In the Matter Of:

In Re: RMP - Significant Energy Resource Decision

HEARING, DAY 3, DOCKET NO. 17-035-40

May 31, 2018

Job Number: 451406A

1 - BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -2 Application of) Docket No. 17-035-40 3 Rocky Mountain Power) 4 for Approval of a) Significant Energy Resource) HEARING DAY 3 Decision and Voluntary 5) Request for Approval) PUBLIC SESSION 6 of Resource Decision) 7 * * 8 9 May 31, 2018 10 9:08 a.m. to 6:06 p.m. 11 12 Public Service Commission 13 160 East 300 South, Fourth Floor 14 Salt Lake City, Utah 84111 15 16 17 18 19 20 * * * Letitia L. Meredith Registered Professional Reporter 21 Certified Shorthand Reporter CA 22 23 24 25 Job No. 451406A

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1	PROCEEDINGS PROCEEDINGS
2	CHAIR LEVAR: We're back this morning in
3	Public Service Commission, Docket 17-035-40,
4	Application of Rocky Mountain Power for Approval of a
5	Significant Energy Resource Decision and Voluntary
6	Request for Approval of a Resource Decision.
7	This is Day 3 of our hearing, and we will
8	start with Dr. Joni Zenger, who has been on the stand
9	yesterday, and the next step is cross-examination by
10	Rocky Mountain Power.
11	You're still under oath from yesterday, and
12	so we'll go to the utility. Thank you.
13	DR. JONI ZENGER,
14	called as a witness on behalf of the Division, having
15	been previously duly sworn, was examined and
16	testified as follows:
17	CROSS-EXAMINATION
18	BY MS. MCDOWELL:
19	Q. Good morning, Dr. Zenger.
20	A. Good morning.
21	Q. So I wanted to start by asking you some
22	questions about the testimony summary you provided
23	yesterday, and I want to begin with some questions
24	about the Oregon order that you cited on the RFP
25	shortlist, which I believe is DPU Cross

Page 8 1 Exhibit No. 3. Do you have a copy of that? 2 Α. Yes -- Justin, do you have -- I'll get one. 3 I have it. 4 Q. Thank you. So in your testimony summary you made a number of arguments about this Order, and 5 just to be clear, those arguments are nowhere in your 6 prefiled testimony; correct? 7 Regarding this Order? 8 Α. 9 ο. Yes. No, because the Order came out after my 10 Α. 11 testimony. 12 Q. So that's new testimony? The topics aren't new, but the fact that 13 Α. 14 the Order came out regarding the topics I talked 15 about, that's new. So you argue that the Order increases the 16 0. risk of disallowance in Oregon. Is that a fair 17 18 summary of what you stated yesterday? It increases the risk of disallowance in 19 Α. 20 Oregon? Just to paraphrase what I heard you 21 0. Yes. 22 say in your summary yesterday, you said that it increased risk to Utah customers because it increased 23 the risk of disallowance in Oregon. Is that a fair 24 25 summary?

1	Page 9 A. Yes.
2	Q. So isn't it true that the Order expressly
3	disclaims such an interpretation? And I'll direct
4	you to page 13 of that Order.
5	Do you have that?
6	A. Yes.
7	Q. In there it states at the bottom of the
8	page, the last full sentence of the page, "Although
9	we do not acknowledge the shortlist, we believe
10	PacifiCorp is in no different position than it was
11	after its IRP acknowledgment. Resource investment
12	decisions ultimately rest firmly with the Company.
13	We are committed to give fair regulatory treatment to
14	Resource Decisions that PacifiCorp ultimately makes."
15	Now, that language does not sound like the
16	Commission has prejudged the combined projects? Does
17	it?
18	A. That language there does not.
19	Q. And if we're focusing on decisions from
20	other states, isn't really the more material
21	development here the risk-reducing CPCN from the
22	Wyoming commission?
23	A. That would be a risk-reducing, yes.
24	Q. And wouldn't you also agree that the
25	Company's stipulation with the Idaho staff that is

Page 10 now pending before the Idaho commission is also 1 2 risk-reducing? 3 Α. Yes. 4 So you're not saying that the Commission 0. should give more weight to the Oregon order than the 5 Wyoming or Idaho developments, are you? 6 I didn't say that, but I do think that the 7 Α. Oregon order does carry a lot of weight because the 8 9 Company can still go ahead with the projects on its own but at its own -- it accepts the risks rather 10 11 than sharing the risks with ratepayers. 12 0. But it has IRP acknowledgment; correct? 13 Yeah, Oregon order has IRP acknowledgment Α. 14 but not RFP acknowledgment. 15 So in your testimony summary, you also Q. accuse the Company of a poor record of natural gas 16 price forecasting, resulting in trading losses. 17 Do you recall that? 18 Yes, I do. 19 Α. 20 So can you point me to the part of your Q. 21 testimony that addresses and supports that statement? 2.2 Α. Yeah. Our witness Dan Peaco is the main 23 expert on that, but I also raised it in my testimony. Sorry. If I had the electronic version, it would go 24 25 much faster.

Page 11 1 0. I just didn't recall any reference to 2 trading losses in your testimony, so that's why I'm asking. 3 4 Α. There's a real small paragraph on page 17 of my Confidential Exhibit 1.0 R Supplemental, 1.0 5 Surrebuttal, on the bottom of 17. 6 So I don't see anything in that statement 7 0. about trading losses or about the Company's history 8 9 of under-forecasting natural gas processes, and that was specifically what I was asking about. 10 11 Α. Let's see. To the extent market 12 projections factor in future price risk, they 13 overstate projected benefits by inflating future 14 benefits. The risk that natural gas and carbon prices are or may be lower than assumed, " and I go on 15 16 to say how the Company projects out 20 to 30 years in the future. But I do believe there's another section 17 in here if I can --18 19 Justin, if you see that before I do, let me 20 know. 21 0. Perhaps we can come back to that --2.2 Α. Okay. 23 -- at the end of my cross-examination. 0. 24 So in your summary you also claimed that the Company's -- I think you called it "the need for 25

1	Page 12 haste in this case was self-inflicted" I think
2	those were your words because the Production Tax
3	Credits have been around for a long time. Do you
4	recall that part of your summary?
5	A. I do.
6	Q. So are you aware that the Production Tax
7	Credits actually expired on January 1, 2015, and were
8	not in place during any part of 2015?
9	A. I'm aware that the law changed and that the
10	new IRS ruling provided additional guidance that
11	would extend them, so I'm not aware exactly what the
12	January 15th rule was on them.
13	Q. Well, I'll represent to you that the
14	Production Tax Credits expired on January 1, 2015 and
15	then were reenacted at the end of the year through
16	the PATH Act. Does that sound does that click
17	with your or align with your understanding?
18	A. Yeah, I remember for sure them reenacting
19	with the PATH Act.
20	Q. Right. At the end of 2015. And then the
21	IRS guidance associated with the PATH Act was
22	promulgated in mid-2016. Does that also sound
23	comport with your understanding of the schedule?
24	A. I'm not sure about the IRS guidance part,
25	but I knew that the PATH Act and that information had

1	Page 13 been you know, had been known by parties in 2015.
2	Q. So you don't know you're testifying that
3	the PTCs were available to the Company, but you don't
4	know when the IRS guidance on the PATH Act came out?
5	A. I probably do have it somewhere in my wind
6	repowering testimony, but I would have to go look at
7	that.
8	Q. Well, assuming subject to check that the
9	Internal Revenue guidance came out in mid-2016 I
10	think Ms. Crane testified it was May of 2016 that
11	meant the Company had approximately one year before
12	it filed to identify the opportunity, develop the
13	opportunity, obtain safe harbor equipment, add the
14	opportunity to the IRP, develop the RFP, and file
15	this case. Does that all of that occurred in
16	approximately a one-year period; correct?
17	A. Yes, as I recall and this was also in
18	the wind repowering case the Company provided
19	discovery that stated that they had been approached
20	by GE and the wind turbine manufacturers seemed
21	like it was spring of 2015.
22	Q. Well, in the spring of 2015, the Production
23	Tax Credits were not in effect; correct? So I would
24	assume you mean the spring of 2016?
25	A. Okay. Let's see. When did you say the

Page 14 1 PATH Act -- I don't have my 39 testimony. 2 Q. The PATH Act was passed, enacted in 3 December of 2015. 4 Α. Okay. Yeah, then it would have been in the 5 spring of 2016 that the Company was accosted by the wind turbine manufacturers. 6 So wouldn't you agree that all of the tasks 7 0. I just listed would be a pretty big job to accomplish 8 in a one-year period? 9 10 Α. Yes. 11 So you also claim that the capacity Q. 12 contribution from the combined projects is small and 13 the cost is large. Do you recall that part of your 14 summary? 15 Α. Yes, yes. 16 So between 2006 and 2010, are you aware 0. that the Company added 12 wind plants which were the 17 18 wind plants subject to repowering in the repowering 19 docket? 20 Α. Yes. 21 And that's approximately -- was 0. 22 approximately 1000 megawatts of wind? That's what, 23 again, was subject to the repowering docket? 24 You mean the ones that were originally put Α. 25 in, you mean?

Page 15 1 0. Yes. 2 That sounds about right. Α. And you -- I reviewed some testimony that 3 0. 4 you filed in the 2009 rate case where you reviewed the prudence of many of those wind resources? 5 Do you recall reviewing many of those wind resources at the 6 time? 7 8 Α. Yes. 9 ο. So would it surprise you to learn that the Company's investment in its current wind fleet 10 11 between that period of time, 2006 to 2010, was 12 approximately \$2 billion for those 12 wind plants? 13 That wouldn't -- it wouldn't surprise me. Α. So during 2006 to 2010, the Company added 14 0. approximately 1000 megawatts of wind for 15 approximately \$2 billion, and here the Company 16 proposes to add more wind, 1150 megawatts and 17 140-mile transmission line for approximately that 18 19 same cost; isn't that correct? 20 Α. Yes. 21 Now, you mentioned -- your testimony in the 0. 22 repowering case, can you turn to your direct 23 testimony at page 16, please, and there at the top of the page, line 319, there's a question that states 24 "Is the Division's testimony here consistent with 25

Page 16 your testimony in Docket No. 17-035-39 related to the 1 2 Company's request to repower its wind facilities?" Do you see that? 3 4 Α. Yes. So there you state that the Division's 5 0. 6 position in this case and the repowering case are consistent; is that correct? 7 8 Α. Yeah, consistent in that the Company failed 9 to demonstrate that they -- either project provided net benefits to ratepayers. 10 11 So even though repowering was a voluntary Q. 12 resource case and this case involves a Significant 13 Energy Resource Decision, it's fair to say that the 14 Division applied essentially the same rationale in both cases? 15 16 No, I didn't say that. I just said that Α. our finding determined that the Company in both cases 17 18 failed to demonstrate that they were prudent. 19 ο. So can you now turn to page eight of your April 17th testimony. 20 21 Α. Yes. 22 Q. And I want to direct your attention to 23 Line 142 to 143, and the question at Line 127 is "Has the Company acknowledged these uncertainties related 24 to the combined projects?" And then one of the 25

1	Page 17 uncertainties you list there is that "the Company's
2	in the midst of acquiring land rights and is having
3	disputes with landowners in Wyoming."
4	Do you see that testimony?
5	A. Yes.
6	Q. So your only support for that statement is
7	your footnote which list the intervenors in the
8	Wyoming CPCN docket; isn't that true?
9	A. One minute. It wasn't the only support,
10	but I did list and identify each of the filings by
11	the intervening parties who are objecting, but I also
12	noted that the Company still needed to obtain
13	approval from the Industrial Siting board and other
14	rights-of-way.
15	Q. My question here is what your support is
16	for the statement that the Company is having disputes
17	with landowners in Wyoming. The only evidence you
18	cite in this testimony is that Footnote No. 5; isn't
19	that correct?
20	A. Yes.
21	Q. Are you aware that two of the parties you
22	list in this footnote the North Laramie Range
23	Alliance and Rock Creek Wind are not landowner
24	intervenors?
25	A. I knew that they represented either sheep

Page 18 1 holders, mineral rights owners or -- in other words, 2 they had some type of special interests in the 3 docket. 4 So I'll represent to you that the 0. Northern Laramie Range Alliance is an environmental 5 intervenor and Rock Creek Wind is a -- was a bidder 6 7 in the RFP process. Does that refresh your recollection about the identity --8 Yes. 9 Α. 10 -- of those parties? 0. 11 Uh-huh. Α. 12 Q. And isn't it true by the date of your 13 testimony, April 17, 2018, all but one of the intervenors you list in this footnote had withdrawn 14 from the Wyoming CPCN docket? 15 16 I'd have to take that subject to check, Α. 17 yeah. 18 So were you present during Mr. Teply's Q. testimony yesterday? 19 20 Yes. Α. 21 And are you aware, based on his testimony, 0. 22 that the Company has already reached preliminary 23 agreements on rights-of-way for over 50 percent of the impacted landowners associated with the 24 transmission line and wind projects? 25

1	A. Yes. Page 19
2	Q. So with respect to obtaining rights-of-way
3	then, the Company is actually well ahead of the
4	project schedule; isn't that correct?
5	A. I haven't looked at the latest project
6	schedule, and I was concerned with either those last
7	ones because those are the ones that could cause big
8	delays if they have to go into eminent domain
9	proceedings.
10	Q. I'll represent to you that the schedule
11	provides one year for obtaining rights-of-way, and at
12	this point one year from now for obtaining
13	rights-of-way, and at this point the Company has
14	already obtained agreements for 50 percent of those
15	rights-of-way. So doesn't that give the Company a
16	fair amount of headroom to obtain the rest of those
17	rights-of-way?
18	A. Yes.
19	Q. Can you turn to page 14 of your testimony,
20	please. I want to direct your attention to your
21	testimony beginning on Line 248 and going to 256, and
22	there you argue that the Commission should view the
23	Company's forecast of transmission costs with
24	skepticism because of the Company's experience with
25	respect to the Populus to Terminal transmission line.

