other sources of**  
5 **steel.**

6       Q. If you could turn to page 10 of your  
7 testimony. At lines 9 to 12, you mention that the  
8 seams issues were the basis for the increase in the --  
9 were a basis, excuse me, for the increase in the  
10 hourly rate adopted by Bonneville in BP-18. Do you  
11 see that reference?

12       **A. (Michael Deen) I'm sorry. Do you have the**  
13 **line?**

14       Q. Yeah. It's on lines 10 and 11. Actually, it  
15 slips over to page -- to line 12.

16       **A. (Michael Deen) Yes.**

17       Q. Okay. And at the bottom of page 10 over to  
18 page 11, you mention that increasing amounts of  
19 renewable resources in California, particularly solar,  
20 were exacerbating these seams issues. Do you  
21 recall -- do you see where you say that?

22       **A. (Michael Deen) Yes.**

23       Q. For ease of reference, can we call this latter  
24 effect the duck curve effect just for future  
25 questions?

1       **A. (Michael Deen) Sure. That is a common term**  
2 **for it.**

3       Q. Okay. At page 11 of your testimony you say  
4 that these -- these factors, that the duck curve and  
5 the seams issues were eroding the incentive to invest  
6 in long-term service. And there I think you were  
7 describing what Bonneville's concerns were; is that  
8 correct?

9               MS. SCRUGGS: Do you have a line number,  
10 Mr. Reiter?

11              MR. REITER: I'm sorry. I thought I had  
12 written the line number down.

13 BY MR. REITER:

14       Q. Do you recall saying that?

15       **A. (Michael Deen) I'm sorry. Could you repeat**  
16 **the question one more time?**

17       Q. Yeah.

18              MS. SCRUGGS: Are you referring to lines  
19 20 and 21?

20              MR. REITER: Yes. Thank you.

21              MR. DEEN: Yes. So the -- it's referring  
22 to the combination of seams issues with the  
23 accelerating trend of the duck curve.

24 BY MR. REITER:

25       Q. Okay. Now, you say that these conditions on

1 page 8, lines 14 to 15, that these will almost  
2 certainly persist in the BP-20 period. Do you recall  
3 saying that?

4 **A. (Michael Deen) I'm having trouble finding the**  
5 **reference on page 8, but I do generally, yes.**

6 Q. Oh, okay.

7 **A. (Michael Deen) That is generally true.**

8 Q. Okay.

9 HEARING OFFICER DENNISON-LEONARD: I think  
10 the line numbers are 14 and 15.

11 MR. REITER: That's what I --

12 MR. DEEN: Thank you, Your Honor.

13 BY MR. REITER:

14 Q. So let's take these issues one at a time, the  
15 seams issue and the duck -- the duck curve effect.  
16 You describe one seams issue at page 10, lines 15 to  
17 20, that the CAISO market does not consider the  
18 firmness of transmission when evaluating bids and that  
19 this creates an opportunity for energy using original  
20 hourly non-firm to flow ahead of long-term firm. Do  
21 you see that?

22 **A. (Michael Deen) Yes, generally. It's lines 15**  
23 **to 20 there?**

24 Q. Yeah.

25 Do you know how frequently non-firm energy

1 has been able to flow ahead of firm transactions in  
2 the past fiscal years -- Fiscal '16, '17 -- prior to  
3 the BP-18 rate increase?

4       **A. (Michael Deen)** I have not specifically  
5 quantified the amount of times that a long-term firm  
6 rights holder has attempted to use their -- attempted  
7 to use their rights and had their bid rejected and  
8 been replaced by a non-firm user. However, I would  
9 note that that threat and that possibility is there at  
10 all times.

11       Q. Okay. But you haven't quantified how often  
12 it's happened in the past; right?

13       **A. (Michael Deen)** No.

14       Q. And you haven't quantified the magnitude of  
15 any -- the volumes that would have been affected.

16               MS. SCRUGGS: And objection, Your Honor.  
17 I think the witness was answering the question with  
18 regard to FY 2015 and 2016. That was the scope of the  
19 question, and that was the scope of the answer.

20               MR. DEEN: Can you repeat the last  
21 question?

22 BY MR. REITER:

23       Q. Yeah. You talked about the frequency with  
24 which this occurred in the past before the BP-18 rate  
25 increase in, you know, FY '16, FY '15. Did you study



1 the magnitude of -- the number of megawatts that would  
2 have been affected by this seams issue in those  
3 periods?

4 A. (Michael Deen) So as I said, I did not  
5 specifically quantify the instances where the  
6 possibility became reality. However, the possibility  
7 affects all potential transactions on the Intertie.  
8 And that is true both before and since the rate change  
9 has been adopted.

10 Q. So where -- you haven't quantified it; so the  
11 possibility is somewhere between zero and a hundred  
12 percent that this occurs frequently. Is that what  
13 you're saying?

14 A. (Michael Deen) What I'm saying is I have not  
15 quantified the specific instances that it has occurred  
16 but the threat of it occurring -- and I believe this  
17 is what was determined in the BP-18 rate case. The  
18 threat of that occurring provided enough of a  
19 disincentive for investment in long-term firm that a  
20 rate change was warranted. In other words, I did not  
21 feel that I needed to quantify that specific amount in  
22 order to reach that conclusion.

23 Q. If you could turn to page -- page 2, lines 14  
24 to 15 of your testimony. In there you were  
25 criticizing JP01's analysis. And I think that -- that

1 the gist of it is they conflated causation and  
2 correlation. Is that a shorthand summary of your  
3 biggest objection to that regression analysis?

4 **A. (Michael Deen) I'm a little uncomfortable**  
5 **with -- with shorthand summaries in this context.**

6 Q. Okay. Is that one of your criticisms?

7 **A. (Michael Deen) That is certainly an important**  
8 **criticism.**

9 Q. Okay. Would you agree that comparing market  
10 prices before and after the hourly rate increase and  
11 drawing a conclusion just from that comparison would  
12 be an example of drawing a conclusion without evidence  
13 of causation?

14 **A. (Michael Deen) So is there a specific point**  
15 **in any testimony where I -- where I draw that**  
16 **conclusion?**

17 Q. I'm just asking you just generally, you know,  
18 how you -- you know, how you apply this causation  
19 versus -- correlation versus causation concept.

20 **A. (Michael Deen) Sure. So the way that I apply**  
21 **that concept is in analysis of the regressions that**  
22 **JP01 put forward. That's how I apply that concept in**  
23 **my testimony. I would be happy to expand on that if**  
24 **that would be helpful.**

25 Q. Well, I'm just asking basically, if you were

1 trying to understand the difference between causation  
2 and correlation, would you agree that just comparing  
3 market prices before and after the BP-18 hourly rate  
4 increase and drawing a conclusion from that comparison  
5 would be an example of drawing a conclusion without  
6 evidence of causation.

7       **A. (Michael Deen) I'm a little confused about**  
8 **what conclusion that I'm drawing in that case. Am I**  
9 **drawing --**

10       Q. Well, okay. Any conclusion from that.

11               MS. SCRUGGS: Objection, Your Honor. It  
12 calls for the witness to speculate about what  
13 conclusion is getting drawn. He's being asked to  
14 opine whether it's reasonable to come to a certain  
15 conclusion under the facts presented by Mr. Reiter,  
16 but it's not clear as to what conclusion Mr. Reiter is  
17 referring to.

18               MR. REITER: I'm asking, Your Honor,  
19 whether any conclusion at all. If all you have is the  
20 information that comparing market prices before and  
21 after the hourly rate increase, can you draw any  
22 conclusion from those two numbers?

23               HEARING OFFICER DENNISON-LEONARD:  
24 Ms. Scruggs?

25               MS. SCRUGGS: That's fine. No objection.

1                   MR. DEEN: So the only -- the only  
2 conclusion that I would draw between prices in FY '17  
3 and FY '18 in this instance with absolutely no other  
4 information is that FY '18 prices were higher than FY  
5 '17 prices.

6 BY MR. REITER:

7           Q. And wouldn't comparing long-term firm renewal  
8 rates before and after the hourly rate increase and  
9 drawing the conclusion about the effect of the rate  
10 increase on renewable rates also be finding causation  
11 without evidence of causation?

12           A. (Michael Deen) So I'll probably have to  
13 disagree a little bit on that one. So following the  
14 rate change in FY '18, an extraordinarily large amount  
15 of megawatts were renewed. And, again, although I  
16 haven't quantified the specific contribution of the  
17 incentive change from the rate design change adopted  
18 in BP-18, we have strong reason to believe that that  
19 did increase the incentive to reinvest in long-term  
20 firm. Therefore, I think we can conclude that the  
21 rate is functioning as intended.

22           Q. So when you say you had strong reason, I'm  
23 correct, am I not, that you're not privy to internal  
24 decision-making considerations by long-term firm right  
25 holders on whether or not to renew their agreements;

1 right?

2       A.   (Michael Deen) I am not privy to the internal  
3 decision-making processes of any long-term firm rights  
4 holder. However, I can observe their behavior, and I  
5 can understand the incentive changes promoted by the  
6 BP-18 rate change and draw a conclusion that that is  
7 likely at least a contributing factor in that 100  
8 percent renewal rate for FY '18.

9       Q. But if all you know -- you don't know what  
10 their internal decision-making was and all you know is  
11 that they renewed their contracts, you don't know just  
12 based on the rate increase to the BP-18 rates that  
13 that caused them to have an increased incentive to  
14 renew; right? You don't know that.

15               MS. SCRUGGS: Objection. It misstates the  
16 witness' testimony. He has just testified he observed  
17 the witness' behavior and used that as a foundation  
18 for his conclusion. But he did already answer the  
19 question about whether he knows and is privy to the  
20 internal decision-making of the long-term firm rights  
21 holders on the Southern Intertie.

22               HEARING OFFICER DENNISON-LEONARD:  
23 Mr. Reiter?

24               MR. REITER: That's fine, Your Honor.

25               HEARING OFFICER DENNISON-LEONARD: Okay.

1 BY MR. REITER:

2 Q. If you could turn to page 3, line 11 of your  
3 testimony. You state that the original hourly  
4 reservations only account for 57 aMW of -- that's "a,"  
5 a small "a" with capital "MW" -- would have flowed  
6 north to south with the original hourly  
7 reservations without the BP -- I'm sorry -- flows from  
8 north to south in Fiscal '18. Do you see that  
9 testimony?

10 A. (Michael Deen) Yes, I see line 11 of page 3.

11 Q. So you do not know how many aMW would have  
12 flowed north to south with original hourly  
13 reservations without the BP-18 rate increase; isn't  
14 that correct?

15 A. (Michael Deen) No. I have not specifically  
16 conducted an analysis to quantify, but for the hourly  
17 rate change, what amount of megawatts would have  
18 flowed. However, the -- both prior to and after the  
19 rate change, the contribution of hourly -- original  
20 hourly service to overall flows has been quite small.

21 In other words, I don't have any reason to  
22 believe that the amount would have been significantly  
23 different to a degree that could plausibly affect  
24 market prices as described in the JP01 analysis.

25 Q. If you could turn to page 5 of your testimony,

1 and I'm looking specifically at lines 8 to 15. You  
2 testified there that one of the errors in JP01's  
3 regression analysis is the inclusion of the date  
4 Powerex began participation in the Western Energy  
5 Imbalance Market. And you say that this is an  
6 explanatory variable with no plausible economic  
7 meaning. Do you see that passage?