Page 20 1 Do you see that testimony? 2 Yes, I do. Α. And you allege there that the cost of the 3 0. 4 line increased tenfold from 78 million to 5 108 million. Do you see that testimony on Lines 252 to 253? 6 7 Α. Yes. 8 So in support of that you cite your Q. 9 testimony in Footnote 20. Do you see that? 10 Α. Yes. 11 That's testimony from the CPCN docket for Q. 12 the Populus to Terminal line; correct? 13 Α. Correct. 14 Ο. Now, isn't it true that your testimony in that case made clear that the \$78 million cost that 15 16 you refer to there relates to the 2006 merger commitment related to the 300 megawatts Path C line? 17 18 Α. Yes. I wasn't sure right off the top of my 19 head how much the merger commitment was, but I know 20 that it referred to it. Was it -- I'd have to -- if 21 it's 300 megawatts, I have to check that. 22 Q. Will you accept subject to check --23 Α. Yeah. -- that the \$78 million related to the 24 0. Company's merger commitment related to the Path C 25

Page 21 line, which was a 300 megawatts transmission line? 1 2 Α. Yes. And the CPCN case itself dealt with the 3 0. 4 1400 megawatts Populus to Terminal line; correct? 5 Α. Yes. And Path C was just a small section of that 6 Q. larger Populus to Terminal line; correct? 7 Subject to check, yeah. 8 Α. 9 ο. And your testimony in that CPCN docket was 10 supportive of the Populus to Terminal line CPCN; 11 correct? 12 Α. Correct. 13 And you never raised any concerns in that 0. 14 docket with respect to project scope or cost; 15 correct? I don't know that I never did. I think 16 Α. once we started receiving all the change notices and 17 project change notices, I may have in the next rate 18 case, so that I can't testify to, the general rate 19 20 cases. 21 0. But with respect to the CPCN docket, your 22 testimony was supportive of that line? 23 Α. Yes, generally. And never raised the issue that costs had 24 0. 25 increased from 78 million to 800 million?

Page 22 1 Α. If the cost increased on the project, I 2 probably would have raised the issue. So are you aware that Mr. Mullins's 3 0. 4 December testimony in this docket, he also conflated the 300-megawatt Path C line and the 1400-megawatt 5 Populus to Terminal line? Are you aware of his 6 7 testimony on that same topic? I don't recall him specifically mentioning 8 Α. that one. 9 10 And in response, do you recall that 0. 11 Mr. Vail testified in January in his rebuttal 12 testimony that the Populus to Terminal line was actually delivered within 7 percent of the estimated 13 14 costs, not at a 1000 percent above the estimated 15 costs? 16 Yes, I recall that. Α. But your testimony ignores that fact; 17 Q. There's no reference to the fact that the 18 correct? 19 Company actually came in at 7 percent of its estimated project costs; correct? 20 21 Α. I don't address it. I have not verified 2.2 it. 23 Can you turn to page 26 of your testimony. 0. 24 MR. JETTER: I'm sorry. Could you repeat that. 25 MS. MCDOWELL: Page 26.

Page 23 MR. JETTER: Of the surrebuttal? 1 2 MS. MCDOWELL: The same testimony, the April 17 3 testimony. Okay. 4 MR. JETTER: Thank you. I would like to direct your attention to 5 0. 6 the question that begins on Line 512 and then goes on 7 to the answers on page 27. Do you have that? Α. 8 Yes. 9 ο. And there you object to the combined projects as early acquisition. Do you see that? 10 11 Α. Yes. 12 Q. And in support you cite to an Order in the 13 Mona to Oquirrh case, the CPCN docket. Do you see 14 that testimony? 15 Yes. Α. 16 And I've handed you -- before we began I 0. actually put up on the witness stand there a cross 17 exhibit, Cross Exhibit No. 2, which is the 18 Commission's Order in that case. Do you have that? 19 20 Yes, I do. Α. 21 So can you turn to page 15 of that Order, 0. 22 please. So just to back up, in that case the 23 Commission approved the Company's CPCN request for that line with the exception of the Limber to 24 25 Terminal line; is that correct?

Page 24 1 Α. Correct. 2 Q. And on page 15 in denying CPCN for that portion of the line, the Commission pointed to 3 4 several factors beginning at the middle of the page. The first is that the Company had no specific 5 construction date planned. Do you see that? 6 7 On page 15? Α. Yeah, about midway down through the page. 8 Q. 9 Α. Yes. And it also stated that -- in the next 10 0. sentence that no in-service date had been established 11 12 by the Company. Do you see that? 13 Α. Yes. And then, again, down in the next paragraph 14 Ο. it says that "the Company has not received, nor is it 15 16 in the process of obtaining, a conditional use permit for this line." Do you see that? 17 18 Α. Yeah. And the same paragraph for -- it 19 says we have not -- the Company hasn't established 20 the present or future need. 21 0. So your testimony cites this case as 22 precedent for denying approval of the transmission 23 line in this case as an early acquisition; correct? I think the main reason in my case here is 24 Α. I support -- to show support that the Commission 25

1	Page 25 approved a research decision in full in part so
2	that could be applicable to this case, that if
3	there's that they could also approve part of the
4	decision if they find a certain part is not in the
5	public interest.
6	Q. So doesn't this case present a very
7	different scenario than the Limber to Terminal line?
8	And I'll just explain my question a little bit
9	further. The line here has a specific in-service
10	date; correct? 2024, which the Company's proposing
11	to move up to 2020; correct?
12	A. Correct.
13	Q. And the need for the line is documented in
14	the Company's long-term transmission plan; correct?
15	A. It's in the long-term transmission plan,
16	but it's been debated to this day.
17	Q. And, finally, the permitting process, you
18	would agree, for the line in this case has been
19	extensive; correct?
20	A. Correct.
21	Q. So with respect to the need for that
22	transmission line and the permitting status, I want
23	to ask you some questions about another cross exhibit
24	that I provided to you before we began, and that is
25	Cross Exhibit No. 3, which is the Division's Comments

Page 26 1 in response to the 2015 IRP Update. 2 Do you have that? Α. Let's see. 3 4 It's dated June 29, 2016, and you're listed 0. 5 as one of the --6 Α. Yes. 7 -- authors of those comments. Do you see 0. 8 that? Uh-huh. 9 Α. So these comments were filed in June of 10 0. 11 2016 and that's about the time that the public 12 process in the 2017 IRP began; correct? 13 Α. I'd have to check when we had the kickoff 14 meeting. It may be earlier than that. I'd have double-check. 15 16 But sometime in mid-2016 the public process 0. began for the 2017 IRP? 17 18 I want to say maybe April. Α. Yes. 19 Q. Can you turn to page 11 of those comments. 20 These are the comments requesting waiver of Α. 21 the business plan sensitivity; right? 22 Q. Yeah, but also comments to the Integrated 23 Resource Plan update. It's the combined comments, and I, just to save paper, only included in this the 24 25 excerpt that was related to the IRP update.

Page 27 1 Α. Okay. I'm there. 2 Q. So I want to direct your attention to the top of page 11 where it states "Energy Gateway 3 4 Permitting." Do you see that? 5 Α. Yes. 6 Q. And there it says that "It appears that progress is being made in the areas of permitting and 7 funding," and then it lists Segment D, which is the 8 segment related to the line that's before the 9 Commission in this case; correct? 10 11 Α. Well, it's been broken up into different 12 segments since then. 13 So Segment D2 is the segment that is ο. 14 specifically involved in this case; correct? 15 Α. Right. 16 So can you turn to page 12 of the document, 0. the next page. And there the comments state -- and 17 18 I'll just read this paragraph into the record and 19 then ask a question about it. 20 "The Company first announced its Gateway Energy Transmission Plan in 2007. While the IRP 21 22 identifies the need for more transmission lines to 23 deliver electricity to customers either from new generating plants or through improved access to 24 25 existing resources in the region, Energy Gateway

Page 28 1 meets this need by providing access to both 2 conventional and renewable energy sources in areas with diverse resources. 3 4 "From the time public outreach began in 2008, the difficulty in permitting, further 5 6 assessments, and delays with the projected in-service, this portion of the transmission line 7 8 will have taken nine years to complete. In spite of 9 the delays, the Energy Gateway strategy is a 10 fundamental part of the Company's long-term planning 11 for existing and future customers, and the Division 12 stresses the importance of transmission planning 13 because of its long lead time." 14 So I want to ask you about this comment. Isn't it true that one year before this case was 15 16 filed, the Division stated that the Energy Gateway line is needed and is a fundamental part of the 17 18 Company's plan for its existing and future customers? 19 Α. Okay. One year from when? What were your 20 dates? 21 One year from the date this case was filed. 0. 22 These comments were filed June 29, 2016. This case 23 was filed one year later on June 30th, 2017. 24 Α. I have to do some thinking on that. Yeah, so this was the tail end of the 2015 IRP update, and 25

Page 29 1 then you filed this, yep. And then this current case 2 was filed June 30th. So your answer is yes? 3 Q. 4 Α. Yes. So given the long lead time for permitting 5 0. and construction of transmission, wouldn't you agree 6 that there are risks to customers in waiting until 7 there is a reliability need to build transmission? 8 9 Α. Yes. MS. MCDOWELL: That's all I have. Thank you. 10 And I quess, let me just, before I conclude, offer 11 12 Cross Exhibit 2 and 3. 13 CHAIR LEVAR: Okay. Is there any objection to 14 entering those two exhibits into evidence? 15 Not seeing any objection, so the motion is 16 granted. 17 (RMP Cross Exhibit 2 and 3 were received.) 18 MS. MCDOWELL: Thank you. 19 CHAIR LEVAR: Okay. Mr. Jetter or Ms. Schmid, 20 if you have any redirect. 21 MS. SCHMID: May we have just one moment. 2.2 CHAIR LEVAR: Yes. 23 MR. JETTER: I'm ready whenever the rest of the 24 room is. 25 THE WITNESS: Okay.

Page 30 1 MR. JETTER: May I proceed, Mr. Chairman? 2 CHAIR LEVAR: Yes. MR. JETTER: 3 Thank you. 4 REDIRECT EXAMINATION BY MR. JETTER: 5 6 Q. Dr. Zenger, I would like to ask you just a few brief redirect questions. If you recall 7 8 answering some questions from counsel for WRA 9 yesterday regarding the Commission's view of the choice of low-cost resources, if the Division viewed 10 11 the combined projects in this case as the lowest-cost 12 reasonable lowest-risk resource, would the Division 13 support the projects? 14 Α. That would depend on taking into consideration the risk, the remaining risk. 15 16 0. Okay. And would you agree with me that the Division would support resource acquisition if it was 17 shown to be lower cost and lower risk than market 18 transactions? 19 20 Yes, yes. Α. 21 Thank you. With respect to their risk of 0. 22 disallowance that you've discussed in some of the cross-examination, isn't it a fair assessment that 23 24 the calculations that you've seen from the parties including the Division's own calculations evaluating 25

Page 31 1 the risk of this project prior to the Oregon order 2 being issued were done with the assumption that all 3 states would approve the project?

4 A. Yes.

5 Q. And with respect to disputed land issues, 6 was it your understanding that Rocky Mountain Power 7 would go one by one through each landowner and wait 8 until it had a finished approval with each landowner 9 before moving on to the next, or would you expect 10 them to have been seeking landowner approval with all 11 landowners concurrently?

12 Α. My understanding is that they either 13 contact or send out letters to any affected landowner 14 within a certain amount of feet, so they try to, you know, in a large group identify them, and then they 15 16 narrow down the group as they find out which groups are more affected or, you know, if the line is going 17 to go through their line -- through their land, if 18 19 there's issues, and then it does come down to a 20 one-on-one meeting with the landowners. 21 0. Okay. And so on a timing basis -- let me

21 Q. Okay. And so on a timing basis -- let me 22 ask you a brief foundational question to this. Is it 23 your understanding that any one of landowners can 24 hold up the project?

25 A. Yes, yes.

Page 32 It wouldn't make sense to build a 1 0. 2 transmission line with a gap over one landowner's property; is that correct? 3 4 Α. Correct. In terms of timing, even if you had 5 0. 6 99 percent of the land rights, the 1 percent would still cause the same delay as having more than 7 1 percent of the land? 8 9 Α. That's correct. 10 I'd like to ask you briefly some quick 0. 11 follow-up questions regarding the Limber-to-Terminal 12 line that was projected by the Company to be needed sometime between 2017 and 2019. Is it currently 13 between 2017 and 2019? 14 Is the current projection date, did you 15 Α. 16 say? Just today is it within that time 17 Q. No. 18 frame range? 19 Α. Oh, yes, we are within that time frame. 20 And are you aware of the Company Q. 21 constructing the Limber-to-Terminal line? 2.2 Α. No. 23 0. So is it fair to say that delaying that 24 approval of that line requested by the Company may 25 have saved ratepayers money?

1	Page 33 A. Yes.
2	Q. And do you believe that it's appropriate to
3	wait to approve a transmission project until a
4	reliability problem is projected with some degree of
5	certainty?
6	A. Yeah, I think there needs to be some degree
7	of certainty, but I also don't believe that I mean
8	that's why we have the IRP because these projects
9	take long-term planning. It's not something that can
10	be done just in time, so yeah.
11	Q. But is it fair to say would you say that
12	waiting to begin construction on a major transmission
13	project should only be done with a demonstrated need
14	for that?
15	A. Is that the only reason? Is that what
16	you're asking me?
17	Q. What I'm asking is is it prudent to wait
18	until the need is demonstrated before constructing a
19	new transmission line?
20	A. Yes.
21	MR. JETTER: Those are all of my redirect
22	questions. Thank you.
23	CHAIR LEVAR: Okay. If any party intends to do
24	any recross based on Mr. Jetter's questions, please
25	indicate to me.

1	Page 34 MS. MCDOWELL: I have one additional question.
2	Dr
3	CHAIR LEVAR: Let me just I'm not seeing
4	anyone else with recross. Okay.
5	MS. MCDOWELL: So sorry I jumped in there and
6	interrupted.
7	RECROSS-EXAMINATION
8	BY MS. MCDOWELL:
9	Q. Dr. Zenger, I did ask you a question early
10	on in my cross-examination asking for any support in
11	your testimony for your statement that the Company
12	had failed to accurately project natural gas prices
13	and specifically that that resulted in trading
14	losses, and you had indicated that perhaps your
15	counsel could point that out to you.
16	In redirect your counsel did not direct
17	your attention to any part of your testimony that
18	supports those statements in your summary, did he?
19	MR. JETTER: I'm going to enter an objection to
20	relevance of this line of questioning. Counsel for
21	Rocky Mountain Power said during the oral arguments
22	on her motion at the beginning of this hearing that
23	we were free to have some latitude in rebutting the
24	Company's new testimony.
25	I don't know what the relevance would be

Page 35 then to discussing some additional information from 1 2 the Division witnesses in their opening comments that are directly related to some of the comments from 3 4 Rocky Mountain Power. CHAIR LEVAR: Would you like to respond to the 5 6 objection? 7 MS. MCDOWELL: Let me respond in two ways. First of all, we said that assuming that the motion 8 9 would be denied. The motion was granted, and the 10 material that you felt was new was stricken. So the 11 procedural order in this case does not allow for live 12 surrebuttal, and in any event, even if that were the 13 issue, what I'm asking here is in her summary she made specific statements. And I'm asking for the 14 15 evidentiary support for those statements, and there 16 isn't any. So that's -- I'm totally entitled to ask 17 for what it is that's supporting statements she's 18 making to this Commission. 19 CHAIR LEVAR: I'm going to overrule the 20 objection. I do recognize that technically this 21 wasn't part of your cross-examination -- I mean part 2.2 of your redirect, so technically it wouldn't fall in 23 recross, but you raised it in your original cross as an issue we would come back to later. 24 25 I do think it's relevant to ask Ms. Zenger

Page 36 1 if a statement in her opening statement is supported 2 in her testimony, so I'm going to allow her to answer 3 the question. 4 Α. So I do believe it's supported. Other than 5 that one piece I pointed you to -- I'm quickly looking for my other statements. I know that I do 6 discuss it and mention that our witness Dan Peaco has 7 done the analysis on it. 8 I'd like to also make a note while 9 MR. JETTER: we're looking, on the record, that the Division's 10 11 motion was not granted. The Division's motion that 12 adjoined with the industrial groups was denied. 13 CHAIR LEVAR: Okay. Thank you. That's an 14 appropriate clarification for the record. 15 MS. MCDOWELL: I think appropriately it was 16 partially granted and partially denied. That was my -- I mean you granted the motion with respect to 17 the solar sensitivities and that -- as new 18 information. 19 20 CHAIR LEVAR: I think that's an accurate 21 description of the results. 2.2 MS. MCDOWELL: Yes. Thank you. 23 CHAIR LEVAR: I'll just comment, while Dr. Zenger is looking, I think the relevance of this 24 doesn't rest to that issue, though. I mean whether a 25

1	Page 37 statement in her opening statement is supported in
2	her testimony is a relevant question to ask. The
3	answer might be yes or no, but regardless of whether
4	live surrebuttal is allowed, it's relevant to
5	answer to know one way or the other whether the
6	statement supported her testimony.
7	A. I think I can just answer that with a yes
8	and refer to the excerpt on page 17 where I talk
9	about market price risk.
10	CHAIR LEVAR: Of your April 17th testimony?
11	A. Yes, my April 17th.
12	Q. So your testimony is that your testimony
13	yesterday about the Company's inability to forecast
14	natural gas prices and its that leading to trading
15	losses is supported only by this statement on
16	page 17; correct?
17	A. No, I didn't say
18	Q. In your testimony?
19	A. No, I didn't say "only by"
20	Q. Can you point me
21	A. But I'm saying it is supported by that
22	statement.
23	Q. Excuse me. Can you point to me any other
24	part of your testimony that specifically supports
25	those contentions?
1	

Page 38 1 Α. Let me just quickly read this one. "Market 2 price risk, there are risks that natural gas and 3 carbon prices are or may be lower than assumed. The 4 Company's projecting 20 to 30 years of market and fuel prices into the future. Any calculation that is 5 6 too high means that net power cost savings are less likely to be realized. To the extent market 7 projections factor in the future price risk, they 8 9 overstate projected benefits by inflating future benefits." 10 11 And that statement, just to be clear, says Q. 12 nothing about the Company's track record of 13 forecasting natural gas prices; correct? I'm looking for that. 14 Α. MS. MCDOWELL: Well, perhaps to move this along, 15 16 we could conclude at this point, and if Dr. Zenger finds a specific reference that's relevant to that 17 part of the summary, the Division could re-call her 18 19 to identify that. 20 CHAIR LEVAR: Any objection from the Division to 21 moving forward that way? 2.2 MR. JETTER: No, that's fine. We can probably introduce the evidence in cross of another witness 23 24 too, so we can just move on. 25 CHAIR LEVAR: Okay. Is that all of your

1	Page 39
2	MS. MCDOWELL: That's all I have. Thank you.
3	CHAIR LEVAR: Okay. Commissioner White, do you
4	have any questions for Dr. Zenger?
5	COMMISSIONER WHITE: Good morning. Yeah, just
6	one. There's been a lot of discussion about from
7	the Division's position about risk. There's a lot of
8	risks that are at play, I guess, in this project
9	you know, pricing, forecast, construction, PTCs.
10	Is there something in your mind do you
11	rank these in terms of what is the highest level of
12	risk to these projects coming to be beneficial, I
13	guess, to customers? I'm just trying to or is it
14	just a totality of the risk? Is there anything in
15	particular that is the key driver, I guess, in terms
16	of what you perceive as a risk?
17	DR. ZENGER: Well, so my testimony the record
18	is in my testimony, and I haven't given a probability
19	weighting to any of the risks. The tax risk was one
20	of the primary ones, which did come to bear, did come
21	to fruition. The PTCs availability is huge, and
22	anything that would affect the PTCs being realized is
23	risks.
24	For example, there was a legislative bill
25	in Wyoming to double the wind tax in Wyoming, and

1	Page 40 even though that didn't pass, that would have negated
2	the PTC value, and so anything that affects the PTC
3	value or calculation is a risk. And Wyoming is
4	getting a new governor, so I still think that's a
5	very likely possibility going forward.
6	The cost in construction risks are
7	obviously risks in that, you know, we need the
8	projects to be commissioned by the end of 2020,
9	and we haven't seen the final EPC contracts, so the
10	other company states they will assume some of these
11	risks and that, but we don't know really what that
12	means.
13	We don't know if you know, if there's
14	large legal fees in the construction contracts or
15	something that customers may end up paying for anyway
16	just to assure us that there's no risks. So I think
17	those contracts I think I listed quite a few in my
18	rebuttal testimony. So anything affecting the PTCs,
19	affecting them coming being commissioned on time.
20	There's risks that the Company makes a
21	lot of assumptions that, you know, we don't know will
22	come to bear. For instance, building the new
23	projects, they are new. They are not projects that
24	are just being recommissioned. They are using new
25	turbines, new towers. We don't know if we're going

1	Page 41 to have gear box failure, O&M problems.
2	The Division believes there's a risk in
3	accepting on face value the Company's SO and PaR
4	results because our witness Mr. Peaco demonstrated
5	those aren't likely to be the accurate numbers. It's
6	more likely that the projects will harm customers.
7	So back to your original question about the
8	weighting or if one is more important than another, I
9	mean they are all important, but I'd have to go back
10	through and look at each one we've identified and see
11	where we're at, and, yeah, obviously some risks have
12	been eliminated. Some have been assuaged. So there
13	still are a lot of risks that remain.
14	COMMISSIONER WHITE: Thank you. I have no
15	further questions.
16	CHAIR LEVAR: Mr. Clark, do you have any
17	questions?
18	COMMISSIONER CLARK: Yeah, I would like to
19	pursue your comments about risk in this way: In the
20	repower docket, the Division raised a number of risks
21	that sound to me to be similar, at least in
22	character the risk that the projects would qualify
23	for Production Tax Credits, the risks that the
24	projection of energy that would be produced would
25	that those projections would not be realized or
1	

Page 42 would -- there would be a shortfall and so the 1 2 realization of the credits would be less than in the 3 economic assumptions or the economic analyses that 4 supported the projects, risks related to construction costs and -- as you think about those kinds of risks 5 that you just enumerated, are any of them more 6 significant or more severe in this setting than in 7 the repower setting in your mind or are they all 8 9 basically similar -- basically similar in severity? DR. ZENGER: I think the risks in this docket 10 11 are much more severe for several reasons. One, we've 12 got the transmission line that needs to be built to 13 power the new wind facilities; and, two, it's just a 14 big massive undertaking. It's not just going in and taking off parts of a wind turbine generator and 15 16 sticking on new ones. 17 You've got to bring in cranes and cranes

17 You've got to bring in cranes and cranes 18 and cranes project to project with different crews, 19 and that's a big undertaking. It's massive in this 20 docket. So the construction cost is bigger, getting 21 the line built at the same time. You know, we have 22 to have construction workers coming in and doing the 23 line and equipment.