8 **A. (Michael Deen) Excuse me. Sorry. Yes, I do**  
9 **see that passage, and I would note that it does**  
10 **continue beyond lines 8 to 15.**

11 Q. I understand that. I was just focusing on  
12 that for now.

13 At the time you submitted your rebuttal  
14 testimony, had you familiarized yourself with the  
15 requirements for someone to participate in EIM?

16 **A. (Michael Deen) That's a very general**  
17 **question. I think I'm going to need a more specific**  
18 **question.**

19 Q. Well, there are certain requirements the ISO  
20 has for participation in EIM. Are you aware of that?

21 MS. SCRUGGS: Objection, Your Honor.

22 Are there certain requirements that you're  
23 referring to, Mr. Reiter, that you would like the  
24 witness to tell you whether or not he familiarized  
25 himself with those requirements or which -- which

1 general requirements are you talking about?

2 MR. REITER: I'm asking specifically --  
3 I'm asking to the extent he was generally familiar  
4 with the requirements for participation in EIM.

5 MR. DEEN: I'm generally aware that there  
6 are requirements for participation in the EIM. If you  
7 have a specific one you would like to -- I was not  
8 relying on any of those in particular in formation of  
9 this testimony, but if you have --

10 BY MR. REITER:

11 Q. No. That's fine.

12 A. (Michael Deen) -- something specific you  
13 would like to discuss --

14 Q. That's fine. That's what I was interested in.

15 You -- have you reviewed the Powerex  
16 documents identified as cross-examination exhibits  
17 before you prepared your rebuttal?

18 MS. SCRUGGS: Mr. Reiter, are you  
19 referring to specific exhibit numbers?

20 BY MR. REITER:

21 Q. Yes. These are in binder 3 and they would  
22 be -- bear with me a second. These would be 4, 5,  
23 6 -- I'm sorry. 4, 5, 6, and 7 and 8.

24 MS. SCRUGGS: And for the record, Exhibits  
25 7 and 8 are not exhibits that pertain to Powerex.



1 Exhibits 7 and 8 are California ISO Western EIM  
2 benefits reports for various quarters in 2017 and  
3 2018.

4 BY MR. REITER:

5 Q. Did you review any of those documents in --  
6 before you submitted your rebuttal testimony?

7 A. (Michael Deen) I had not reviewed these  
8 specific documents. However -- I had not reviewed  
9 these specific documents.

10 Q. Okay. And with respect to the -- to Powerex's  
11 documents included there, you've seen these in advance  
12 of the hearing; correct?

13 MS. SCRUGGS: I'm sorry. Mr. Reiter, are  
14 you referring to Exhibits 4, 5 -- 4 and 5?

15 MR. REITER: Yes, just 4 and 5. I'm  
16 sorry.

17 MR. DEEN: I did have the opportunity to  
18 review those this weekend.

19 BY MR. REITER:

20 Q. Okay. Do you have any reason to believe that  
21 these documents do not accurately represent Powerex's  
22 use by the EIM and the conditions of its  
23 participation?

24 MS. SCRUGGS: Objection, Your Honor.  
25 Calls for speculation.

1 HEARING OFFICER DENNISON-LEONARD:

2 Mr. Reiter?

3 MR. REITER: I don't think it calls for  
4 speculation. This is asking him if he has any reason  
5 to doubt the accuracy of their representation.

6 MS. SCRUGGS: Your Honor, may I ask a  
7 couple of questions in aid of that objection?

8 HEARING OFFICER DENNISON-LEONARD: Yes.

9 MS. SCRUGGS: Mr. Deen, please go to  
10 Exhibit 4. Let me know when you are there.

11 MR. DEEN: I am there.

12 MS. SCRUGGS: Exhibit 4, Mr. Deen, appears  
13 to be the Powerex EIM Go-Live experience, a  
14 presentation that was made by presumably a Powerex  
15 representative on June 6, 2018. Were you involved in  
16 making that presentation?

17 MR. DEEN: I was not involved in making  
18 the presentation.

19 MS. SCRUGGS: Were you there during the  
20 presentation?

21 MR. DEEN: I was not a viewer of that  
22 presentation.

23 MS. SCRUGGS: Were you privy to Powerex's  
24 internal decision-making process in developing that  
25 presentation?

1 MR. DEEN: I was not.

2 MS. SCRUGGS: Objection, Your Honor. The  
3 witness is being asked to speculate.

4 Please go to Exhibit No. 5.

5 MR. REITER: Your Honor, if I could short  
6 circuit this -- I mean, this is kind of silly. I  
7 don't know how you get to do direct examination in the  
8 middle of cross, but my question is simple. If he  
9 can't -- if he can't -- if he doesn't -- isn't able to  
10 under -- to represent that these are accurate, that  
11 can be his answer. He doesn't have to speculate. I'm  
12 asking him if he has any reason and if he --

13 HEARING OFFICER DENNISON-LEONARD: Can  
14 you -- can you cite testimony to which -- so at the  
15 beginning of the hearing, we talked about which  
16 exhibits were being presented to which witnesses.

17 MR. REITER: Yes.

18 HEARING OFFICER DENNISON-LEONARD: And so  
19 which part of the testimony does -- from Mr. Deen do  
20 these exhibits --

21 MR. REITER: It's where he refers to  
22 the -- it's where he refers to the implausible -- on  
23 page 5 he says the most egregious example of the entry  
24 of Powerex into EIM as a -- as an incorrect variable  
25 for the regression study. He's talking about entry

1 into EIM. That's his -- the subject of his testimony.  
2 So I'm asking him --

3 HEARING OFFICER DENNISON-LEONARD: In the  
4 context of the regression.

5 MR. REITER: Yes.

6 HEARING OFFICER DENNISON-LEONARD: So I'm  
7 going to sustain the objection because the question  
8 you're asking is outside the scope of the testimony.

9 MR. REITER: Well, Your Honor, I don't  
10 understand your ruling. So if I could just ask the --

11 HEARING OFFICER DENNISON-LEONARD: Try  
12 another question, then.

13 MR. REITER: Okay. So --

14 MR. DEEN: Are you trying to get to the  
15 basis of my conclusions, the foundations of those  
16 conclusions in that paragraph?

17 MR. REITER: No. That's okay. I -- I  
18 think -- if you're not -- if you're --

19 MR. DEEN: I'd be happy to explain the  
20 foundations of those conclusions.

21 MR. REITER: You can answer the questions  
22 I ask. Okay? That would be a lot easier.

23 I don't think we need to pursue this any  
24 further, Your Honor.

25 HEARING OFFICER DENNISON-LEONARD: All

1 right. Are you saying you're -- are you saying you  
2 have no further cross for this witness or just --

3 MR. REITER: No, no.

4 HEARING OFFICER DENNISON-LEONARD: -- just  
5 on the subject?

6 MR. REITER: Just on this subject.

7 HEARING OFFICER DENNISON-LEONARD: Okay.  
8 Thank you.

9 BY MR. REITER:

10 Q. So if you could turn to page 5, line 18 of  
11 your testimony.

12 A. (Michael Deen) Is this on the subject we were  
13 just on?

14 Q. Sort of.

15 A. (Michael Deen) Okay.

16 Q. And you say there that Powerex's participation  
17 in EIM is limited in scope. Do you see that?

18 A. (Michael Deen) I do.

19 Q. Okay. What did you mean by "limited in  
20 scope"? Number of megawatts? Number of megawatt  
21 hours?

22 A. (Michael Deen) Yeah. I'm referring generally  
23 to the amount of capacity Powerex makes available into  
24 the market which is, I believe, on -- I guess it is in  
25 Exhibit 4 there -- typically 150 megawatts of transfer

1 capability. And also, since we have these handy, for  
2 example, in the -- I don't know whether it's No. 8 or  
3 No. 9 -- shows the megawatt hours which are also  
4 limited in the context of the overall size of  
5 Northwest markets.

6 And then, additionally, Powerex is a net  
7 importer of energy in the EIM which runs contrary to  
8 the prediction of the JP01 regression analyses.

9 Q. If you -- at page 5, line 1 of your testimony,  
10 you say that JP01's analysis does not support the  
11 application of economic theory that is the foundation  
12 of their case. So I have a couple of --

13 HEARING OFFICER DENNISON-LEONARD: Excuse  
14 me, Mr. Reiter. Can you give me that cite again?

15 MR. REITER: Yes.

16 I'm sorry. I have the wrong cite, Your  
17 Honor.

18 Yeah. I think I was correct. I'm sorry.

19 BY MR. REITER:

20 Q. You say, "...that JP01's analysis does not  
21 support the application of economic theory that is the  
22 foundation of their case."

23 HEARING OFFICER DENNISON-LEONARD: Can you  
24 give me the cite again? because I thought you said --

25 MR. REITER: Yes, Your Honor.

1 HEARING OFFICER DENNISON-LEONARD: -- page  
2 5, line 1 and what I --

3 MR. REITER: I'm sorry. 1 through 5, Your  
4 Honor. I should have been more specific. If you look  
5 at the end of the answer.

6 HEARING OFFICER DENNISON-LEONARD: Okay.  
7 Thank you.

8 So you're citing the testimony beginning  
9 on line 4.

10 MR. REITER: Yes.

11 HEARING OFFICER DENNISON-LEONARD: Okay.

12 BY MR. REITER:

13 Q. So a couple of basic questions. Do you know  
14 what elasticity of demand is?

15 A. (Michael Deen) I am -- I am generally  
16 familiar with the concept.

17 Q. Have you conducted any analyses or studies of  
18 the elasticity of demand for any product or service at  
19 any time in any prior work you've done?

20 A. (Michael Deen) I'm sorry. In any prior work  
21 I've done in my -- in my entire life or with regard to  
22 this testimony?

23 Q. Let's start with this testimony.

24 A. (Michael Deen) In this testimony I have not  
25 conducted specific analysis of the elasticity of

1 demand.

2 Q. Have you done it in the past?

3 A. (Michael Deen) As part of the course of my  
4 professional career, I have conducted some studies  
5 that used elasticity of demand.

6 Q. Would you agree elasticity of demand can  
7 differ in the short end and in the long run?

8 A. (Michael Deen) Yes.

9 Q. At page 11 -- at page 11, lines 7 to 9 -- tell  
10 me when you have that in front of you.

11 A. (Michael Deen) I have it there.

12 Q. You refer to BPA's rate design before the  
13 BP-18 rate case of widely adopted methodology which  
14 assumes there are 16 high load hours per day, five  
15 days per week. Do you see that?

16 A. (Michael Deen) I do.

17 Q. What other transmission providers who use that  
18 widely adopted methodology have switched their rate  
19 design from that methodology because of the growth of  
20 solar generation if you know?

21 A. (Michael Deen) I'm not aware either way.

22 MR. REITER: Your Honor, the pauses are to  
23 try and shorten this a little.

24 HEARING OFFICER DENNISON-LEONARD: I  
25 appreciate that.



1                   Do you have a sense of how much remaining  
2 time you need for this?

3                   MR. REITER:   Maybe -- I think maybe  
4 another 10 minutes or 15 minutes.

5                   HEARING OFFICER DENNISON-LEONARD:   Okay.  
6 All right.   Thank you.

7 BY MR. REITER:

8           Q.   If you could turn to your Data Response No. 2.  
9 That's in the first -- Binder No. 1.   So this would  
10 be --

11           A.   **(Michael Deen)   I'm sorry.   Did you say No. 1?**

12           Q.   I'm sorry.   No. 2 in Binder No. 1.

13           A.   **(Michael Deen)   Oh, okay.**

14           Q.   I think this is on page 60 of the booklet.

15                   Do you have that in front of you?

16           A.   **(Michael Deen)   I do.**

17           Q.   Okay.   So your testimony at lines -- page 3,  
18 16 to 19 you testified that the rate increase for  
19 hourly service of BP-18 increased the probability of  
20 full subscription of the Southern Intertie.   And then  
21 we asked you for any studies in this -- in this Data  
22 Request 2 that showed this increased probability.  
23 Now, your response says you had not conducted a  
24 quantitative study of the effect of the change in  
25 design on the probability of full subscription.