And I think we're relying really heavily in this case on third-party consulting reports, whether

1	Page 43 it's the Sapere report talking about the projected
2	net capacity value factors for these new wind farms
3	or the pro forma contracts for the contractors that
4	we that are unsigned and we haven't seen the terms
5	of or we haven't reviewed the Company's bidding or
6	even the weighting of the bidding, how they are
7	bidding.
8	Are they you know, is it in ratepayers'
9	interest the way they are bidding those? Or is
10	you know, is the Company going to assume some of the
11	risk or, you know, if they don't come to fruition or
12	they are late, are ratepayers going to pay it one way
13	or another?
14	So I think the fact that this is all new
15	construction; we've got the transmission line just
16	those in and of itself makes the risks in this
17	project more severe than the repowering one.
18	COMMISSIONER CLARK: No further questions.
19	Thank you.
20	CHAIR LEVAR: Thank you. I just have a couple
21	questions on just one narrow portion of your
22	testimony.
23	In your experience are landowner disputes
24	typical when any transmission line is built?
25	DR. ZENGER: I'm looking at the ones we have

1	Page 44 recent history of here in Utah, and, yeah, I remember
2	the Populus to Terminal one, and there were a lot of
3	disputes. A lot of that began with the way that
4	Rocky Mountain Power was handling it. Their
5	community affairs and their outreach program is much
6	better now, but there were landowners that hadn't
7	heard anything about it, and so, yeah, I think you're
8	going to have the "not in my backyard" problem.
9	We've had it so far in every transmission line that
10	I've seen so far.
11	CHAIR LEVAR: Do you have any reason to believe
12	that landowner disputes in connection with the line
13	that's in front of us in this docket are atypical or
14	are more severe than what would be normal in any
15	transmission line construction?
16	DR. ZENGER: Yeah. I think they are because in
17	reading some of the filings from the parties that
18	either hadn't they may not have been just a
19	landowner but they have rights to the land or mineral
20	rights or something. Those people are extremely
21	passionate about it because they've planned, you
22	know, their whole livelihood on drilling in this area
23	or fourth generation family sheepherders or something
24	like that.
25	But I think they are more severe here

1	Page 45 because we're not just talking about a resident and
2	it crossing a piece of someone's farm. From what
3	I've read in the Wyoming proceeding, the
4	Rock Creek and these were I don't know how to
5	explain it. These were these are taken more
6	serious, and I would not be surprised at all if one
7	of them ends up being an eminent domain case.
8	CHAIR LEVAR: Okay. Thank you. I appreciate
9	those answers. Thank you, Dr. Zenger. We appreciate
10	your testimony today.
11	DR. ZENGER: Thank you.
12	CHAIR LEVAR: Mr. Jetter or Ms. Schmid?
13	MR. JETTER: Thank you. The Division would like
14	to call it's next witness, Mr. Charles Peterson.
15	CHAIR LEVAR: Mr. Peterson, do you swear to tell
16	the truth?
17	THE WITNESS: Yes.
18	CHAIR LEVAR: Thank you.
19	MR. LOWNEY: Serving some cross-examination
20	exhibits.
21	MR. JETTER: May I proceed, Mr. Chair?
22	CHAIR LEVAR: Yes.
23	MR. JETTER: Thank you.
24	CHARLES E. PETERSON,
25	called as a witness on behalf of the Division, having

1	Page 46 been duly sworn, was examined and testified as
2	follows:
3	DIRECT EXAMINATION
4	BY MR. JETTER:
5	Q. Mr. Peterson, would you please state your
6	name and occupation for the record.
7	A. Charles E. Peterson, spelled s-o-n. I'm a
8	utility technical consultant with the Division of
9	Public Utilities.
10	Q. Thank you. And in the course of your
11	employment and review of this case for the Division
12	of Public Utilities, did you create and cause to be
13	filed with the Commission direct and supplemental
14	rebuttal and surrebuttal testimony in this docket?
15	A. Yes.
16	Q. If you were asked questions that were asked
17	and answered in those prefiled sets of testimony
18	today, would your answers remain the same?
19	A. Yes.
20	Q. Do you have any corrections or edits you
21	would like to make to that prefiled testimony?
22	A. Yes. On my direct testimony dated
23	December 5th on page 3, line 54, there's a typo
24	there. It refers to repowering projects, and that's
25	an artifact from the previous 39 docket that we had.

Page 47 It should read "combined projects," and I 1 2 should also note that my usage in this testimony of "combined projects" included the repowering, the 3 4 Wyoming wind and transmission all together. Thank you. And I'd just like to clarify a 5 0. little bit more on that issue. When you said the 6 combined projects, does that mean the four different 7 versions of the combined projects in this case at the 8 time those testimonies were given? 9 10 Well, what the direct testimony primarily Α. dealt with was the Company's original filed 11 12 testimony, and so it represented their -- I think 13 their 860-megawatt wind, for example, Wyoming wind in the original filing. 14 15 Thank you for that clarification. Q. Okay. 16 With that, I would move to enter the direct and supplemental rebuttal and surrebuttal testimony 17 prefiled by Mr. Charles Peterson in this docket along 18 with the exhibits attached to those two filings. 19 20 CHAIR LEVAR: If anyone objections to that 21 motion, please indicate to me. 2.2 I'm not seeing any objection from anyone, 23 so the motion is granted. Thank you. 24 (Prefiled Testimony and Exhibits of C. Peterson 25 were received.)

Page 48 1 0. Mr. Peterson, have you prepared a brief 2 summary of your testimony? 3 Α. Yes, I have. 4 ο. Please go ahead. Good morning, Commissioners. My testimony 5 Α. in this matter covered two areas. The first was 6 7 whether or not the Company had the financial capacity to finance its combined projects. I'm using it again 8 9 in a broad sense including the repowering. Without harm to itself and added cost to ratepayers. 10 11 The second area is the Company's RFP 12 process and the comments and conclusions of the Utah 13 and Oregon independent evaluators. 14 With respect to the first issue, my analyses indicate that it is within the financial 15 16 capacity of PacifiCorp to pursue the Wyoming wind and 17 transmission projects and also the repowering as it has proposed them. This is especially true if the 18 Company maintains a capital structure of 19 20 approximately 50 percent common equity, which the 21 Company seemingly has implied that it will do. 2.2 With respect to the Company's RFP, in 23 general the Company processed the RFP smoothly. 24 While different issues came up during the course of 25 the RFP, the Division's perception is that the

1	Page 49 Company worked with the independent evaluators to
2	satisfactorily resolve most issues.
3	As highlighted in my confidential
4	supplement rebuttal testimony, the independent
5	evaluators had positive things to say about the RFP,
6	but they also raised some concerns or criticisms. In
7	the Division's view, the Company did receive a robust
8	response to its RFP such that the Division is
9	reasonably confident that we have a good idea of the
10	market for projects to harness Wyoming wind.
11	However, as cited by both IEs, near the end
12	of the process the Company cited a restudy of the
13	area by PacifiCorp Transmission that would have
14	rendered most of the project bids nonviable based
15	upon the project's positions in the transmission
16	study queue.
17	While it is fortuitous that this had a
18	minimal effect on the Company's selected shortlist of
19	projects, it raises the question of whether the
20	Company would have received the same robust response
21	if bidders had known that above a certain
22	transmission queue number there was no chance of
23	being selected, which is the practical effect of the
24	restudy.
25	As the Oregon IE remarked, "Based on the

1	Page 50 final analysis laid out above" I'm quoting
2	"only one other third-party bid on the
3	shortlistcould even compete with these offers. In
4	fact, only one other Wyoming wind offerhad a high
5	enough queue position to be viable.
6	"So this entire RFP really boiled down to
7	two viable benchmarks and two third-party offers,
8	meaning a lot of analysis presented here was of
9	questionable valuable," end of quote. That's in the
10	IE Oregon IE's report pages 34 and 35.
11	In future RFPs, the Company needs to have
12	better coordination between its generation planning
13	and its transmission planning going into the RFP. As
14	quoted by the Oregon Commission in its May 23, 2018
15	order refusing to acknowledge the RFP shortlist"
16	they quote the Oregon IE. Quote, "'PacifiCorp's
17	procurement, in the form of this RFP, got out ahead
18	of its resource and transmission planning. If
19	PacifiCorp had identified this earlier, then all
20	aspects of this work IRP, transmission planning
21	and resource acquisition could have worked
22	together in a more coherent fashion,'" end of quote.
23	That's also in the IE's Oregon IE's report on
24	page 35.
25	So, again, the Division's conclusion would

Page 51 parallel the Oregon IE's, that in future RFPs the 1 2 Company needs to be sure that there's better 3 coordination within the Company. 4 In its latest filings, the Company witnesses take issue with several of the comments I 5 made including quotations from Utah and Oregon 6 7 independent evaluator reports regarding the Company's prosecution of its wind RFP. I believe my testimony 8 9 and the IE comments speak for themselves. And, of 10 course, we heard extensively from Mr. Oliver 11 yesterday. 12 I have one comment on the Company's latest 13 filings. Company witness Mr. Rick Link on Lines 475 to 478 of his latest surrebuttal testimony states 14 15 that, quote, "I'm aware of DPU's persistent concerns 16 about relying on FOTs to meet the Company's 13 percent planning-reserve margin target. 17 18 "For this reason I've been surprised by 19 DPU's arguments supporting increased reliance on 20 uncommitted FOT resources in its opposition to the 21 combined projects, " end of quote. 2.2 "The Division's concerns have been that the 23 Company may indeed need to reduce reliance on FOTs, 24 but what the Division envisioned is that the Company 25 would acquire dispatchable resources that have

1	Page 52 high-capacity contribution values, and not, as
2	proposed here, non-dispatchable wind resources that
3	are very inefficient in contributing to any claimed
4	capacity needs of the Company." And that concludes
5	my statement.
6	MR. JETTER: Thank you. I have no further
7	questions. Mr. Peterson is available for cross and
8	questions from the Commission.
9	CHAIR LEVAR: Okay. Thank you.
10	Mr. Moore or Mr. Snarr, do either of you
11	have questions for Mr. Peterson? No?
12	MR. MOORE: No.
13	CHAIR LEVAR: Okay. Mr. Russell, do you have
14	any questions for Mr. Peterson?
15	MR. RUSSELL: I do not. Thank you.
16	CHAIR LEVAR: Mr. Baker?
17	MR. BAKER: No questions. Thank you.
18	CHAIR LEVAR: Okay. Ms. Hickey?
19	MS. HICKEY: No questions. Thank you.
20	CHAIR LEVAR: Mr. Holman?
21	MR. HOLMAN: No questions. Thank you.
22	CHAIR LEVAR: Ms. Hayes?
23	MS. HAYES: No questions. Thank you.
24	CHAIR LEVAR: Okay. It's a little bit early for
25	a break, but probably makes sense not to try to find

	Page 53
1	a time in the middle of your cross-examination, and
2	since one of the bathrooms is certain to be being
3	cleaned right now, why don't we take about a
4	15-minute break. Come back sometime between 10:35
5	and 10:40.
6	(A break was taken, 10:20 to 10:35.)
7	CHAIR LEVAR: Okay. We're back on the record.
8	And before we move to Ms. McDowell's
9	cross-examination of Mr. Peterson, just to let
10	everyone know what we can plan for, assuming that we
11	finish all the witnesses in a reasonable time to
12	allow for oral argument tomorrow in the case we
13	don't, we'll have another discussion about it but
14	assuming there's time, our intention is to allow
15	two hours for oral arguments.
16	The way we intend to divide that up is we
17	intend to allow one hourly, generally, for the
18	parties who support the application and one hour for
19	the parties who do not support the application.
20	So Rocky Mountain Power, Utah Clean Energy,
21	Western Resource Advocates, and Interwest Energy
22	Alliance will have one hour to split up between them
23	as they choose to do so with both oral argument and
24	if Rocky Mountain Power wants to reserve time for
25	rebuttal.

	Decc. 54
1	Page 54 And then the other four parties the
2	Division of Public Utilities, the Office of Consumer
3	Services, Utah Association of Energy Users, and
4	Utah Industrial Energy Consumers have one hour, so
5	basically 15 minutes apiece, unless you agree to
6	divide that up any differently than that.
7	So we'll plan to do that at the conclusion
8	of the hearing tomorrow, and with that, we'll go to
9	Ms. McDowell's cross-examination of Mr. Peterson.
10	MS. MCDOWELL: Thank you, Chair LeVar. In the
11	interest of time and based on Mr. Peterson's summary,
12	we have decided to waive cross-examination and will
13	not be introducing the cross exhibits we distributed.
14	CHAIR LEVAR: Okay. Thank you.
15	Commission Clark, do you have any questions
16	for Mr. Peterson?
17	COMMISSIONER CLARK: No questions. Thank you.
18	CHAIR LEVAR: Commissioner White?
19	COMMISSIONER WHITE: No questions. Thank you.
20	CHAIR LEVAR: And I don't have any others. So
21	thank you for your testimony today.
22	CHARLES PETERSON: Thank you.
23	CHAIR LEVAR: That was probably an easier day
24	than you thought you'd have.
25	CHARLES PETERSON: It is, yes.
1	

Page 55 1 CHAIR LEVAR: Okay. 2 MR. JETTER: With that, the Division would like 3 to move to its next witness, and the Division will 4 call and have sworn in David Thomson. CHAIR LEVAR: Mr. Thomson, do you wear to tell 5 6 the truth. 7 DAVID THOMSON: I do. 8 CHAIR LEVAR: Thank you. 9 DAVID T. THOMSON, 10 called as a witness on behalf of the Division, being 11 duly sworn, was examined and testified as follows: 12 DIRECT EXAMINATION 13 BY MR. JETTER: 14 ο. Good morning, Mr. Thomson. Would you please state your name and occupation for the record, 15 16 and would you please spell your last name. 17 Okay. My name is David T. Thomson, Α. 18 T-h-o-m-s-o-n. There's no "p" in Thomson, and I'm a senior consult- or technical- -- what am I? 19 I'm 20 drawing a blank. 21 MS. SCHMID: Extremely valuable to the Division. 2.2 Α. Yeah, some sort of consultant with the 23 Division. 24 I believe your title is Utility Technical 0. 25 Consultant.

Page 56 Yeah, that's it. Utility Technical 1 Α. 2 Consultant. 0. Thank you. Have you -- in the course of 3 4 your employment as a Utility Technical Consultant, have you had the opportunity to review testimony in 5 this docket, and did you create and cause to be filed 6 with the Commission direct rebuttal and supplemental 7 rebuttal and surrebuttal testimonies? 8 That is correct. 9 Α. 10 Do you have any edits or changes you would 0. 11 like to make to those documents? 12 Α. I do not. 13 If you were asked the same questions in 0. 14 that prefiled testimony today, would your answers remain the same? 15 16 They would. Α. 17 Thank you. With that, I would like MR. JETTER: to move for entry into the record the direct, 18 rebuttal, and supplemental rebuttal, and surrebuttal 19 20 of DPU witness David Thomson along with the exhibits 21 attached thereto. 2.2 CHAIR LEVAR: If anyone objects to that motion, 23 please indicate to me. 24 I'm not seeing any objection, so the motion 25 is granted.

Page 57 (Prefiled Testimony and Exhibits of D. Thomson 1 2 were received.) Thank you. 3 MR. JETTER: 4 Mr. Thomson, have you prepared a brief 0. statement summarizing your testimony? 5 6 Α. I have. 7 Please qo ahead. 0. 8 Α. Thank you. Good morning, Commissioners. The Division 9 believes the Revenue Tracking Mechanism, or RTM, 10 unnecessary because existing methods are adequate for 11 12 rate recovery if the proposed combined new wind and 13 transmission projects are approved. 14 No information has been provided by the Company in its testimony in this docket or statements 15 in this hearing that should cause the Commission to 16 change its decision in the wind repowering docket. 17 18 The decision was to not approve the RTM. 19 If the Commission approves the new wind and 20 transmission projects proposed by the Company, the 21 Division believes, for reasons it put forth in this 22 docket and the wind repowering docket, that it would 23 be wise and in the public interest for the Company to use a general case for ratemaking associated with the 24 25 projects.

1	Page 58 The Division recommends the Commission deny
2	the Company's request for the RTM also in this
3	docket. And this completes my statement.
4	MR. JETTER: Thank you. I have no further
5	questions and would tender Mr. Thomson for cross and
6	questions from the Commission.
7	CHAIR LEVAR: Okay. Thank you. Mr. Moore do
8	you have any questions for Mr. Thomson or
9	Mr. Snarr.
10	MR. SNARR: Thank you.
11	CROSS-EXAMINATION
12	BY MR. SNARR:
13	Q. I just have a few questions just focusing
14	on one aspect of the accounting issues you've
15	addressed. In connection with my questions, I would
16	like to refer you to a prior Order of this
17	Commission, not for the sake of what the Commission
18	decided in that docket, but because they recounted
19	Division policies respecting accounting issues. May
20	I share that with you?
21	A. Sure.
22	Q. This is an Order issued on January 3rd,
23	2008. It's in the docket. The lead number is
24	06-035-163. It has to do with other issues related
25	to MidAmerican and PacifiCorp. I'm really just going

1	Page 59 to focus on issues relating to accounting that you
2	address here.
3	Mr. Thomson, I direct your attention to the
4	second page of what I handed you. I represent that's
5	page nine of the Commission's Order. Do you see the
6	highlighted portion there?
7	A. Could you speak into the mike, please?
8	Thank you.
9	Q. Oh. Sure. I would like to direct your
10	attention to page nine, which is the second page, and
11	there's a highlighted portion of the Order. I'm
12	wondering if you could read the highlighted portion
13	to us.
14	A. "The Division's guidelines of the deferred
15	accounting treatment should be allowed for events
16	determined by the Commission on a case by case basis
17	to meet one of the following circumstances: Events
18	that are both unforeseen and extraordinary; or events
19	that provide a future net benefit for ratepayers.
20	"The Division defines 'unforeseen' as an
21	event where the impacts could not be anticipated in
22	the ratemaking process and defines 'extraordinary' as
23	an event that is specific, unusual, unique,
24	infrequent, material, not ongoing, and not a part of
25	the normal operations."

Page 60 1 Does this somewhat reflect the current 0. 2 Division policies? Α. No. I think the Commission has a 3 4 discretion on deferred accounting for things that are not in the past, and this statement has to do with 5 retro -- using deferred accounting for retroactive 6 ratemaking, and so since we're not talking about 7 retroactive ratemaking, they could come in and do 8 deferred accounting for the future costs. 9 As far as Division guidelines, do you take 10 0. issue with this summary that the Commission has made 11 12 here about when deferred accounting might be 13 appropriate? 14 Α. I think this is a proper statement having to do with retroactive ratemaking having to do 15 deferred accounting. 16 Is it the position of the Division, isn't 17 ο. it, that the proposed projects in the case at hand 18 here do not provide benefits to customers; is that 19 20 correct? 21 Α. That is correct. 22 ο. And as far as the Division is concerned, are there conditions -- are there unforeseeable 23 events or extraordinary circumstances apparent in 24 25 this case?

1	Page 61 A. I think this case is normal future
2	ratemaking, and when the Company decides these
3	projects are going to be built, if they want to defer
4	those costs that are taken now or in the future, they
5	can do deferred accounting. These guidelines,
6	unforeseen, extraordinary, have to do with them
7	getting a deferred accounting order retroactively
8	from something that's already happened in the past.
9	That's our guidelines.
10	Q. Isn't it true that you recommended that the
11	general rate case be used to recover the costs in
12	connection with this case?
13	A. That's my number one priority, and I've
14	made it pretty clear, I think
15	Q. Thank you.
16	A that that's our recommendation, to do
17	the general rate case.
18	Q. And you also made it clear that the
19	Division opposes any use of the RTM; is that right?
20	A. That is correct.
21	Q. And you also made it clear in your
22	testimony, I believe, that you indicated there should
23	not be any carrying charge via the RTM mechanism or
24	even through deferred accounting if it happened to
25	apply?

1	Page 62 A. That was my recommendation.
2	MR. SNARR: Okay. Thank you.
3	CHAIR LEVAR: Is that all your questions?
4	MR. SNARR: Yes.
5	CHAIR LEVAR: Mr. Russell, do you have any
6	questions for Mr. Thomson?
7	MR. RUSSELL: I do not. Thank you.
8	CHAIR LEVAR: Mr. Baker?
9	MR. BAKER: I do not. Thanks.
10	CHAIR LEVAR: Ms. Hickey?
11	MS. HICKEY: None. Thank you, sir.
12	CHAIR LEVAR: Mr. Holman?
13	MR. HOLMAN: No questions. Thank you.
14	CHAIR LEVAR: Ms. Hayes?
15	MS. HAYES: No questions for me either.
16	CHAIR LEVAR: Thank you.
17	Ms. McDowell or Mr. Lowney?
18	MS. MCDOWELL: The Company has no questions.
19	Thank you.
20	CHAIR LEVAR: Okay. Thank you.
21	Commissioner White, do you have any
22	questions for Mr. Thomson?
23	COMMISSIONER WHITE: No questions. Thank you.
24	CHAIR LEVAR: Commissioner Clark?
25	COMMISSIONER CLARK: No questions.
1	

1	Page 63 CHAIR LEVAR: And I don't either. Thank you for
2	your testimony today, Mr. Thomson.
3	DAVID THOMSON: Thank you.
4	CHAIR LEVAR: Mr. Snarr, did you want to enter
5	this into evidence or was it simply just
6	MR. SNARR: It was just to add in the
7	cross-examination. There's no need to have it
8	entered.
9	CHAIR LEVAR: Thank you.
10	MR. SNARR: Thank you.
11	MR. JETTER: The Division would like to call its
12	next witness, Mr. Dan Peaco. And while Mr. Peaco is
13	headed to the stand, I would just like to give notice
14	to the Commission that the Division does not intend
15	to call Robert Davis or enter his testimony into the
16	record of this proceeding.
17	CHAIR LEVAR: Okay.
18	MR. JETTER: He did file in, I think, the first
19	round for intervening parties.
20	CHAIR LEVAR: In December, yes. Thank you for
21	informing us of that.
22	Mr. Peaco, do you swear to tell the truth?
23	DANIEL PEACO: I do.
24	CHAIR LEVAR: Thank you.
25	///

	Daga 64
1	Page 64 DANIEL E. PEACO,
2	called as a witness on behalf of the Division, being
3	duly sworn, was examined and testified as follows:
4	DIRECT EXAMINATION
5	BY MR. JETTER:
6	Q. Mr. Peaco, would please state your name and
7	occupation.
8	A. My name is Daniel Peaco. I'm principal
9	consultant with Daymark Energy Advisers, consultant
10	to the Division.
11	Q. Thank you. Did you create and cause to
12	filed with the Commission direct and surrebuttal as
13	well as supplemental rebuttal and surrebuttal
14	testimony in this docket?
15	A. I did.
16	Q. Do you have any edits or changes you would
17	like to make to any of those three prefiled
18	testimonies?
19	A. I do not.
20	Q. If you were asked the same questions in
21	those testimonies today, would your answers remain
22	the same?
23	A. Yes.
24	Q. I would like to move at this time to enter
25	into the record the direct surrebuttal and
1	

Page 65 supplemental rebuttal and surrebuttal testimony of 1 2 DPU witness Daniel Peaco. CHAIR LEVAR: Okay. If anyone objects to that 3 4 motion, please indicate to me. I'm not seeing any objections, so the 5 6 motion is granted. (Prefiled Testimony and Exhibits of D. Peaco 7 were received.) 8 9 ο. Thank you. Mr. Peaco, you have prepared a 10 summary of your testimony this morning? 11 Α. Yes. 12 0. Please go ahead and read it, and I just ask 13 that for the court reporter's sake maybe read it a little slowly, slower than --14 15 I have a reputation, I guess, in that Α. 16 regard so I'll try to --That would be great. Thank you. 17 Q. She can't quite kick me, but I have been 18 Α. 19 kicked before, so I'll try to slow down. 20 Okay. Good morning, Commissioners. Ι 21 appreciate the opportunity to present my testimony on 2.2 behalf of the Division this morning. 23 The Wind and Transmission Projects, what I will call the Combined Projects -- which are the 24 combined projects within this docket only as opposed 25

1	Page 66 to Mr. Peterson's broader definition proposed in
2	this docket are not in the ratepayers' best interest,
3	and approval is not in the public interest.
4	While the Company continues to argue that's
5	its own analysis demonstrates that it's acting in
6	best interest of the ratepayers, the Division and
7	every other customer group offering testimony in this
8	case disagrees. It is my view that the Company's
9	analysis overstates the benefits and ignores key
10	downside risks. As a result, it has not demonstrated
11	that the Combined Projects are likely to benefit
12	ratepayers.
13	The Company's approach fails to consider a
14	number of alternative resource options that would
15	provide ratepayers with the lowest-cost, lowest-risk
16	resource. Even as compared to taking no action, the
17	proposed projects are reasonably likely to result in
18	net cost to ratepayers and expose ratepayers to
19	significant cost risk.
20	The Company has conducted a large number of
21	analyses and scenarios using its complex planning
22	models. However, the volume and complexity of the
23	analysis is not a sufficient basis for judging the
24	credibility of the results. In this case, the
25	Company's analysis masks key assumptions, omits key

Page 67 1 alternatives, and ignores significant risks that 2 drive an inflated representation of the benefits of 3 the combined projects.

4 As I have shown in my testimony, the inputs and methods used in the Company's modeling produce 5 results and analysis that are biased in the favor of 6 the Company's owned wind projects over wind purchase 7 alternatives and in favor of the Combined Projects, 8 9 in total, over other alternatives. The Company has 10 repeatedly modified its methodology to omit costs 11 attributable to the project and impute speculative 12 benefits to justify the Combined Projects.

13 When combining all of these together, the Company presents a price-policy scenario matrix that 14 suggests most of the outcomes are net benefits for 15 That conclusion belies the fact that the 16 customers. Company's modeling is not presenting a fair analysis 17 of the projects in any of the price-policy scenarios. 18 19 As a result, simply assuming that more net benefits 20 outcomes in the matrix means that the project is more 21 likely than not to produce a net benefit for 22 customers is not a correct conclusion.

The Company relies on several highly
speculative assumptions to reach its own net benefit
claims. Three of the most significant are, first,

Page 68 1 the omission of 12 percent of the transmission costs 2 during the life of the Wind Projects; second, the 3 omission of the revenue requirements of the 4 transmission costs after of the end of the Wind 5 Projects' life; and, third, the addition of a 6 terminal value amount for the Company's owned wind 7 turbines.