1           Isn't it accurate to say you didn't  
2       conduct any study on this?

3           **A. (Michael Deen) Could you define what you mean**  
4       **by "study."**

5           Q. Well, I asked you for any studies in the data  
6       request, and if no studies exist, please so state. So  
7       is it fair to assume that, if you had a study, you  
8       would have produced it?

9           **A. (Michael Deen) So in responding to this data**  
10       **request, I took "study" to mean an original,**  
11       **quantitative analysis that I had authored to specify**  
12       **the probability -- specific probability change that**  
13       **the hourly rate change had on the incentive to invest.**

14               So I did not conduct that type of study;  
15       however, I did analyze the incentive change that  
16       occurred as a result qualitatively, observed the  
17       behavior that occurred after that, and I feel  
18       comfortable concluding that the -- as the testimony  
19       says, that the rate change contributed to that result.

20           Q. If you could turn to your Data Response No. 5.  
21       Let me know when you have that. That's on page 62  
22       of -- or 63 of the binder.

23           **A. (Michael Deen) Yes.**

24           Q. Okay. At the end of your response, you say  
25       that Powerex is a net importer of energy from the

1 CAISO into EIM; so Powerex's participation in EIM  
2 might produce an increase in supply at Mid-C rather  
3 than substantial increases in prices that the JP01  
4 model predicts. Do you see that?

5 **A. (Michael Deen) I do.**

6 Q. What substantial increases in prices are  
7 you -- that you say JP01 predicts are you referring  
8 to?

9 **A. (Michael Deen) I'm sorry. I'm just having a**  
10 **little bit of trouble finding it here on my testimony.**  
11 **Oh, yes, back on page 5 where we were discussing it.**

12 **So I'm referring to the large magnitude of**  
13 **the coefficient associated with the variable in the**  
14 **JP01 regression analyses. So I'm looking specifically**  
15 **at lines 15 to 17 there.**

16 Q. If you could refer to -- to your testimony at  
17 line 16 on page 5. And you say that the prices that  
18 you reference is implausible. Do you see that?

19 **A. (Michael Deen) I do.**

20 MS. SCRUGGS: I think that's on line 19  
21 for the record.

22 HEARING OFFICER DENNISON-LEONARD: Yeah.  
23 To clarify I think the price is on line 16, and the  
24 word "implausible" is on line 19.

25 ///

1 BY MR. REITER:

2 Q. Okay. What level of price effect would you  
3 say would be plausible?

4 A. (Michael Deen) So I haven't specifically  
5 quantified a level I would consider plausible.  
6 However, given that, you know, the Mid-C prices in the  
7 last few years have averaged between, you know, say,  
8 20 and \$30 typically, the concept that Powerex's  
9 limited participation in the EIM could explain \$15.77  
10 per megawatt hour is implausible, from my perspective.

11 Q. Would a \$5 change be plausible?

12 A. (Michael Deen) I would still find that  
13 extremely large given the magnitude of this  
14 participation.

15 Q. If you could turn to page 8 of your testimony.  
16 I'm going to ask you to refer to lines 11 to 12. You  
17 state there that there's no rationale for discounting  
18 hourly service on the Southern Intertie from north to  
19 south. Do you see that?

20 A. (Michael Deen) I do. And I can clarify.  
21 That's a little bit of shorthand. I mean there is no  
22 rationale for discounting hourly service on the  
23 Southern Intertie from north to south based on the  
24 evidence presented by JP01 in this proceeding.

25 Q. Okay. That's -- so you're not saying that

1 utilities would never discount services to increase  
2 revenues; right?

3 A. (Michael Deen) So are you asking in  
4 general --

5 Q. Yes.

6 A. (Michael Deen) -- is it possible that a  
7 utility might decrease the price of a product to  
8 increase -- increase usage?

9 Q. Increase, not just usage, but revenues.

10 A. (Michael Deen) I suppose that's possible, but  
11 I don't see the application in this case.

12 Q. Okay. If existing long-term firm customers  
13 were all under contract -- so the Southern Intertie  
14 was fully subscribed. Let's assume that -- and  
15 discounting were introduced but made temporary, isn't  
16 it possible that BPA could discount without increasing  
17 the risk that long-term firm customers might not renew  
18 their contracts?

19 A. (Michael Deen) So I think that would require  
20 some speculation, but I can give my opinion. I think  
21 that that would not be a prudent practice on behalf of  
22 BPA. So I think the -- for the incentive to be  
23 effective, one of the factors is it needs to be  
24 durable. So if BPA is constantly discounting the rate  
25 from north to south, that would sort of undermine the

1 original purpose of adopting the rate change given  
2 that those circumstances that necessitated the change  
3 are still extant.

4 MR. REITER: Mr. Deen, I think that's all  
5 the questions I have.

6 MR. DEEN: All right. Thank you,  
7 Mr. Reiter.

8 HEARING OFFICER DENNISON-LEONARD: You're  
9 excused.

10 All right. Let's take a five-minute break  
11 before we bring the Powerex witness up.

12 (Brief recess taken at 3:17 PM. Resume at  
13 3:23 PM.)

14 HEARING OFFICER DENNISON-LEONARD: All  
15 right. Let's go back on the record.

16 (Panel sworn.)

17 HEARING OFFICER DENNISON-LEONARD: All  
18 right. Counsel for Powerex, would you like to  
19 introduce your witness.

20 MR. JOHNSON: Thank you, Your Honor.

21 Mr. Wellenius, would you please state and  
22 spell your last name, please.

23 MR. WELLENIUS: My last name is Wellenius,  
24 W-e-l-l-e-n-i-u-s.

25 MR. JOHNSON: And your full name, please.

1 MR. WELLENIUS: Paul Kevin Wellenius.

2 MR. JOHNSON: Did you sponsor rebuttal  
3 testimony on behalf of Powerex entitled "Bonneville  
4 Southern Intertie Hourly Rate," No. BP-20-PX-01?

5 MR. WELLENIUS: I did.

6 MR. JOHNSON: The witness is available for  
7 cross, Your Honor.

8 MR. JARBOE: All right. Your Honor, Tony  
9 Jarboe, JP01. Before we begin with Mr. Wellenius, I  
10 would like to ask pursuant to 1010.16 that certain  
11 evidence be -- that you take official notice of  
12 certain evidence. What I have here is census data and  
13 a map and weather data relating to Mr. Wellenius'  
14 testimony.

15 HEARING OFFICER DENNISON-LEONARD: Okay.  
16 How is it going to be used? because we have the rule  
17 that says you need to give cross-examination exhibits  
18 two days before.

19 MR. JARBOE: I was just going to have  
20 Mr. Wellenius read the data for certain cities that he  
21 cited to in his testimony.

22 MR. JOHNSON: Your Honor, Powerex objects  
23 to this. This is a transparent attempt to introduce  
24 new cross exhibits in violation of the rules, in  
25 violation of your order requiring they be filed by

1 4:30 last Friday. Counsel for Joint Party 01 already  
2 agreed this morning that the cross exhibits would be  
3 limited to those that they identified in response to  
4 the motion from the Public Power Council. I do not  
5 believe they should be introduced at this time as  
6 cross exhibits.

7 MR. JARBOE: Alternatively, we can just  
8 introduce them later and request official notice at a  
9 later date.

10 HEARING OFFICER DENNISON-LEONARD: I think  
11 that would be appropriate.

12 CROSS-EXAMINATION

13 BY MR. JARBOE:

14 Q. All right. Mr. Wellenius, let's begin with  
15 your testimony. We will start on page 4, lines 5  
16 through 7. Please look up at me when you've reached  
17 that.

18 A. (Paul Wellenius) I'm sorry. Is my testimony  
19 in one of these binders?

20 Q. No. We do not provide your testimony.

21 MR. JARBOE: Do you have that?

22 MR. JOHNSON: We do not. We'll try and  
23 locate a copy quickly.

24 MS. SCRUGGS: Here you go.

25 (Mr. Johnson hands document to



1 Mr. Wellenius.)

2 BY MR. JARBOE:

3 Q. All right. You found it?

4 A. (Paul Wellenius) I have it.

5 Q. Okay. Excellent. So page 4, lines 5 through  
6 7, you criticized the characterization of the hourly  
7 IS rate as a --

8 A. (Paul Wellenius) Give me a moment.

9 Q. Oh, I'm sorry. I thought you were at it.

10 A. (Paul Wellenius) Page 4 you said?

11 Q. Page 4, lines 5 through 7, yeah.

12 A. (Paul Wellenius) Yes, I have it.

13 Q. Okay. You criticize JP01 for characterizing  
14 the hourly IS rate as an export tax without  
15 recognizing that this rate does not apply to the vast  
16 majority of deliveries; correct?

17 A. (Paul Wellenius) That's what it says.

18 Q. But isn't it true that, even if a higher rate  
19 or a tax doesn't apply to -- it only applies to a  
20 subset of events, couldn't it also influence others  
21 within the market? To give you an example, if you --  
22 one that's familiar to both you and me, airlines.  
23 Most of them now impose a baggage fee -- correct? --  
24 for checked baggage.

25 A. (Paul Wellenius) I'm not testifying on

1   **airlines, Mr. Jarboe.**

2           Q.   I'm aware of that.   But what I'm saying is  
3   that it is possible, wouldn't you agree, that even if  
4   a higher rate only applies to a subset -- for example,  
5   the hourly rate -- it can influence a much larger set.

6           A.   **(Paul Wellenius)   My testimony says that the**  
7   **hourly IS rate is not an export tax and it's**  
8   **inappropriate to characterize it as an export tax**  
9   **primarily because it's not a tax on exports.  If it**  
10   **were, it would be charged on all exports, and it**  
11   **patently is not.**

12          Q.   But you say that it's incorrect to  
13   characterize it as an export tax and to fail to  
14   recognize that this rate does not apply to the vast  
15   majority of deliveries.

16          A.   **(Paul Wellenius)   That's what it says.**

17          Q.   Well, thank you.  I appreciate you  
18   complimenting my reading skills.

19                So what I'm asking you, though, is that  
20   if -- I mean, simply put, just because a higher rate  
21   only applies to a certain subset, it can influence  
22   consumer behavior on a much larger set of data -- on a  
23   much larger set; correct?

24          A.   **(Paul Wellenius)   It sounds like --**

25          Q.   I.e. --

1       A.   (Paul Wellenius)   Oh, go ahead.

2       Q.   Oh, I'm sorry.

3               I.e., if you have a much higher rate on  
4 the hourly rate, it can influence prices on much  
5 larger types of -- on many different types of energy  
6 because -- because customers are now trying to avoid  
7 paying that higher rate so they find other  
8 alternatives that are a lower cost than this new  
9 higher rate.

10       A.   (Paul Wellenius)   I think that's an ex-post  
11 change to the theory that was actually put forth by  
12 JP01 which is that an export tax would reduce all  
13 exports or would reduce the quantity of exports and in  
14 doing so and do so by sufficiently large amounts to  
15 change the supply and demand fundamentals in the  
16 Northwest to reach between 30,000 to 50,000 megawatts  
17 of generation.