8 The Company's repeated changes to the 9 projects have left the reviewing parties with limited meaningful opportunity to review. The configuration 10 11 of the Combined Projects has changed in each of the 12 Company's filings in this proceeding with the 13 Company's January and February 2018 submissions including a total of 1,311 megawatts of new wind, 14 associated transmission network upgrades, and the 15 Aeolus-to-Bridger/Anticline 500 kV transmission line 16 at a capital cost of more than \$2.2 billion. 17 The Company modified the project in its 18 surrebuttal testimony to now include a total of 19 20 1,150 megawatts of new wind with the total cost of 21 the Combined Projects having been reduced

22 commensurate with the assumed cost of 161 megawatts23 Uinta Project removed from the proposal.

24 The economics of the combined projects as 25 propose by the Company are significantly dependent

1	Page 69 upon the limited-time opportunity represented by the
2	Production Tax Credits, or PTCs, available to the new
3	wind projects and to a future with significant
4	pricing of greenhouse gas emissions and natural gas
5	prices much higher than current market conditions.
6	These conditions, the other risk factors
	the Company is asking the ratepayers to bear, and the
8	lack of full consideration of resource alternatives
9	lead me to conclude to the combined projects are not
10	in the public interest.
11	I will now address these issues in more
12	detail. I will summarize findings and
13	recommendations relevant to the Commission's
14	consideration of the Company's most recent proposal
15	for the combined projects that I have presented in my
16	direct testimony, my surrebuttal testimony, and my
17	supplemental rebuttal and surrebuttal testimony,
18	focusing on the issues that the Company is now asking
19	the Commission to address in this case.
20	The first issue I would like to address is
21	the Uinta Project. As an initial matter, the
22	Company's combined projects as proposed in
23	January 2018 inappropriately included the Uinta wind
24	project as a project that is not dependent upon
25	the transmission projects. The Company did not

	Page 70
1	evaluate the Uinta Project as a stand-alone project
2	in its economic analysis.
3	I had recommended that the Unita Project be
4	evaluated separately from the balance of the combined
5	projects. Contrary to the Company's assertions, my
6	testimony did not propose removal of the Uinta
7	Project, rather that it should be evaluated fully as
8	a stand-alone proposal.
9	The Company withdrew the Uinta Project from
10	its application in its surrebuttal testimony. The
11	Company never provided a complete stand-alone
12	analysis of the Uinta Project. Its limited analysis
13	only provided positive values in six of the nine
14	price-policy scenarios, certainly not compelling
15	economics.
16	Given these circumstances, I support
17	excluding the Uinta Project from further
18	consideration in this proceeding. However, given the
19	Company's limited consideration of the project on its
20	own merits, I cannot offer a definitive assessment of
21	the economic merits of this project and would not
22	rule out further consideration of this project in a
23	subsequent proceeding.
24	Next I would like to address the issues of
25	need for the combined projects. The Company

r	D
1	Page 71 initially claimed that the approval of the
2	transmission projects was needed to capture a
3	time-limited economic opportunity. But the Company's
4	representations of the need for the combined projects
5	has materially changed through the course of the
6	proceeding. However, the Company's after-the-fact
7	claims of resource need are not supported by its
8	analysis or its procurements actions.
9	My investigation of the Company's initial
10	application confirmed the existing transmission
11	system meets NERC standards and that there is no
12	reliability based need for system upgrades in this
13	part of the transmission system if the wind projects
14	are not built.
15	The Company also acknowledged that the
16	transmission projects are not economic without the
17	wind projects and associated PTC benefits. There is
18	no resource need for these projects. They do not
19	serve to address any identified need from a
20	reliability or public policy requirement.
21	The Company initially offered the combined
22	projects as a unique opportunity for the Company to
23	develop the combined projects to provide cost savings
24	to ratepayers. It did not claim a resource need for
25	the combined projects. However, if the projects do

Page 72 not offer a high likelihood of economic benefits, 1 2 there is no need to act now and they would not be 3 part of any IRP-preferred portfolio to meet the 4 Company's needs. The Company's supplemental surrebuttal 5 testimony changed its rationale for the combined 6 projects, indicating the projects are needed to meet 7 an identified resource need. In this revised 8 9 position, the Company asserts that the projects are -- fill a need, specifically a capacity need to 10 11 meet system reserve requirements that would otherwise 12 be filled with Front Office Transactions, or FOTs, 13 asserting that the combined projects are part of the least-cost, least-risk plan for meeting resource 14 15 needs. 16 In my rebuttal testimony I demonstrate that the Company's assertions regarding the resource need 17 are not supported by evidence offered. 18 There are a number of alternatives that the Company should have 19 20 investigated if it were in fact seeking the 21 lowest-cost, lowest-risk alternatives to FOTs. 2.2 These considerations include the following: 23 The Company's 2017R Request for Proposals, or RFP, 24 design is not consistent with the resource need 25 asserted. If it was the Company's intent to meet a

1	Page 73 need for capacity in its system at least cost, an RFP
2	narrowly targeting only wind resources in a specific
3	location or even in the somewhat broader solicitation
4	of wind projects included in the final RFP is not
5	consistent with seeking resources to meet a capacity
6	need in its system at large at least cost. An
7	all-source RFP would have been much more consistent
8	with the need-based argument.
9	Second, the RFP evaluation process used a
10	portfolio methodology that effectively ignored the
11	cost of transmission in choosing wind resources in
12	eastern Wyoming. This evaluation does not lead to
13	identification of lowest-cost resources systemwide.
14	Third, the Company's separately solar RFP
15	produced proposals that provide higher benefits to
16	ratepayers.
17	Fourth, the Company opted for wind projects
18	that it planned to own and operate that it plans
19	to own and operate over wind projects offering power
20	through purchased power agreements, PPAs, despite the
21	fact that its own analysis showed the PPAs offered
22	the lower-cost, long-term solution. The Company has
23	not considered any lower-cost transmission solution
24	alternatives to the 500 kV facilities proposed such
25	as 345 kV or 230 kV upgrades.

Page 74 And, finally, six, the Company has not 1 2 presented any analysis of the economics of a delay in 3 the transmission projects or the combined projects to 2024 or later. 4 In surrebuttal testimony, the Company 5 6 reasserts the resource-need argument, arguing that 7 the FOTs are the least-cost alternative to the 182-megawatt capacity contribution that the combined 8 9 projects would add to the system. It also argues 10 that the economic opportunity and resource need are 11 not necessarily mutually exclusively. 12 The Company's new assertions do not address 13 the several reasons that the Company's assertion resource need is flawed including the Company does 14 15 not dispute my observation that the RFP design was narrow and not designed to seek the least-cost, 16 least-risk alternatives to FOTs to meet the system 17 18 reserve requirements. 19 The Company does not dispute that the RFP 20 evaluation ignored the transmission costs associated 21 with eastern wind projects. The Company offers no 22 explanation for the selection of wind self-build 23 projects over lower-cost PPAs. The Company does not 24 dispute that it has not considered or evaluated 25 alternative transmission products.

1	Page 75 The Company does not dispute that the
2	results of the solar RFP show the solar projects to
3	be lower cost than combined projects using the IRP
4	and RFP evaluation methods consistent with its
5	analysis of the combined projects.
6	Despite the Company's assertion in
7	surrebuttal that the transmission project would be
8	built in 2024 in any event, it did not present any
9	economic analysis of the deferral of the combined
10	projects to 2024 or later.
11	Taken together, these undisputed
12	circumstances make it clear that the Company did not
13	conduct the planning and procurement for the combined
14	projects to address the resource need it now asserts.
15	There are many alternatives other than eastern
16	Wyoming wind that could provide the capacity
17	requirements that the Company asserts would otherwise
18	be provided with FOTs.
19	These alternatives were not even considered
20	in the Company's analysis. The Company's combined
21	projects were initially proposed as an economic
22	opportunity for ratepayers, and that remains the case
23	now, despite the Company's more recent claims that
24	this is a needed capacity resource.
25	With respect to the solar RFP results, the

1	Page 76 solar projects offer better economics than the
2	combined projects. The Company's dismissal of the
3	solar RFP results for purposes of this case is
4	another example of the flaw in its claim that it is
5	seeking the least-cost, least-risk capacity resource
6	as alternatives to FOTs.

7 Regarding the option to delay the combined projects, a decision to deny the current proposal in 8 9 this proceeding does not change the significant wind energy resource potential in eastern Wyoming and it 10 does not preclude the development of the transmission 11 12 projects at a later date as the Company says it would 13 If the high carbon pricing policies and higher do. gas price scenarios become more likely in the future, 14 the projects could offer better value to the 15 16 ratepayers at that time.

17 At this time, meaningful ratepayer savings appear only in scenarios with high natural gas prices 18 and high carbon pricing. Currently natural gas 19 20 prices are close to the Company's low case and there 21 is no carbon pricing policy in existing or proposed 22 law. Advancing the combined projects now means that 23 ratepayers assume the risk that high gas and carbon pricing do not materialize. 24

25 The Company's assertion that economic

Page 77 1 opportunity and resource need are not mutually 2 exclusive is premised on a false assertion that there 3 is a resource need basis for the combined projects. 4 As I have demonstrated, the resource need assertion is not consistent with the Company's planning or 5 procurement actions. The limited amount of capacity 6 provided by the combined projects is valued into the 7 analysis, but it is ancillary to the actual purpose 8 9 as originally stated by the Company and is apparent 10 in its procurement actions. 11 In summary, the Company's RFP design is not 12 consistent with the resource need it now asserts that 13 the combined projects address, and the Company's RFP and analysis ignores alternatives to the projects 14 that should have been considered. 15

16 I would like to shift to the Company's argument that there's an independent need for the 17 transmission projects. The Company has noted that 18 the Aeolus-to-Bridger/Anticline 500 kV transmission 19 20 projects, also known as Segment 2D of the Gateway 21 West Project, has been in the Company's transmission 22 plan since 2007. The Company's testimony on the need 23 for this line has changed materially through the 24 course of the proceeding.

The Company's initial application made

25

Page 78 clear that the transmission project was needed to 1 2 take advantage of the economic opportunity printed by 3 the wind projects in eastern Wyoming and without the 4 wind projects transmission line would not be economic and would not be built at this time. 5 6 The Company represented that the transmission project had never been economic until 7 The Company's application and supporting 8 now. 9 testimony made clear that the transmission projects and the wind projects were an economic opportunity 10 11 for the ratepayers and that the combined projects 12 would provide substantial economic benefits to 13 ratepayers. In its rebuttal testimony, the Company 14 15 changed its prior testimony that the transmission 16 projects are not needed unless the wind projects are developed to a claim that the need for the 17 transmission project is independent on the wind 18 projects and that the transmission project will be 19 20 built in 2024 in any event. 21 The Company has not provided any 22 reliability or economic analysis or studies that 23 support this new claim of independent need for the transmission projects now or at any point in the 24 25 future. The only study offered by the Company in

Page 79 support of this claim is a recent December 2017 transmission alternative study conducted by the Northern Tier Transmission Group, referred to as NTTG.

The NTTG study specifically examines 5 transmission solutions for the future that includes 6 1100 megawatts of the Company's new eastern Wyoming 7 wind projects, a total of 1600 megawatts of new wind, 8 9 and total of 3,200 megawatts of new generation in the region overall. Notably, this study includes no 10 11 analysis of the need for any of the alternative 12 transmission projects independent of this assumed 13 wind development.

14 After my review of the Company's new claim 15 I concluded that the transmission projects can be justified only in conjunction with the development of 16 17 significant new eastern Wyoming wind projects as all of the studies that the Company has conducted or 18 referred to have shown. If the economics do not 19 20 support the combined projects today and the 21 transmission projects are not built now, the timing 22 of the development will be contingent on future operational and economic conditions as has been the 23 case in the Company's plans for many years. 24 25 Nothing presented in this docket has

1	Page 80 established the basis for the claim that the Company
2	would otherwise prudently build the line in 2024.
3	The Company reasserts its claim that there is an
4	independent need for the transmission project in its
5	surrebuttal testimony, specifically asserts there's a
6	need to relieve existing congestion, that its ability
7	to deliver additional generation is constrained, and
8	that transmission projects are an integral component
9	to the long-term transmission plan.
10	The Company offers no new evidence to
11	support this reassertion of this claim, rather it
12	simply offers a statement of its prior limited
13	support of this claim. Contrary to Mr. Vail's
14	assertion that I misunderstood his claim of the need
15	for independent wind, his response only reinforces my
16	conclusion that the new wind projects are precisely
17	the basis for the need for the line.
18	Existing congestion in the system is
19	neither an economic or reliability basis to support
20	the need for the line. To be clear, congestion is an
21	economic issue, not a reliability issue. Congestion
22	exists in many transmission systems, and in some
23	cases the economic cost of congestion could justify
24	the investment in transmission facilities to relieve
25	that congestion.

1	Page 81 However, in this case, the Company has
2	offered no analysis of the economics of relieving the
3	existing congestion to support this claim much less
4	to demonstrate that the extent of congestion is in
5	any way commensurate with the cost of the
6	transmission project. At best, this is a minor
7	additional benefit but not a primary justification of
8	the need for the line, and the Company has provided
9	no analysis to demonstrate this need.
10	The Company's claim that the line is needed
11	to accommodate new generator request to interconnect
12	directly contradicts its claim that the need is
13	independent of new generation. It is precisely the
14	nexus between new wind generation and the
15	transmission projects that makes it clear that the
16	line is not needed absent new generation.
17	Lastly, the fact that the transmission
18	projects have been an integral component of its
19	long-term plans does not prove need independent of
20	new wind projects. The primary evidence of the
21	Company's claim is the NTTG study that expressly
22	studies the need presuming 3,200 megawatts of new
23	generation will be added to the system including 1100
24	megawatts of wind in eastern Wyoming.
25	The long-term plan is and always has been

1	Page 82 premised on the assumption that eastern Wyoming wind
2	will be developed and will require new transmission
3	to support that development. The timing of the
4	transmission inextricably linked to the point in time
5	when eastern Wyoming wind and the attendant
6	transmission needed to deliver that wind is deemed by
7	this Commission and others to be in the economic
8	interest of ratepayers.
9	I will now shift to talk about the criteria
10	for economic opportunity projects. The Company has
11	offered the combined projects as a unique opportunity
12	for the Company to develop these projects and receive
13	PTC benefits, resulting in lower power costs to
14	ratepayers. As I described earlier, the combined
15	projects are different than typical resource
16	decisions based on need for capacity.
17	The justification of these projects is
18	economics, not reliability, representing an
19	opportunity to lower cost to ratepayers. The
20	combined projects are not the least-cost, least-risk
21	alternative to meet a defined resource need.
22	The Company has asserted that these
23	projects offer a high likelihood of significant
24	benefits to ratepayers. In the context of this case,
25	in my view, a 50/50 proposition is not acceptable. I

Page 83 1 have examined the potential for adverse outcomes to 2 more fully explore the downside risks and seek 3 assurance of much higher probability of significant 4 benefits to ratepayers.

5 I've examined the projects' economics to 6 determine whether the results are sufficiently robust 7 to be beneficial to ratepayers across the full range 8 of market and policy outcomes, and they are aren't.

9 The Company's attempt to shift to the resource-need approach from an economic-opportunity 10 11 perspective includes a shift away from the Company's 12 promise of high likelihood of significant ratepayer 13 benefits. The Company is seeking to have the Commission place little weight on the scenarios that 14 produce negative benefits and have the Commission 15 16 overlook important downside risks of the projects.

17 In the case of an economic opportunity, the choice is different. The options are to pursue the 18 project or not pursue the project. A choice to 19 20 pursue such a project should be done only if there's 21 a high likelihood of significant benefits to 22 ratepayers. The Company is proposing an approach 23 that provides ratepayers much less assurance of significant benefits and significant likelihood that 24 25 ratepayers will see no benefits at all.

1	Page 84 I am not proposing some different legal
2	standard of review rather merely that the
3	Commission's public interest consideration should
4	include the fact there is no traditional resource or
5	reliability need in the absence of economic benefits.
6	I observe that the Company's current
7	estimate of the benefits from the combined projects
8	has declined from the analysis presented in its
9	direct testimony last fall in several of the
10	price-policy scenarios including all of the low gas
11	price scenarios. The Company's current analysis
12	estimates that the net ratepayer benefits across all
13	jurisdictions of the combined projects for the
14	nine price-policy scenarios range from a net cost of
15	184 million to a net benefit of 635 million. The
16	Company's analysis continues to show a net cost to
17	ratepayers in two low gas scenarios.
18	My testimony shows that the cost/benefit
19	margins in those results are not sufficient to assure
20	a high likelihood of significant benefits to
21	ratepayers even if you assume the Company's estimates
22	are reasonable. The low gas/zero CO2 scenario, the
23	Company's analysis shows the \$2.2 billion investment,
24	prior to the removal of Uinta, would impose a net
25	cost to ratepayers across all jurisdictions of

1	Page 85 184 million, resulting in a ratio of benefit to cost
2	of .92, meaning the Company's view is that the total
3	benefits are only 92 percent of cost.
4	The Company's analysis of its
5	medium gas/medium CO2 scenario shows net benefits of
6	\$167 million with a resulting ratio of benefits to
7	costs of 1.07, meaning the Company's view is that the
8	net benefits to ratepayers are only 7 percent of
9	total project costs. This value is much less than
10	the return on investment that the Company is seeking
11	with ratepayers receiving lower estimated benefits
12	than the Company while continuing to bear many
13	important risks.
14	In addition, these values include benefits
15	that I believe are speculative or overstated, making
16	the actual values worse. The Company believes this
17	is a reasonably sized cushion. I disagree with that
18	representation, particularly in light of the
19	significant risks that the Company seeks to leave for
20	the ratepayers to bear.
21	The Company's own analysis shows that the
22	combined projects have limited benefits relative to
23	project costs with two scenarios returning benefits
24	less than costs and three other scenarios showing
25	very limited positive benefit/cost ratios. I
1	

1	Page 86 presented a similar calculation of the benefit/cost
2	ratios in the Company's wind repowering proceeding.
3	The combined projects show lower
4	benefit/cost values in key scenarios than any of the
5	12 wind repowering projects including the one the
6	Commission did not approve. The Company updated its
7	economic analysis reflecting the economics of the
8	combined projects with the removal of Uinta. The
9	revised combined projects net benefits are now lower
10	in six of the nine price-policy scenarios. The two
11	low-gas scenarios that previously had benefit/cost
12	less than 1 are still net cost to ratepayers. Six of
13	the seven price-policy scenarios including the
14	Company's preferred medium gas/medium CO2 scenario
15	now have net benefits lower than included in the
16	Company's analysis presented in February. Overall
17	this means the Company's economic case is now even
18	weaker.
19	The Company further modifies its economic

benefits presentation by introducing a simple averaging of the results of its nine price-policy scenarios, asserting that it is a risk-weighted benefit analysis. This method -- using this method the Company asserts that the risk-weighted value of the combined projects is 210 million, which is

1	Page 87 \$43 million more than its medium gas/medium CO2
2	scenario result.
3	I disagree with the Company's
4	recommendation that this metric be used with the
5	Company's characterization of the metric as
б	risk-weighted. I will first discuss why I disagree
7	with using the metric and then discuss what I believe
8	is a more proper approach.
9	First, the Company's recommendation on this
10	metric is premised on its argument that the combined
11	projects are least cost, least risk needed to meet
12	capacity requirements rather than the economic
13	opportunity decision that it is. The Company seeks
14	to apply this metric based upon actions on a
15	resource-need decision in the Jim Bridger Selective
16	Catalytic Reduction system case.
17	I do not agree with the resource-need
18	argument or the Company's attempt to walk away from
19	its promise of high likelihood of economic benefits
20	and shift to a metric that's now being proposed by
21	the Company.
22	Second, the only risks weighed in this
23	metric are the risks associated with natural gas
24	prices and carbon pricing. There's no attempt to
25	factor in any other of the risks that the Company is

Page 88 asking the ratepayers to bear such as the cost risk of the combined projects, the energy production and attendant PTC realization risk and others that I will discuss.

Further, a simple equal weighting of the 5 6 nine price-policy scenarios is not supported by any 7 analysis presented in this case and does not reflect the nature of the risk that the ratepayers are being 8 asked to assume in this case. The implicit 9 assumption that the each of the nine scenarios is 10 11 equally likely is not supported by any evidence and 12 is not an assumption that I would recommend. The 13 Company asserts that its risk-weighted economic assessment of the combined projects is conservative, 14 15 citing issues including incremental REC values, extrapolation methodology results among others. 16

17 The Company has presented no evidence to quantify these issues and demonstrate that they 18 19 represent any material upside for ratepayers. 20 However, the Company omits any reference to the risk 21 issue -- risk issues that pose material downside risk 22 and I and other witnesses in this proceeding have 23 raised. This makes the analysis anything but 24 conservative.

One issue raised by Company in this context

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Page 89 1 is absurd. The Company indicates it conducted -- had 2 it conducted the analysis assuming the transmission 3 projects would be built in any event and should be 4 treated as a sunk cost would show hundreds of 5 millions of dollars in benefit.

This circular logic should be rejected. As 6 I have described, the Company has presented no 7 evidence to support that claim that the transmission 8 project would be built in 2024 even if there were no 9 wind projects developed. If the transmission 10 11 projects are ever to be built, the Company would need to make an economic case and come before this 12 13 Commission for approval. A serious examination of 14 the adverse outcomes is necessary to assure a high 15 likelihood of benefits to ratepayers and to assure that the downside exposure is limited. 16

17 The combined projects should be 18 sufficiently robust to be beneficial across the full 19 possible range of reasonable market and policy 20 outcomes and of all the risks that the Company is 21 asking the ratepayers to bear including those that I 22 have discussed and the Company has declined to 23 evaluate.

I will now turn to talking about theelements of the Company's analysis that overstates

	1
1	Page 90 the benefits. I have identified three components of
2	the Company's economic analysis that overstate the
3	economic benefits of the combined projects. When
4	adjustments for these factors are included the
5	several additional price-policy scenario results will
6	have negative benefits for customers.
7	First, the Company has assumed that
8	12 percent of the transmission project costs will be
9	paid for by revenues from third-party transmission
10	ratepayers and therefore assumes that the ratepayers
11	here will only incur 88 percent of the cost. The
12	Company did not provide any forward-looking
13	information or any basis for the assumption that the
14	12 percent of the transmission project costs will be
15	paid for by parties other than the ratepayers the
16	retail ratepayers in the Company's system and that
17	the level will persist over the life of the project.
18	This is a questionable assumption given the
19	uncertainty about future plant closures and
20	development of energy resources in the area covered
21	by the transmission assets.
22	Second, the Company has omitted
23	transmission costs from the analysis by truncating
24	the revenue requirement at the end of the wind
25	projects' lives. The full cost of the transmission
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Page 91 projects should be included in the economic analysis 1 2 of the combined projects. 3 Third, the Company added a terminal value 4 benefit to its analysis of the value of the wind projects that are proposed to be owned by the 5 The terminal value benefit was not included 6 Company. 7 in the Company's analysis presented in its direct testimony but has been added to its methodology in 8 9 supplemental and second supplemental direct. This benefit was added only in the supplemental filing and 10 11 is speculative. Together these three components are 12 significant relative to the Company's asserted 13 benefits. Absent these benefits, the only 14 15 price-policy scenarios that would show benefits of 16 the combined projects are the high gas scenarios and the medium gas/high CO2 scenario. Five of the nine 17 scenarios including the medium gas/medium CO2 18 scenario have either no benefits or negative benefits 19 20 absent these three components. 21 The Company offers limited rebuttal to my 2.2 critique of the third-party transmission revenues simply reasserting that historical basis on the 23 percentage of third-party usage of its system overall 24 25 is reasonable estimate for future third-party

1	Page 92 revenues for this project over its life. The Company
2	did not provide any support for this assertion, and
3	the premise that the transmission projects will
4	provide service to third-party users of the system is
5	wholly unsupported. Given significant uncertainties
6	about the makeup and location of generation resources
7	in the future, this is unwarranted.
8	The Company did not dispute my testimony
9	regarding omission of the transmission costs for the
10	full 62 years of the transmission projects' lives. I

11 continue to recommend that these costs be included in 12 the economic analysis. The Company disputes my 13 critique of the terminal value benefits, asserting 14 that the existing infrastructure would have some 15 value.

This assertion ignores my observation that 16 17 there's no evidence provided to support the value postulated by the Company, and there's not assurance 18 that the Company would be permitted to redevelop 19 20 these facilities in 2050. Overall the Company's 21 rebuttal testimony does not offer any evidence that 22 alters my conclusion that the Company's economic analysis overstates the benefits and that the result 23 24 of any reasonable adjustment of the Company's 25 estimated net benefits would result in at least five

Page 93 1 of the nine price-policy scenarios showing no 2 benefits to ratepayers and most of the five showing 3 material net costs.

4 Now, I'll turn to the Company's transmission studies that they presented on. 5 The economics of the combined projects rely on the 6 Company's assertion that the proposed transmission 7 projects will allow for full delivery of all wind 8 9 energy production. Based upon my review of the transmission studies provided by the Company, the 10 11 studies are still preliminary, and there are a number 12 of issues that pose risk that delivery of the full 13 wind energy output may be constrained or the design and cost of the transmission projects may increase. 14

15 The Company has provided two studies of the 16 Aeolus West transmission path transfer capability, an 17 October 2017 preliminary study and a March 30, 2018 18 revised study. The Company also provided system 19 impact studies prepared in February 2018 for each of 20 proposed wind projects.