18               And so the idea that a very, very small  
19 fraction of exports being exposed to the tax could  
20 have that large of an impact on Northwest prices,  
21 that's the part which is fundamentally  
22 mischaracterized.

23       Q.   Just to make sure that we're clear, you  
24 understand that JP01 only analyzed the effect of this  
25 higher rate, or what we call an export tax, on the

1 spot markets; correct?

2       **A. (Paul Wellenius) I understand that JP01's**  
3 **witnesses performed certain regressions on certain**  
4 **data that they found.**

5       Q. Okay. We are moving on to page 4, lines 15  
6 through 18, so just a little bit further down the  
7 page.

8               So you criticize the Parker and Peters  
9 analysis. You state that they start from a  
10 fundamentally misguided theory regarding the  
11 significance of the hourly IS rate and whether it can  
12 be expected to affect the quality -- or the quantity  
13 of exports from the Northwest to California. But my  
14 question is: How can we know the significance of the  
15 hourly IS rate without doing the analysis? You assume  
16 without any analysis that we're starting with a  
17 misguided theory.

18       **A. (Paul Wellenius) I think I provided a fairly**  
19 **extensive treatment of that analysis. I didn't just**  
20 **ignore it or slam it because of its misguided nature,**  
21 **but it does have a misguided nature.**

22       Q. So it has a misguided basis, but after you ran  
23 the analysis, even if your beginning theory was  
24 incorrect, wouldn't your analysis in the end show  
25 that, in fact, the beginning analysis was wrong if it

1 was?

2       **A. (Paul Wellenius) You'll have to break that**  
3 **down a little bit --**

4       Q. Okay.

5       **A. (Paul Wellenius) -- Mr. Jarboe.**

6       Q. So even if you begin -- for example, our  
7 theory is that the hourly IS rate influenced markets  
8 significantly. After we ran the regression, wouldn't  
9 the -- regardless of what we thought when we began the  
10 analysis, wouldn't the result end up showing that our  
11 analysis was incorrect if we were, in fact, wrong?

12       **A. (Paul Wellenius) There's double negatives**  
13 **there, but as it happens, both the theory is**  
14 **unreliable and the analysis is unreliable; so we don't**  
15 **really have too much of a conflict to untangle.**

16       Q. All right. Let's move on to page 7 of your  
17 testimony. You have the monthly average daily value  
18 of the ICE day-ahead on-peak index price at Mid-C;  
19 correct? That's the figure at the top of page 7.

20       **A. (Paul Wellenius) I see the figure. What was**  
21 **the question, please?**

22       Q. It's the ICE day-ahead on-peak index price at  
23 Mid-C according to the label.

24       **A. (Paul Wellenius) It is the month-by-month**  
25 **average of the daily day-ahead on-peak index prices at**

1 Mid-C by month for Fiscal Year '17 and Fiscal '18.

2 Q. And that is a 16-hour product; correct?

3 A. (Paul Wellenius) The on-peak product is a  
4 16-hour, six-day-a-week product.

5 Q. So since the issue is whether the BP-18 rate  
6 increase caused a decrease in the price of all hourly  
7 exports, why are you looking only at one product in  
8 the day-ahead market instead of at all hourly exports?

9 A. (Paul Wellenius) I think there's an error in  
10 your question. Can you try it again?

11 Q. So how about I try and clarify. So what JP01  
12 has posited is that the BP-18 rate increase has caused  
13 a decrease in the price of all hourly exports;  
14 correct?

15 A. (Paul Wellenius) That's not correct.

16 Q. I apologize. In the spot market, a decrease  
17 in the spot market at Mid-C.

18 A. (Paul Wellenius) I'm sorry. That's not a  
19 question.

20 Q. Well, I was hoping that you could retain the  
21 rest of it so let's -- to clarify, the issue is  
22 whether the BP-18 rate increase caused a decrease in  
23 the price of the spot market at Mid-C; correct?

24 A. (Paul Wellenius) That's JP01's contention.

25 Q. That's our position, yeah.

1           So why are you looking at only a single  
2 product? Why aren't you looking more broadly at the  
3 spot market?

4           A.   (Paul Wellenius) My rebuttal testimony  
5 responds to the analysis put forth by JP01. And I  
6 take that as you filed it, and I think you'll find  
7 that later on. This is a set of information about  
8 prevailing market prices over the two-year period of  
9 interest here.

10           In this particular case, it's using the  
11 day-ahead on-peak ICE index price at Mid-C as a  
12 representative indication of how markets moved  
13 supporting the observation that prices in Fiscal '18  
14 were higher than in Fiscal '17.

15           If you read a little farther in my  
16 testimony, you will find on page 6, Footnote 12, that  
17 these same characteristics are found regardless of  
18 whether you're looking at the ICE day-ahead on-peak  
19 index price which is in my figure or if you look at  
20 the prices put forth by JP01's witnesses.

21           So this is a distinction without a  
22 difference in terms of the conclusions and  
23 observations.

24           Q. But it would make a difference in the  
25 magnitude of the increase -- correct? Because

1 different individual products would increase by  
2 different amounts; correct?

3       **A. (Paul Wellenius) I think I was pretty clear**  
4 **about what data points I was comparing.**

5       Q. So moving on to page 8, lines 12 through 16.  
6 You claim -- you cite to JP01's claim that the Mid-C  
7 day-ahead prices were depressed by 7.91 -- or \$7.91.  
8 You then argue that that implies that without such a  
9 depression the Mid-C day-ahead on-peak prices would  
10 have been more than \$39. But what this analysis has  
11 done is taken an average -- an average depression and  
12 applied it to a single specific product. Is that  
13 really a correct analysis?

14               That's really more of an apples and  
15 oranges comparison because you have the average for  
16 all day-ahead spot market prices, the average  
17 decrease, and then how that would impact a single,  
18 particular product.

19       **A. (Paul Wellenius) Mr. Jarboe, I think what**  
20 **you're getting at is that the \$7.91 impact alleged by**  
21 **JP01 is based on JP01's data analysis which is from**  
22 **the EQR transaction data. And I am applying that or**  
23 **putting that in the context of Mid-C index prices from**  
24 **ICE which is a somewhat different data point**  
25 **representing effectively the same highly analogous**



1 things.

2           Now, as it turns out, I did compare both  
3 the EQR average prices that JP01's witnesses put  
4 forward and the ICE day-ahead prices. They're broadly  
5 similar. To the extent that you're concerned that the  
6 average prices used by JP01's witnesses represent, you  
7 know, all hours of the day, not just 16 on-peak hours,  
8 then applying the 7.91 to the heavy load hour product,  
9 the on-peak product, probably understates how you  
10 think that price will perform because \$7.91 of a lower  
11 set of prices which is what the EQR all hours average  
12 would have been is a higher fraction of the  
13 difference.

14           So if anything, I have given a more  
15 limited characterization of the extent that you think  
16 or that JP01's witnesses allege the rate change had an  
17 impact.

18       Q. Please take a look at page 10 starting at line  
19 11 of your testimony. This is where you cited to a  
20 number of what you believe to be errors in Parker and  
21 Peters analysis, either -- either wrong direction or  
22 wrong magnitude of impact.

23           So let's go ahead and start with line 11.  
24 You criticize the fact that the day-ahead Mid-C prices  
25 are not affected by natural gas prices. So the first

1 question is: Are you familiar with Granger causality?

2 A. (Paul Wellenius) Well, Mr. Jarboe, your  
3 question is mischaracterizing my testimony. I don't  
4 say that any of those things are unambiguously and  
5 clearly wrong. The testimony on its face says that  
6 these are contrary or counterintuitive results.

7 Q. Okay.

8 A. (Paul Wellenius) And contrary or  
9 counterintuitive results as I'm sure Mr. Peter's  
10 co-witness would agree is something that begs an  
11 explanation. It begs a detailed treatment on why are  
12 these results coming out counterintuitively. Why are  
13 things that we may believe to have an effect not  
14 having an effect, or why are things that we think  
15 don't have an effect are appearing to have an effect.  
16 And this does cause us to evaluate the reliability of  
17 the regression.

18 In fact, there's a good treatment of  
19 exactly how to test this out and to explain it and to  
20 write it up properly in the textbook that Professor  
21 Parker recommends for his class. You might have a  
22 look at Chapter 19, Wooldridge, which talks about how  
23 to properly conduct an econometric analysis and how it  
24 should be written up. And, frankly, under that  
25 standard, Professor Parker should have failed this

1 particular piece of testimony.

2 Q. Well, regardless of what Mr. Parker's grade  
3 would have been on this particular piece of testimony,  
4 are you familiar with Granger causality?

5 A. (Paul Wellenius) Not prior to your data  
6 requests.

7 Q. Okay. That's all we needed on that.

8 So moving on to the --

9 A. (Paul Wellenius) I will say the reason it  
10 wasn't until the data request is because there was no  
11 mention of it in your direct case which is what I'm  
12 limited to responding to.

13 Q. But you do understand you could have conducted  
14 a Granger causality test.

15 A. (Paul Wellenius) As could you.

16 Q. So moving on, your next counterintuitive  
17 result is that day-ahead Mid-C prices rise when there  
18 is more Northwest hydro availability. So that's  
19 measured by the elevation of Lake Roosevelt.

20 A. (Paul Wellenius) These are not my  
21 counterintuitive results. They're yours.

22 Q. What you claim is a counterintuitive result.  
23 Is that better?

24 A. (Paul Wellenius) Your result, which I point  
25 out, is counterintuitive.

1       Q.   So, first of all, you're familiar with where  
2 Lake Roosevelt is located; correct?

3       A.   (Paul Wellenius)  It is a reservoir behind  
4 Grand Coulee Dam.

5       Q.   So what studies have you done regarding hydro  
6 operations in the Northwest?

7       A.   (Paul Wellenius)  Mr. Jarboe, where do I talk  
8 about analysis or studies that I do about hydraulic  
9 operations in the Northwest?  This is a simple, plain  
10 language interpretation of the coefficients of your  
11 witnesses' regressions and the manner that your  
12 witnesses have chosen to describe these variables as  
13 the availability of Northwest hydro.  And the  
14 regression on its face says, when there is more  
15 Northwest hydro available, prices at Mid-C somehow go  
16 up.

17       Q.   So --

18       A.   (Paul Wellenius)  Those are -- that is your  
19 testimony, not mine.  My testimony is, hey, that's  
20 kind of weird.  You should have looked at this or  
21 tried to explain it or maybe reconsidered your model  
22 in light of that result.

23       Q.   So how can you argue that the results are  
24 counterintuitive if you -- do you understand hydro  
25 operations?  because, if you do not, then you can't

1 really argue that the results are counterintuitive.

2 A. (Paul Wellenius) Do you have a question,  
3 Mr. Jarboe?

4 Q. Yes. Do you understand hydro operations in  
5 the Northwest?

6 A. (Paul Wellenius) I have experience with hydro  
7 operations.

8 Q. So what studies have you done regarding hydro  
9 operations in the Northwest?

10 A. (Paul Wellenius) And my experience with hydro  
11 operations goes back almost two decades including  
12 modeling of hydro systems and the effect of, in  
13 particular, of hydrological conditions and inflow  
14 conditions and the relationship to electricity prices.

15 In particular, the general relationship is  
16 that, when there is more energy available and produced  
17 by hydro facilities, that reduces the need to run  
18 thermal power plants in order to meet a given amount  
19 of demand which tends to reduce prices. That is kind  
20 of the general relationship that applies broadly in  
21 the hydroelectric systems that I studied or have been  
22 involved in.

23 Q. But we are talking only about the spot market  
24 here, so day-ahead prices. And if the Lake Roosevelt  
25 level is rising, that means that that energy, that

1 potential energy, that water is being stored. That  
2 means it's not being used at least yet. Now, it will  
3 be used at --

4 MR. JOHNSON: Objection, Your Honor. He's  
5 misstating the testimony.

6 MR. JARBOE: Withdrawn. We'll move on to  
7 the next.

8 BY MR. JARBOE:

9 Q. So you're familiar with nonpower constraints  
10 on hydro operations in the Northwest, then, given your  
11 experience.

12 A. (Paul Wellenius) I'm sorry. What are you  
13 pointing to in my testimony?

14 Q. I'm asking whether you're familiar with  
15 nonpower constraints with -- having to do with hydro  
16 operations in the Northwest.

17 A. (Paul Wellenius) I'm familiar that the  
18 operation of hydro systems in the Northwest and  
19 elsewhere are subject to multiple constraints and  
20 objectives.

21 I think if you believed that they were  
22 important, then they would have merited discussions of  
23 your results in order to say, yeah, you know, what --  
24 in light of these results, here's why this model still  
25 makes sense or perhaps we need to revisit the model.

1 And that's the kind of discussion that would  
2 ordinarily be expected in order to establish the  
3 reliability or the credibility of an analysis.

4 Q. So what's just one example of a nonpower  
5 constraint on hydro operations in the Northwest?

6 A. (Paul Wellenius) You're asking me --

7 Q. Yes.

8 A. (Paul Wellenius) -- to testify about nonpower  
9 constraints in the Northwest?

10 Q. Yes.

11 A. (Paul Wellenius) Related to what part of my  
12 testimony?

13 MR. JOHNSON: Objection, Your Honor. This  
14 is starting to range far from the statement of  
15 Mr. Wellenius' testimony which interprets JP01's  
16 regression analysis and the coefficients therein. Ask  
17 him simply whether it's an intuitive or  
18 counterintuitive result, and he's answered that  
19 question.

20 MR. JARBOE: How can he know it's  
21 counterintuitive, though, if he doesn't understand  
22 Northwest power hydro operations? So I am probing his  
23 knowledge to see whether or not he is qualified to  
24 tell us that our results are counterintuitive.

25 MR. JOHNSON: Asked and answered, Your

1 Honor. He's explained his hydro experience in the  
2 Northwest.

3 HEARING OFFICER DENNISON-LEONARD: So do  
4 you want me to rule on the objection?

5 MR. JARBOE: I was just going to move on.

6 HEARING OFFICER DENNISON-LEONARD: All  
7 right.

8 BY MR. JARBOE:

9 Q. So the elevation of Lake Roosevelt is one  
10 number which can go up or down for many reasons, many  
11 of which are -- have nothing to do with the generation  
12 of electricity; correct? For example, you can't just  
13 open the flood gates if it will violate one of  
14 the nonpower --

15 MR. JOHNSON: Objection, Your Honor.  
16 Counsel is testifying, not asking a question. If he  
17 wants to restate his declaration in the form of a  
18 question, that would be more appropriate.

19 MR. JARBOE: On cross-exam we can posit  
20 something without testifying. I'm asking the witness  
21 if he agrees.

22 HEARING OFFICER DENNISON-LEONARD: Okay.  
23 Please restate the question.

24 So the testimony at issue is about it's  
25 counterintuitive that prices would rise when there's



1 more hydro available. So that's the testimony. And  
2 what is your question related to that testimony?

3 BY MR. JARBOE:

4 Q. So if the elevation at Lake Roosevelt which is  
5 how we're measuring whether there is more hydro  
6 availability, that elevation is simply one number  
7 which can go up or down for many reasons, many of  
8 which are unrelated to the generation of electricity.  
9 You can't just open the floodgates if it will violate  
10 one of the many nonpower constraints; is this correct?

11 A. (Paul Wellenius) Mr. Jarboe, this is a  
12 variable that your witnesses said was relevant to  
13 understanding electricity prices at Mid-C.

14 Q. I understand, but I'm probing your knowledge  
15 so we can determine whether or not you're qualified to  
16 determine whether or not this result is  
17 counterintuitive.

18 A. (Paul Wellenius) This is a variable described  
19 as reflecting the availability of hydro energy.  
20 You're saying -- and I believe it is statistically  
21 significant in JP01's results that it says that, when  
22 there is more hydro energy available, then Mid-C  
23 prices go up. That seems counterintuitive and begging  
24 for an explanation. If you believe and your witnesses  
25 believe that there was an important and compelling

1 explanation, it was not included in the direct case.  
2 That's the extent of my observation on this.

3 Q. So when the elevation increases, that means  
4 water is being stored and not flowing through the dam;  
5 is this correct?

6 A. (Paul Wellenius) When the elevation of water  
7 goes up, it means that the inflow has exceeded the  
8 outflow.

9 Q. Okay. So next you found it counterintuitive  
10 that day-ahead Mid-C prices are not affected by  
11 temperature in Seattle, Portland, or Spokane but are  
12 strongly affected by the temperature in Burbank,  
13 California; correct?

14 A. (Paul Wellenius) That's what it says in the  
15 testimony.

16 Q. I assume that you know where Burbank,  
17 California, is related -- or is located.

18 A. (Paul Wellenius) I do.

19 Q. And how close is it to Los Angeles?

20 A. (Paul Wellenius) Quite.

21 Q. So you would agree, then, temperature -- the  
22 temperature in Burbank would likely be similar in Los  
23 Angeles; correct? Stated another way is that the load  
24 to Burbank doesn't just represent the load to Burbank.  
25 It's an indicator of the load to the greater -- the

1 much larger metropolitan area.

2       **A. (Paul Wellenius)** Well, you kind of jumped the  
3 curb there. You were talking about temperature, but  
4 now you're talking about load. It's not just air  
5 conditioners that consume electricity, Mr. Jarboe.

6       Q. So is the temperature in Burbank likely  
7 similar to the temperature in Los Angeles?

8       **A. (Paul Wellenius)** I haven't studied it.

9       Q. So since you've testified correctly that they  
10 are very close, isn't it likely that they will -- that  
11 the temperature in both cities will be very similar?  
12 Burbank and Los Angeles.

13       **A. (Paul Wellenius)** I don't know.

14       Q. So I guess the question, then: Why is it  
15 counterintuitive that there's a strong correlation  
16 with the temperature in Burbank, California, which is  
17 located right next to Los Angeles whereas Portland,  
18 Spokane, and Seattle which combined are close to half  
19 the size of Los Angeles don't have as strong an  
20 effect? Why is that counterintuitive?

21       **A. (Paul Wellenius)** Mid-C is a liquid trading  
22 hub in the Pacific Northwest. The Pacific Northwest,  
23 its region generation averages over hourly  
24 generation -- it bounces around between 30,000 and  
25 50,000 megawatts in each hour. I would expect that a

1 primary determinant of those prices were the load and  
2 supply conditions in the Northwest, especially since  
3 there is not an unlimited amount of transmission to  
4 farther distances including Los Angeles which is quite  
5 far away, not withstanding the number of people that  
6 live there.

7           So the counterintuitive result was that  
8 local conditions under JP01's regression analysis  
9 appear to not matter, but more distant conditions seem  
10 to be strongly significant. And, again, none of these  
11 were categorical disqualifiers but things that should  
12 raise red flags about the reliability and credibility  
13 of the model and require greater explanation in order  
14 to substantiate that credibility.

15       Q. Understood. I'm just probing kind of your  
16 knowledge and why you felt these results are  
17 counterintuitive.

18           And then on the next -- top of page 11, so  
19 lines 1 and 2, we get to the EIM entry. You found the  
20 Mid-C prices rising by \$15.77?

21       A. (Paul Wellenius) I did not find that. You  
22 did.

23       Q. You found that result to be counterintuitive.

24       A. (Paul Wellenius) I actually I found that  
25 result to be completely undisclosed and unexplained in

1 any way.

2 Q. So my question is: When Powerex joined the  
3 EIM, did it get direct access to other balancing  
4 authorities? balancing authority areas.

5 A. (Paul Wellenius) It is not connected to any  
6 other balancing authorities -- balancing areas beyond  
7 what it was connected to and had access to prior to  
8 joining the EIM.

9 Q. So did you have a chance to look over the  
10 exhibits that we gave you ahead of time? And in  
11 particular, I am referring to -- it looks like  
12 BP-20-JP01-06. That would be in Binder 3.

13 MR. JOHNSON: Mr. Jarboe, to clarify,  
14 you're referring to the CAISO business practice  
15 manual?

16 MR. JARBOE: That is correct.

17 MR. JOHNSON: Thank you.

18 MR. WELLENIUS: I have it here.

19 MR. JOHNSON: Your Honor, just to review  
20 an earlier discussion we had this morning, this is one  
21 of the exhibits where there was some confusion over  
22 the pagination.

23 And, Mr. Jarboe, when you ask your  
24 question, just to make sure our understanding is  
25 correct, if you could just be specific about the

1 location of the page that you're referring to.

2 MR. JARBOE: Absolutely.

3 BY MR. JARBOE:

4 Q. I'm sorry. Let's instead look at Exhibits  
5 JP01-08, and on page 7. So do you understand what all  
6 of those -- what all of the acronyms mean on that  
7 page? And, in particular, we're interested in PWRX.  
8 You understand that refers to Powerex?

9 A. (Paul Wellenius) That's my understanding.

10 Q. So if you go through and look at the various  
11 references to Powerex, each one of those shows a  
12 connection to a different balancing authority area  
13 through the EIM; correct?

14 A. (Paul Wellenius) I understand those to refer  
15 to a CAISO defined EIM transfer path between EIM  
16 entity participants. It does not directly reflect to  
17 a transmission reservation or a -- it does not specify  
18 the POR and POD of transmission path.

19 Q. Would Powerex have been able to do these same  
20 transactions prior to joining the EIM?

21 A. (Paul Wellenius) Which transactions are you  
22 referring to?

23 Q. I am referring to the ones listed on page 7 of  
24 JP01-08.

25 A. (Paul Wellenius) I don't see transactions. I

1 see quantities that were scheduled from one part of  
2 the EIM to another.

3 Q. So would they have been able to transmit these  
4 quantities from one part of the EIM to another  
5 without -- without joining the EIM?

6 A. (Paul Wellenius) Would it be physically  
7 possible to accomplish a similar quantity of  
8 transfers? Yes.

9 Q. So why did they bother joining?

10 A. (Paul Wellenius) Your question seems to  
11 presuppose that the only possible reason for joining  
12 is to accomplish something which was physically  
13 impossible before, and I reject the premise of that  
14 question.

15 Q. But you --

16 MR. JOHNSON: Objection, Your Honor. This  
17 is starting to -- why Powerex joined the EIM is not  
18 within the scope of Mr. Wellenius' testimony.

19 MR. JARBOE: It definitely is. He talked  
20 about the EIM in his testimony and --

21 MR. JOHNSON: In his testimony he talks  
22 about the EIM as a limited market in which Powerex  
23 participates. It's an alternative to other markets.  
24 He does not talk about why Powerex joined the EIM.

25 ///

1 HEARING OFFICER DENNISON-LEONARD:

2 Mr. Jarboe, can you point to the portion of  
3 Mr. Wellenius' testimony where he discusses the  
4 reasons for Powerex joining the EIM?

5 MR. JARBOE: We'll withdraw and move on.

6 BY MR. JARBOE:

7 Q. Page 16, lines 14 through 20 in your  
8 testimony.

9 A. (Paul Wellenius) Yes.

10 Q. So you -- the first thing that I -- so here  
11 you're talking about the Western EIM, and it's just  
12 one way for entities to participate in the real time  
13 markets operated by the CAISO; correct?

14 A. (Paul Wellenius) This portion of the  
15 testimony, I'm explaining why it is ludicrous to think  
16 that Mid-C bilateral day-ahead price can more than  
17 double as a result of Powerex's participation in the  
18 EIM.

19 Q. So, again, when you join the EIM, do you get  
20 direct access to other balancing authorities' areas?

21 A. (Paul Wellenius) I don't think that has  
22 anything to do with this paragraph.

23 Q. But you're saying it's entirely possible that  
24 they -- that -- to participate in these various  
25 markets, CAISO, without joining the EIM. But by



1 joining the EIM, do you or do not get other -- access  
2 to other balancing authorities' areas?

3       **A. (Paul Wellenius)** The transmission that  
4 exists -- the transmission that can be used is not  
5 anything that doesn't exist and didn't exist prior to  
6 the EIM. It's -- it is a different way of using for a  
7 relatively small quantity of subhourly energy which is  
8 a fairly small subset of transactions, especially in  
9 proportion to the size of the regions involved. It is  
10 a limited market that provides a way of undertaking  
11 transactions that are also possible and also occur  
12 outside of the EIM platform.

13       **Q.** And do you understand the wheeling charge is  
14 not more than 1 cent per megawatt hour within the EIM;  
15 correct? And if you would like, I can point to a  
16 place in the exhibit where it says that.

17               **MR. JOHNSON:** Yes, we need a citation,  
18 please.

19               **MR. JARBOE:** Yeah. It is BP-20-JP01-06,  
20 page 13, under where it says "EIM Transfer Schedule  
21 Cost," second paragraph. It says, "The EIM Transfer  
22 Cost shall be less than \$0.01."

23       **A. (Paul Wellenius)** What was the page of that,  
24 please?

25       **Q.** Page 13 of the JP01-06.

1           A.   (Paul Wellenius)   Your question was something  
2 about a wheeling charge?

3           Q.   I guess to be more precise to just keep the  
4 language consistent, the transfer cost.   So the EIM  
5 transfer cost is less than 1 cent.   You agree with  
6 that?

7           A.   (Paul Wellenius)   You seem to be conflating  
8 the EIM transfer cost with a wheeling charge, and what  
9 you're missing is that this portion of the business  
10 practice manual is not a charge that is levied to a  
11 customer.   It's not a charge that anyone gets an  
12 invoice for.   It is a number used in a computer  
13 algorithm in order to figure out what priority order  
14 is it going to fill out the schedules when it conducts  
15 the EIM optimization.

16                   At the top of the paragraph, it talks  
17 about the purpose of the transfer schedule cost.   It  
18 says the EIM transfer schedule cost is included in the  
19 objective function of the market optimization.  
20 Nowhere here does it say this is a charge to customers  
21 or a wheeling charge.

22           Q.   So I guess my question to you, then:   What is  
23 the wheeling charge?

24           A.   (Paul Wellenius)   For what and where?

25           Q.   For EIM transactions.

1           A.   (Paul Wellenius)   The wheeling charge charged  
2 by who?

3           Q.   By any entity.   By the ISO.

4           A.   (Paul Wellenius)   The California ISO is the  
5 market operator for the EIM.   They do not levy a  
6 transmission access charge on EIM transfers.   There  
7 continue to be costs associated with transmission  
8 procured from other entities including the  
9 transmission reservations from Bonneville on the  
10 Southern Intertie which are made available for EIM  
11 transactions by Powerex.

12                       So when you talk about wheeling charges,  
13 the difficulty there is that the CAISO is not in a  
14 position to determine transmission charges for other  
15 entities.   Those are unaffected.   That's why your  
16 citation to this particular business practice manual  
17 is quite off base.

18           Q.   Page 19 starting at line 17.   So and then, if  
19 you could just read that through page 20, line 5 just  
20 to yourself, familiarize yourself with that passage.

21           A.   (Paul Wellenius)   Through line 5 on the next  
22 page?

23           Q.   Correct.

24           A.   (Paul Wellenius)   Okay.   I read it.

25           Q.   So are you saying that there is no way to

1 determine the effect of any single factor through a  
2 regression analysis? because it seems to me that  
3 you're saying everything is so intertwined. So are  
4 you saying that there's no way to determine the effect  
5 of any single factor?

6       **A. (Paul Wellenius) I'm saying that the**  
7 **particular way that JP01's witnesses put forward their**  
8 **analysis, which is what I'm limited to responding and**  
9 **rebutting to, fails to do that. I would note that**  
10 **that is about how Mr. Peters and Mr. Parker**  
11 **characterized the results of their analysis. The far**  
12 **bigger point is that the analysis was highly improper,**  
13 **not explained, and the pivotal and, frankly, the**  
14 **signature undisclosed design of the analysis**  
15 **completely falls apart if it's brought into the light.**

16       **Q. At the bottom of page 20 -- so we're looking**  
17 **at lines 18 through 19 at the bolded statement. So**  
18 **does this statement by Parker and Peters provide a**  
19 **specific magnitude of a change or is it solely**  
20 **directional?**

21       **A. (Paul Wellenius) I think the quote speaks for**  
22 **itself.**

23       **Q. So if -- how would you go about getting the**  
24 **magnitude? Assuming that it is solely a**  
25 **directional analysis -- solely a directional**

1 assumption, how would you go about getting the  
2 magnitude?

3 A. (Paul Wellenius) The magnitude of what?

4 Q. Magnitude of the impact.

5 A. (Paul Wellenius) On? Of what?

6 Q. The quantity of energy -- hourly energy  
7 exported to California.

8 A. (Paul Wellenius) It's your witnesses that  
9 said that it should fall as a result of the hourly  
10 rate. I'm not saying that it should fall. I said  
11 that the hourly rate is -- applies to -- it is a  
12 significantly small quantity.

13 It's your witnesses saying that the  
14 quantity should fall, and it's your witnesses that  
15 didn't bother to test that hypothesis.

16 Q. So did you bother to ask for a data request to  
17 see if they did?

18 A. (Paul Wellenius) Data requests where asked  
19 for when I needed additional information to understand  
20 what you did. When what was done was clear, I didn't  
21 need a data request.

22 Q. But throughout -- but you still argue --  
23 withdrawn.

24 Mr. Wellenius, you did say that there were  
25 unexplained -- just one moment.

1 All right. Please take a look at page 21,  
2 lines 6 through 9. So you posit that, all else being  
3 equal, a reduction in exports from the Northwest to  
4 California may be expected to increase the quantity of  
5 energy sold at Mid-C and decrease the quantity of  
6 energy exported over the Southern Intertie and sold to  
7 COB and NOB; correct?

8 A. (Paul Wellenius) That's what it says.

9 Q. So I assume that you're quite familiar with  
10 the concept of demand elasticity; correct?

11 A. (Paul Wellenius) It doesn't necessarily  
12 follow, but it's a concept I'm familiar with.

13 Q. And had you previously conducted any analyses  
14 or study of the elasticity of demand?

15 A. (Paul Wellenius) Demand for what product?

16 Q. Well, we can start -- for your analysis here,  
17 did you conduct any analysis of the demand elasticity  
18 in relation to the Peters and Parker regression  
19 analysis?

20 A. (Paul Wellenius) Peters and Parker regression  
21 analysis was a quantity of wholesale transactions from  
22 a selected subset of parties that demand or -- to the  
23 extent you even call it a demand, it needs to be  
24 distinguished from the demand for electricity  
25 consumption by end users.

1           I think you may be familiar with the  
2 general assumption that the demand for electrical  
3 usage by end users is not particularly sensitive to  
4 real time prices, but that's not what we're talking  
5 about here. What we're talking about are wholesale  
6 transactions at a trading hub between entities where  
7 generally the sensitivity to price would be relatively  
8 high.

9           So I would -- going to and expecting that  
10 at Mid-C at these various trading hubs where the  
11 primary transactions are alternatives between  
12 purchasing energy or operating owned resources, the  
13 electricity or sensitivity to price for those  
14 transactions would not be inelastic.

15         Q. Do you have any evidence of high elasticity?

16         A. (Paul Wellenius) I don't have quantitative  
17 evidence one way or the other. What I just mentioned  
18 was my familiarity with what's being transacted by  
19 wholesale entities.

20         Q. So page 22, lines 15 through 20 -- actually,  
21 let's go ahead and expand that to 13 through 20.

22           So if it were found that elasticity were  
23 -- or that demands were highly inelastic in the spot  
24 markets, wouldn't it be true that this conclusion  
25 wouldn't be correct? because, again, you're going to

1 demand and -- or you're going to volume as opposed to  
2 going to -- hold on. Withdrawn.

3           So, Mr. Wellenius, is it your testimony  
4 that, because there are no volume -- that we found no  
5 statistically significant volume changes at -- let's  
6 see. What was it? -- COB and NOB, then our -- then  
7 the analysis by Parker and Peters must be incorrect  
8 because there would have -- if their analysis was  
9 correct, you would have to see a statistically  
10 significant volume change at COB and NOB. Is that  
11 your testimony?

12           **A. (Paul Wellenius) I think you can read my**  
13 **testimony. And it's not the lack of a statistically**  
14 **significant finding. It's actually that Parker and**  
15 **Peters found a statistically significant increase in**  
16 **the day-ahead transaction quantities at both COB and**  
17 **NOB. That's on the prior page 21, lines 20 and 21.**

18           So even if you want to go down a rabbit  
19 trail with inelastic demand in which quantities  
20 shouldn't change, that's actually not what Parker and  
21 Peters found. They found that quantities would  
22 increase. How do you increase quantities downstream  
23 of the Intertie in which you're alleging flows  
24 actually went down? That makes no sense.

25           Q. Next please go to page 29, line 11 through



1 page 30, line 3. So on line 11 you testify the seams  
2 issue continue to exist. Now, have you done any --  
3 any studies of instances during the FY 2018 period  
4 when a bid was accepted by the CAISO from the  
5 Northwest entity without firm transmission rates from  
6 the CAISO and this acceptance caused a bid using firm  
7 transmission rights of any duration to not be accepted  
8 by the CAISO?

9 **A. (Paul Wellenius) Can you rephrase your**  
10 **question, please?**

11 Q. I'll try and restate it, and we can break it  
12 down in pieces.

13 So you testified that the seams issue  
14 continue to exist. So have you conducted any studies  
15 of any instances in FY 18 when a bid was accepted by  
16 the CAISO from a Northwest entity without firm  
17 transmission rights, and that acceptance caused a bid  
18 using firm transmission rights of any duration to not  
19 be accepted?

20 **A. (Paul Wellenius) I think the basis for my**  
21 **answer immediately follows. Yes, they do. The**  
22 **mechanism of the problem created by the seams issue in**  
23 **which Bonneville transmission firm priority is**  
24 **functionally equivalent to nonfirm priority is the**  
25 **result of the market rules. And in my testimony I**

1 explain how there has been no fundamental change to  
2 those market rules.

3 Q. That's not the question. The question -- so  
4 you have not, in fact, conducted any studies of  
5 instances in FY 2018 where a bid by a Northwest entity  
6 without firm transmission rights caused a bid by a  
7 Northwest entity with firm transmission rights to not  
8 be accepted? It's a yes-or-no question.

9 A. (Paul Wellenius) It's actually not because  
10 what you're saying is that is the right way to look at  
11 the impact of the seams issue which is flatly  
12 incorrect. What you are describing would require,  
13 first of all, having customer-specific information  
14 about bid submission and bid acceptances which is not  
15 public information. So that type of question would be  
16 very difficult to answer by anybody.

17 But, more importantly, it would be  
18 irrelevant because the seams issues is not just about  
19 when does -- it is really about the creation of  
20 congestion in undermining the firm priority of the  
21 Bonneville product.

22 Q. But wouldn't that data be useful in  
23 determining the magnitude of any seams  
24 issue? determining how often, if ever, that a nonfirm  
25 bid pushed out a firm transmission bid?

1           A.   (Paul Wellenius) I think there's a couple of  
2 different ways to look at it. The way my testimony  
3 looks at it is I'm looking at the essential market  
4 rules that were discussed extensively over the last  
5 several years as being the underlying reason for the  
6 seams issues. And where those rules have -- and the  
7 seams issues they cause have been recognized by, not  
8 only Bonneville customers, but by the Bonneville  
9 administrators. And there's been no change to those  
10 rules, and I think the basis for those conclusions  
11 remains very solid.

12           Q. Just a moment. If all goes according to plan,  
13 we won't have any more questions, but we are just  
14 confirming.

15                   HEARING OFFICER DENNISON-LEONARD: Thank  
16 you, Mr. Jarboe.

17                   MR. JARBOE: No further questions,  
18 Mr. Wellenius. Thank you.

19                   HEARING OFFICER DENNISON-LEONARD: Thank  
20 you. You're excused.

21                   All right, we need a few minutes to set up  
22 the phone arrangements for our final witness. We will  
23 take a five-minute break and have our final witness.

24                   MR. REITER: Your Honor, can I ask to take  
25 a ten-minute break? That may shorten some of my

1 questions. I just want to go over --

2 HEARING OFFICER DENNISON-LEONARD:

3 Absolutely. So we will take a ten-minute break. We  
4 will resume at 4:35 by the clock in the room. That's  
5 Pacific time.

6 (Brief recess taken at 4:23 PM. Resume at  
7 4:33 p.m.)

8 HEARING OFFICER DENNISON-LEONARD: All  
9 right. Let's go back on the record.

10 Let's just confirm that we have  
11 Dr. McCrary on the phone.

12 MR. McCRARY: Yes. This is Justin  
13 McCrary. Can you hear me?

14 HEARING OFFICER DENNISON-LEONARD: Yes, we  
15 can hear you.

16 MR. McCRARY: Wonderful.

17 HEARING OFFICER DENNISON-LEONARD: I'm  
18 going to swear you in.

19 (Panel sworn.)

20 HEARING OFFICER DENNISON-LEONARD: All  
21 right. Mr. Johnson, do you want to introduce the  
22 witness?

23 MR. JOHNSON: Yes, Your Honor. My  
24 pleasure.

25 Professor McCrary, would you please state

1 your full name and spell your last name.

2 MR. McCRARY: My name is Justin McCrary,  
3 and the spelling on the last name is M-c-C-r-a-r-y.

4 MR. JOHNSON: Thank you.

5 And did you sponsor rebuttal testimony on  
6 behalf of Powerex entitled "Bonneville Southern  
7 Intertie Hourly Rates" No. BP-20-E-PX-02?

8 MR. McCRARY: Yes, I did.

9 MR. JOHNSON: Thank you.

10 The witness is available for  
11 cross-examination.

12 CROSS-EXAMINATION

13 BY MR. REITER:

14 Q. Good afternoon, Professor McCrary. Actually,  
15 I probably should say, since you're in New York, "Good  
16 evening."

17 A. (Justin McCrary) Yes, that's true.

18 Q. Thank you.

19 So it's fair to say, is it not, that  
20 you're appearing here as an expert on, among other  
21 things, regression analysis and not as an advocate for  
22 any particular party. Would that be a fair statement?

23 A. (Justin McCrary) Yes, that's correct.

24 Q. I wonder if you could turn to page 9 of your  
25 testimony, and in particular line 12. Tell me when

1 you have that in front of you.

2 A. (Justin McCrary) I have it in front of me.

3 Q. Okay. So at line 12 you're -- you say that  
4 the Powerex IM entry -- EIM entry is not the primary  
5 variable of interest in a regression. Do you see  
6 that?

7 A. (Justin McCrary) I do, yes.

8 Q. Okay. What was your familiarity with EIM at  
9 the time you prepared your testimony in this case?

10 A. (Justin McCrary) Are you referring to the  
11 regression, or are you referring to the market?

12 Q. The market.

13 A. (Justin McCrary) So prior to my engagement in  
14 this matter, I had not been familiar with the EIM  
15 market. And, in particular, I'll note that my  
16 understanding of my role here today is that I've been  
17 asked to provide testimony regarding statistics and  
18 econometrics and, in particular, regression  
19 methodology.

20 I'm not holding myself out as an industry  
21 expert, and I understand that Mr. Wellenius may have  
22 provided testimony that's more consistent with that.  
23 That's not my understanding of my role today.

24 Q. That's my understanding. So would it be fair  
25 to say that you relied on Mr. Wellenius' opinions

1 regarding the relevance of this EIM entry to help  
2 inform your opinion about the relevance of the EIM --  
3 Powerex EIM entry variable?

4       A.   (Justin McCrary)   No.   Actually, I was  
5 familiar with the broad strokes of some of his  
6 criticisms from the review of his report, but the  
7 inclusion of the Powerex EIM entry variable and the  
8 regression model itself is fundamentally distortionary  
9 and misleading and means that the regression doesn't  
10 have the interpretation that's being put on by Parker  
11 and Peters.   That's really the nature of my critique.

12       Q.   Is it fair to say that's based, at least in  
13 part, on your conclusion about the relevance of that  
14 variable to an regression analysis?

15       A.   (Justin McCrary)   I would say no.   If it was  
16 true that it was known that the entry of Powerex into  
17 the EIM market was something that was a very important  
18 phenomenon that had to be taken account of, the way in  
19 which that was done so here is still distortionary and  
20 misleading and is inconsistent with professional  
21 standards.   This is not what you would have seen  
22 having been done and consistent with promotion to  
23 tenure or having been hired as an economist or  
24 publication for peer review or, honestly, even an  
25 undergraduate thesis would not have gotten a passing

1 mark.

2 Q. Okay. That's actually what I was going to ask  
3 you about. Are you familiar with the -- with the  
4 procedural rules at Bonneville and in particular the  
5 entitlement of parties to conduct discovery on the  
6 testimony of other parties' witnesses?

7 A. (Justin McCrary) I have a general  
8 understanding of discovery. I also understand that  
9 this is not exactly the same as other discovery  
10 context with which I have some familiarity. And I'm  
11 sure that you know the rules better than I do.

12 Q. All right. Well, you --

13 A. (Justin McCrary) I have a general sense.

14 Q. So let me ask --

15 A. (Justin McCrary) Nothing specific.

16 Q. I'm sorry. It's hard to know, when you can't  
17 see somebody, when their answer has ended.

18 A. (Justin McCrary) No problem.

19 Q. So you testify at page 10 of your testimony  
20 that you would have at least -- expected at least a  
21 fulsome explanation of why Parker and Peters believe  
22 it was appropriate to include this variable in the  
23 regression. Do you see that testimony?

24 A. (Justin McCrary) I'm sorry. I was just  
25 flipping to the page. What line number are you



1 referring to?

2 Q. Page 10, lines 10 and 11.

3 A. (Justin McCrary) Yes.

4 Q. Okay. Now, you're not saying that you -- that  
5 you couldn't have asked in discovery for an  
6 explanation of why they included it whether or not you  
7 expected it should have been in the -- in the  
8 testimony to begin with; is that correct?

9 A. (Justin McCrary) I'm sorry. I think I lost  
10 track of your question.

11 Q. Sure. Okay. I think you stated you would  
12 have expected that explanation to appear in their  
13 testimony; right?

14 A. (Justin McCrary) That's correct.

15 Q. Okay. But do you understand that you would  
16 have -- you had the opportunity to ask why it was not  
17 included and to ask for the explanation in discovery?

18 A. (Justin McCrary) Honestly, I would have  
19 expected for that explanation to have been in their --  
20 in their testimony. That would have been -- and maybe  
21 we'll get into this in the cross-examination, or maybe  
22 it's very clear already from the -- from the testimony  
23 that I submitted.

24 But the inclusion of that variable means  
25 that you're not actually engaging in what Parker and

1 Peters claims they're engaging in. So their -- their  
2 testimony is that they provided a before-and-after  
3 analysis. And that's not actually true with the  
4 Powerex EIM entry variable included in the model.

5 So when I realized that the Powerex EIM  
6 entry variable was included in the model and the way  
7 that that actually distorts the interpretation that  
8 was -- that was put upon the model by Parker and  
9 Peters, I immediately realized, oh, this is precisely  
10 the kind of thing that one has an absolute obligation  
11 to describe. That would be true in any academic paper  
12 and in any informal conversation regarding the  
13 interpretation that should be put upon regression.

14 Q. That's not my question, though. My question  
15 is: Did you understand that you had the right to ask  
16 for that explanation? even if you think it should have  
17 been there.

18 MR. JOHNSON: Objection, Your Honor.  
19 Asked and answered.

20 And to the extent counsel's asking for an  
21 interpretation of Bonneville's Rules of Procedure,  
22 that's outside the scope.

23 MR. REITER: Your Honor, they can -- he  
24 can express his understanding of what he had a right  
25 to ask for.

1                   MR. McCrary: And I'm happy to reach that,  
2 honestly.

3                   So it didn't even occur to me. So, you  
4 know, it might have been within my right. I'm  
5 certainly no expert with respect to the rules of  
6 procedure there. I'm not. I also, honestly, think  
7 that, in my mind, it didn't occur to me, oh, I'd like  
8 to ask them. It occurred to me instead that this is  
9 precisely the kind of thing that must be disclosed any  
10 time you're describing a regression.

11 BY MR. REITER:

12           Q. So let me ask you this because you mentioned  
13 the standards for publication. I've been the  
14 executive editor of the "Energy Law Journal" for a  
15 number of years; and so it's a peer-reviewed energy  
16 law journal.

17           A. (Justin McCrary) Uh-huh.

18           Q. And we get manuscripts, potential articles  
19 frequently. And sometimes -- in fact, it's not  
20 unusual that we will find the author has stated a  
21 proposition or made an argument that we feel is  
22 inadequately supported, and we don't reject the  
23 manuscript necessarily. We would ask them if they  
24 have an explanation.

25                   Is that consistent with some of your

1 experiences? that that may happen from time to time.

2 A. (Justin McCrary) It would depend on the  
3 issue.

4 So what I'm trying to describe in my  
5 comments today and also in the written testimony that  
6 I submitted is that this -- this issue is not that  
7 type of issue. This issue is one that fundamentally  
8 distorts the nature of the comparison that's being  
9 drawn. Regression just really does do a comparison in  
10 this kind of a scenario and is really trying to do a  
11 before-and-after analysis maybe controlling for other  
12 factors if you want to be even more subtle about it  
13 than that. Basically it's a before-and-after  
14 comparison.

15 And the inclusion of the Powerex EIM entry  
16 variable means that it doesn't actually accomplish  
17 that and compares apples to oranges instead of apples  
18 to apples. That means that it's not really a  
19 situation where you put yourself in the posture of  
20 asking a clarifying question.

21 You realize, number one, the regression  
22 doesn't mean what they say it means. And, number two,  
23 failing to describe that is -- frankly, I was  
24 appalled. I think that that is generally an  
25 undergraduate, amateur-hour type of mistake. It's not

1 something I would want for any kind of a regulatory  
2 body to rely on or trier of fact to take seriously.  
3 It's just doesn't belong in that -- in that arena at  
4 all.

5 Q. So you're not saying there isn't an  
6 explanation. You're saying they had a clear  
7 obligation to include it. Is that a fair summary?

8 A. (Justin McCrary) That is a fair summary.

9 Q. Okay. I wanted to get to one other point you  
10 discussed in your testimony on page 5. Let me know  
11 when you're at page 5.

12 A. (Justin McCrary) Sure. Let me flip there.  
13 I'm there.

14 Q. At around lines 5 to 7, you're referring to  
15 one of the errors that you say that was in -- in the  
16 analysis they did and that it was -- and that they did  
17 not treat the periods before and after the hourly rate  
18 increase -- that is, before and after I think it was  
19 October 1, '17 -- symmetrically. Do you see that  
20 reference?

21 A. (Justin McCrary) I do.

22 Q. Okay. Is there a rule in econometrics that  
23 the analysis of a change, in this case the change in  
24 the rate on October 1, must always use the identical  
25 durations before and after the change?

1           A.   (Justin McCrary)   If we're talking about an  
2 analysis of events that unfold over time as we do  
3 here -- and before and after means specifically about  
4 time -- and if we're also taking into account, for  
5 example, seasonality -- that is to say, you know, June  
6 has a different meaning than does, say, December --  
7 then it would almost always be right that the windows  
8 of time would either be defined in a symmetric way or  
9 it would be right that there would be an effect of the  
10 regression methodology that would be employed that  
11 would try to make sure that the nature of the  
12 comparisons was apples to apples.

13                       And that's actually precisely what I was  
14 getting at a moment ago regarding my testimony that  
15 what was being done here with the inclusion of the  
16 Powerex EIM entry variable is that it changes the  
17 before-and-after comparison in a fundamental way so  
18 that it's no longer apples to apples and instead  
19 apples to oranges.

20           Q.   If you could just give me a minute.

21           A.   (Justin McCrary)   Sure.

22                       MR. REITER:   Professor, thank you very  
23 much.   I have no further questions.

24                       HEARING OFFICER DENNISON-LEONARD:   Thank  
25 you.

1                   Mr. McCrary, you're welcome to re-mute  
2 yourself or drop off. Excuse me. Dr. McCrary.

3                   MR. McCRARY: No worries.

4                   HEARING OFFICER DENNISON-LEONARD: I do  
5 want to go over just a couple of just logistical  
6 issues specifically with respect to corrections of the  
7 transcript. The process that we are proposing, we had  
8 in the order on the scheduling for cross-examination  
9 the contact information for the court reporter. Those  
10 who wish to purchase a transcript should be able to do  
11 so by Friday, April 20 -- I think it's April 26th.

12                   And if the counsel for the party that was  
13 being cross-examined and counsel for Joint Party 01  
14 can agree on corrections, then they can just give them  
15 to Bonneville's counsel, and they will relay that to  
16 the court reporting service.

17                   If they're agreed-upon changes, we don't  
18 need to go through a formal motion process. If there  
19 are proposed corrections and the party that was being  
20 cross-examined and Joint Party 01 don't agree what the  
21 corrections should be, then that would be handled  
22 through motions. And I think we would ask that any  
23 motion to correct the transcript with respect to a  
24 correction that is not agreed-upon be done within ten  
25 days of today's date.

1 Does that process -- is there anyone who  
2 would not be comfortable proceeding on that basis in  
3 terms of reviewing and correcting the transcript?

4 MR. REITER: That's fine with me, Your  
5 Honor.

6 I just want to get clarification of the  
7 timing. If we're in agreement, how soon should we try  
8 -- I mean, there's a pretty short schedule between now  
9 and the date that briefs are due. So how soon should  
10 we try to -- usually it's not a big deal to reach  
11 agreement on transcript corrections. How soon shall  
12 we --

13 HEARING OFFICER DENNISON-LEONARD: I mean,  
14 I think is there sort of a boundary at which point it  
15 will not really be useful to the parties because we've  
16 gotten too close? What's your view of that?

17 MR. REITER: I would think, if we're  
18 getting the transcript by Friday, you know, we should  
19 be able to exchange any potential corrections by the  
20 middle of the following week; otherwise, it's going to  
21 drag out too long. I don't want to burden other  
22 parties, but I think that, otherwise, we may wind up,  
23 you know, not knowing what the final transcript looks  
24 like when we have to write our briefs.

25 HEARING OFFICER DENNISON-LEONARD:



1 Mr. Johnson, you're --

2 MR. JOHNSON: Yes, Your Honor. That would  
3 be fine with Powerex. We would be happy to review the  
4 transcript and provide any suggested corrections to  
5 you for review by Wednesday.

6 MR. REITER: And we'll do likewise.

7 MR. JOHNSON: Yeah. Wednesday of next  
8 week.

9 HEARING OFFICER DENNISON-LEONARD:  
10 Ms. Scruggs?

11 MS. SCRUGGS: No objection, Your Honor.

12 HEARING OFFICER DENNISON-LEONARD:  
13 Mr. Perkins?

14 MR. PERKINS: Yes, that's acceptable. I  
15 think we can confer informally and try to work out any  
16 types of corrections.

17 HEARING OFFICER DENNISON-LEONARD: All  
18 right. So that will be the process for transcript  
19 corrections. Is there -- are there any other matters  
20 to be addressed before we adjourn today?

21 All right. That concludes  
22 cross-examination in the BP-20 power transmission rate  
23 proceeding.

24 Thank you.

25 (The proceedings concluded at 4:50 PM.)

## C E R T I F I C A T E

STATE OF OREGON           )  
                                  )  
County of Multnomah   ) ss.

I, Shellene L. Iverson, a Certified Shorthand Reporter for the State of Oregon, do hereby certify that the witness appeared before me and were sworn at said time and place set forth in the caption hereof.

At said time and place I reported in stenotype all testimony adduced and other oral proceedings had in the foregoing matter; that thereafter my notes were reduced into the typewritten transcript; and the foregoing transcript, pages 3 through 250, both inclusive, is a true and correct transcript of my original stenographic notes.

I also certify I am not a relative or employee of any attorney/counsel employed by the parties hereto or financially interested in the action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal at Portland, Oregon, this 26th day of April 2019.

**Shellene L.  
Iverson**

Digitally signed by Shellene L. Iverson  
DN: cn=Shellene L. Iverson, o=Capri-  
Iverson Reporting, ou,  
email=iversons@cireporting.com, c=US  
Date: 2019.05.03 13:48:56 -07'00'

Shellene L. Iverson  
Certified Shorthand Reporter  
Certificate No. 03-0386  
Certificate Expires: 9/30/21

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<b>\$0.01</b> (225:22)	<b>103</b> (126:17)(127:4)	<b>'16</b> (57:21)(176:2)(176:25)	<b>2012</b> (40:3)
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<b>\$15.77</b> (196:9)(220:20)	<b>107</b> (129:25)	<b>1636</b> (135:4)	<b>2015</b> (67:4)(68:4)(68:22)(70:12)
<b>\$3.50</b> (123:4)	<b>108</b> (134:5)	<b>164</b> (165:4)	(176:18)
<b>\$30</b> (196:8)	<b>11</b> (43:21)(59:7)(134:20)(134:24)	<b>16-hour</b> (206:2)(206:4)	<b>2016</b> (176:18)
<b>\$39</b> (208:10)	(173:14)(173:18)(174:3)(182:2)	<b>17</b> (11:19)(12:11)(14:17)(14:18)	<b>2017</b> (185:2)
<b>\$5</b> (196:11)	(182:10)(192:9)(196:16)(209:19)	(14:23)(15:1)(43:21)(79:13)(90:25)	<b>2018</b> (25:8)(41:17)(134:8)(185:3)
<b>\$7.91</b> (208:7)(208:20)(209:10)	(209:23)(220:18)(232:25)(233:1)	(104:4)(132:17)(133:7)(133:8)(168:14)	(186:15)(233:3)(234:5)
<b>/</b>	(241:2)	(168:18)(195:15)(227:18)	<b>2019</b> (3:8)
<b>//</b> (127:25)(140:25)(170:25)	<b>-</b>	<b>'</b>	<b>2020</b> (108:25)(113:13)(114:12)
(195:25)(223:25)	<b>-11</b> (9:22)	<b>'17</b> (33:1)(41:19)(83:5)(122:14)	<b>21</b> (31:23)(41:8)(48:22)(71:10)
<b>[</b>	<b>1</b>	(176:2)(180:2)(180:5)(206:1)(207:14)	(71:11)(71:13)(92:20)(93:1)(97:13)
<b>[as</b> (58:3)(59:6)	<b>11:18</b> (100:20)	(245:19)	(132:4)(168:4)(174:19)(230:1)(232:17)
<b>[been]</b> (108:8)	<b>11:23</b> (100:21)	<b>1</b>	<b>22</b> (24:9)(31:23)(128:5)(146:19)
<b>[Bonneville]</b> (55:20)(58:17)	<b>11:41</b> (115:10)	<b>1750</b> (136:25)	(165:4)(231:20)
<b>[Bonneville's]</b> (108:9)(108:14)	<b>110</b> (134:19)(135:1)	<b>1751</b> (135:3)	<b>-</b>
(169:22)	<b>111</b> (59:1)(59:7)	<b>18</b> (83:12)(90:25)(145:18)(150:3)	<b>2</b>
<b>[California</b> (67:7)	<b>118</b> (120:6)	(150:8)(189:10)(204:6)(228:17)	<b>23</b> (3:8)(30:9)(86:21)(148:22)
<b>[Fiscal</b> (108:16)	<b>12</b> (12:6)(66:25)(134:20)(134:24)	(233:15)	(149:3)
<b>[Long-term</b> (81:18)	(168:4)(173:7)(173:15)(196:16)	<b>'</b>	<b>-</b>
<b>[service]</b> (120:9)	(207:16)(208:5)(237:25)(238:3)	<b>'18</b> (33:1)(33:3)(41:19)(64:14)	<b>-23</b> (152:2)
<b>[that]</b> (82:16)	<b>-</b>	(64:19)(64:24)(65:2)(66:18)(75:9)(76:2)	<b>2</b>
<b>0</b>	<b>-12</b> (9:22)(152:2)	(83:4)(89:16)(91:10)(122:17)(127:19)	<b>24</b> (77:19)
<b>01</b> (3:19)(3:23)(4:2)(4:18)(4:21)	<b>1</b>	(161:20)(180:3)(180:4)(180:14)(181:8)	<b>-</b>
(5:5)(7:20)(9:11)(14:13)(14:15)(14:19)	<b>12:45</b> (115:6)(115:8)	(182:8)(206:1)(207:13)	<b>-24</b> (22:16)(117:5)
(15:4)(15:6)(15:9)(20:9)(168:11)	<b>12:48</b> (115:11)	<b>-</b>	<b>2</b>
(170:12)(170:16)(200:1)(247:13)	<b>120</b> (71:10)(139:10)(142:15)	<b>1</b>	<b>25</b> (26:17)(35:20)(86:21)(115:21)
(247:20)	<b>124</b> (67:3)(68:2)	<b>19</b> (31:23)(76:18)(77:6)(79:11)	(118:10)(118:21)(165:5)
<b>01's</b> (170:13)	<b>126</b> (14:21)	(82:13)(92:20)(93:1)(97:13)(99:6)	<b>26</b> (41:8)(48:22)(77:19)
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morning

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one-for-one

people

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## Series

## statement

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Thank

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