In my direct testimony, I offered a number of observations and critiques of the October 2017 transfer limits study. Many of the critiques were specific to the wind project configuration included in the Company's initial application and are now not

Page 94 1 relevant to the proposal that the Company is now 2 proposing. However, two issues I discussed in that 3 testimony remain relevant to the application as it 4 currently stands. First, the Company's plan to add the 5 Aeolus-to-Bridger/Anticline 500 kV transmission line 6 7 increases the transfer limits across the Aeolus West interface also required to use -- their proposal also 8 requires the use of special operation protocols known 9 as Remedial Action Schemes, or RAS, R-A-S. At a high 10 11 level, RAS -- RASs are predefined operational 12 measures such as automatically tripping wind 13 generation, that will be taken during certain operational situations or system contingencies in 14 15 order to main system security. In addition, certain system conditions will 16 require redispatch of eastern Wyoming thermal 17 generation to allow wind production to avoid 18 curtailment, meaning periods of congestion will still 19 20 exist even with the combined projects in place. In 21 both studies the line by itself has only limited 2.2 impact on the increase in the transfer limits. The 23 use of the Remedial Action Schemes are required to achieve most of the transfer limit increase. 24 25 Further, I have noted that we have Company

1	Page 95 documents that indicate that in some circumstances
2	the use of the RAS schemes are imprudent. The
3	Company asserts that in this case the use of RAS are
4	reasonable and prudent. Beyond that assertion, the
5	Company has provided no reconciliation of these
6	conflicting statements and no criteria to distinguish
7	between prudent and imprudent RAS utilization.
8	The Company's assessment of the increase in
9	transfer capability with the addition of the
10	transmission projects are only its estimate of their
11	final transfer capability. The actual process of
12	defining path ratings is conducted by the WECC. The
13	process is also much more extensive involving a WECC
14	study group and testing the interaction of the
15	modified path with many other WECC paths.
16	The assumptions, methods, and conclusions
17	of the Company's study may not be consistent with the
18	ultimate assessment in the WECC's process. While
19	this process won't be complete for some time, the
20	transmission projects and wind projects must be under
21	construction soon in order to qualify for PTCs.
22	If the WECC's study process has different
23	conclusions, it could result in the curtailment of
24	wind and the loss of customer benefits or the need
25	for additional transmission upgrades and increased

Page 96 1 costs. 2 My review of the February 2018 system 3 impact studies and the March 30, 2018 transfer 4 capability study reveal a number of issues that put the ability of the transmission projects to deliver 5 the full output of the wind projects into question. 6 These issues include the March 30, 2018 7 study remains a preliminary study with additional 8 study requirements identified as still needed to 9 complete the assessment. 10 11 This study found poor voltage and 12 unacceptable oscillations under some conditions, 13 noting that follow-up communications with wind turbine manufacturers needed to occur to resolve the 14 15 issues. The March 2018 study included a number of 16 very different assumptions regarding the QF projects 17 included in the study and the extent of redispatch of 18 existing generation required, each having a material 19 20 bearing on the conclusions on transfer capability 21 across the Aeolus West interface. The March 2018 study included several new 2.2 elements in the transmission project that had not 23 previously been identified or included in the 24 25 Company's cost analysis. The March 2018 study

Page 97 1 indicated that alternative solutions to the dynamic 2 reactive devices required at Latham were still under 3 review.

4 With respect to the QF project issue, the March 2018 study used a different study approach in 5 considering the sequencing of projects in the 6 interconnection queue. The new assumptions included 7 a QF in a location that caused less stress on the 8 Aeolus West interface, effectively improving the 9 transfer capability result. Neither study explained 10 11 how the assumptions related to the obligations to 12 sequence projects by queue position or why the 13 two studied used different assumptions in this 14 regard.

15 Finally, I observed that the 16 interconnection restudy process included different 17 treatment of the Ekola Flats and another project ahead of that project in the queue while each project 18 19 had existing interconnection agreements specifying a 20 requirement that the Gateway South be in service. 21 In my review of the system impact studies, 2.2 I learned that the Company does not intend to ensure 23 100 percent deliverability of the wind projects' 24 output. The Company intends to use network service 25 arrangements which carry no assurance of full

Page 98 1 delivery -- deliverability. This exposure to 2 potential curtailments of wind generation under this 3 arrangement could affect the energy and PTC benefits 4 contemplated in the Company's proposal.

In its surrebuttal testimony, the Company 5 provided responses to some of the issues I raised but 6 7 not all. First, regarding the designation of the transmission study a preliminary, Mr. Vail disagrees 8 9 that the preliminary nature of the study is a concern, but he does not dispute that there are 10 11 numerous additional studies that will need to be 12 conducted on the project. Mr. Vail's testimony notes 13 that the interaction between the new Aeolus West path and several other paths in the area will need to be 14 15 studied to ensure that there is no adverse impacts 16 from the new line. At this point these studies are 17 not complete.

18 Second, the Company's rebuttal claims that 19 the poor and unacceptable results in the voltage 20 studies have been resolved, but the Company has 21 provided no evidence supporting this claim. Mr. Vail 22 testifies that these results were a tuning problem 23 with the power plant controller at specific wind 24 plants.

He claims the issues have been resolved and

25

Page 99 the results are available, but the Company did not 1 2 provide them with their filing and did not supplement 3 responses to prior data requests seeking this 4 information. In addition, Mr. Vail notes that there are more detailed studies currently being conducted 5 by outside consultants on these issues. These 6 7 studies are apparently not complete.

The third issue from my prior testimony is 8 9 the changes to key study assumptions that impact the In particular I note that the revised 10 results. 11 transfer capability changed the thermal generators 12 that were redispatched to allow the new wind generation to move over the Aeolus West interface. 13 14 The Company did not respond to this testimony. In 15 addition, I also noted the Company changed the location of the wind's QF to a location that would 16 have significant less -- less of an effect on 17 18 stressing the interface. In response to this point, 19 Mr. Vail agreed that there was a change in the QF 20 assumption service but he states this change was made 21 due to specific terms of the interconnection 22 agreements of the QF.

23 MR. LOWNEY: Objection at this point. It feels 24 like we're doing live surrebuttal testimony. He's no 25 longer summarizing testimony he's filed in this case.

We've been at it by my count for 40 minutes at this
point. The procedural schedule does not allow for
live surrebuttal testimony, and this was heavily
discussed on the first day of the hearing, the
unfairness involved with new facts coming into
evidence at this point in the case.

7 CHAIR LEVAR: Mr. Jetter, do you want to respond 8 to the objection?

9 MR. JETTER: I think I will respond in two ways. 10 First, all of the issues that we're running into here 11 of late information coming in are the result of the 12 Company continually changing the project. We've had 13 arguments before in this docket about incomplete 14 studies, delays, waiting -- we were presented with 15 changes in the project as late as two weeks ago.

I believe we're nearing the end of 16 Mr. Peaco's introductory statement. It is somewhat 17 lengthy. However, he's covering issues that were 18 19 covered by a number of witnesses -- Mr. Link, 20 Mr. Vail, and Mr. Teply -- from the Company. His 21 introductory statement is significantly shorter, I 22 believe, than the combined introductory statements of 23 those witnesses, so I would recommend that he be 24 allowed to continue his opening statement. 25 CHAIR LEVAR: And, you know, as I look across

1	the hearing the last few days as we've dealt with
2	these issues of new information. We've stricken
3	some; we've allowed some. I think I'm inclined at
4	this point to allow Mr. Peaco some latitude to
5	describe the surrebuttal responses to his earlier
6	testimony.

7 So I don't think I'm ready yet to cut off 8 his ability to do that. I note the concern, and at 9 some point if it starts to turn into a new round of 10 testimony, that is an issue at some point we have to 11 cut off, but I don't feel we are there yet. So I am 12 going to allow Mr. Peaco to continue his summary. 13 DANIEL PEACO: Thank you, Mr. Chairman.

DANIEL PEACO: Thank you, Mr.Chairman.

I'm not sure exactly where we 14 Okav. 15 stopped here. I'm going go back to my third issue on 16 this topic. Third issue from my prior testimony is changes to key study assumption that impact results. 17 Particularly I noted that the revised transfer 18 19 capability study changed the thermal generators that 20 were redispatched to allow new wind generation to 21 move over to Aeolus West interface. The Company did 22 not respond to this testimony.

In addition I also noted that the Company changed the location of the wind QFs to a location that would have significantly less of an effect on

Page 102 1 stressing the interface. In response to this point 2 Mr. Vail agreed that there was a change in the QFs 3 assumed in service but he states that the change was 4 made due to the specific terms of the interconnection 5 agreements of the QFs.

His testimony reinforces my concern that 6 the assumptions used by the Company in the revised 7 transfer capability analysis were modified to allow 8 more wind to interconnect east of the Aeolus West 9 path. Regarding the fourth issue, that there were 10 11 new components added to the transmission project in 12 the latest study that have not yet been evaluated for which no cost estimates were provided, the Company 13 14 did not dispute that the new components were added or 15 changed.

16 However, Mr. Vail simply states that the cost was still within tolerance of the original 17 estimates. I found this response troubling as it 18 19 essentially acknowledges that the cost of these 20 additional components is already covered in some sort 21 of contingency that the Company has not identified. 2.2 This leaves me to assume that the cost cited in the 23 Company's testimony are not specific to the 24 components actually included in the project and that 25 there is some amount of cushion built into those

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1	numbers that should be a concern to the Commission.
2	Regarding the reactive device at Latham, at
3	the time of my last testimony, the Company was still
4	evaluating alternatives. Mr. Vail now testifies the
5	Company's evaluation is complete and that
6	PacifiCorp's transmission planning group determined
7	that the Static VAR Compensator, or SVC, can be used
8	instead of a Static a Synchronous Condenser, or
9	STATCOM.
10	The Company has not provided the results of
11	the recent studies or anything supporting this
12	conclusion. Mr. Vail does state that a third party
13	is currently conducting an analysis to determine this
14	needed size of the SVC, but the analysis is not done.
15	He also notes that implementing the SVC instead of
16	the STATCOM will be lower cost, but he provides no
17	cost information to even approximate the cost.
18	Mr. Vail also provided a response to my
19	concern regarding the issue of whether or not the
20	wind projects are 100 percent deliverable. Mr. Vail
21	argues the interconnection studies are not intended
22	to demonstrate deliverability. He does not dispute
23	the need for additional studies to determine if the
24	projects are 100 percent deliverable.
25	In general, the Company's latest testimony
1	

1 does not adequately address all of my concerns with 2 the transmission studies and confirms there are many 3 further studies needed to assure that all the 4 proposed wind projects can be effectively integrated 5 into the system and operate without constraints on 6 delivery.

The studies they have provided so far were 7 structured using assumptions that appear to unduly 8 favor the application. 9 They claim to have done some 10 additional work but have provided no new evidence and 11 have specifically noted multiple studies that are 12 still ongoing or have not yet been conducted. In 13 addition, the Company appears to still not know what the final components of the transmission project will 14 15 be or what these components will cost.

16 Lastly, I would like to turn to what I view are the key risks to be borne by ratepayers. 17 There are a number of key risks that the Company's proposal 18 19 would have ratepayers bear. While the Company has 20 included a number of assurances on risk that are 21 within its control, the combined projects present 2.2 risks to ratepayers beyond those assumed, described, 23 or analyzed by the Company and beyond those the 24 Company has addressed in its risk-weighting. 25 The Company's proposal requires that

1	Page 105 ratepayers bear a number of significant economic
2	risks and uncertainties. I believe it was
3	particularly important for the Company to explore the
4	magnitude of any potential downside risk that the
5	ratepayers are being asked to assume if these
б	projects are to proceed. However, there are a number
7	of important risks where it has not.
8	I have noted that the three natural gas
9	price scenarios were skewed high when compared to the
10	then-current forward prices. Higher gas prices yield
11	higher estimates of benefits of the combined
12	projects. The Company has updated its natural gas
13	prices, but I continue to believe they are generally
14	overstated. I believe a simple weighted average of
15	the three gas price scenarios skews the risk-weighted
16	analysis to higher project values.
17	I have noted that the Company relies on an

I have noted that the Company relies on an Τ./ estimate of energy production that it represents to 18 have an equal likelihood of being higher or lower 19 20 than the actual values, so-called P50 value. In its 21 surrebuttal the Company reasserts its confidence in 22 its estimating techniques. However, it rejects any capacity factor assurances or even conducting any 23 24 analysis of production scenarios. As we heard from 25 Mr. Link yesterday, the Company is not going to

	Page 106
1	guarantee that the wind blows.
2	The actual production in the first
3	ten years of the wind projects is particularly
4	important due to the value of the energy and PTCs in
5	that period. Reason that production could be lower
6	include errors in the Company's estimation method,
7	equipment issues, operation of RAS or other
8	curtailment of output for system conditions, and the
9	inherent uncertainties in the strength of the wind
10	resource over time.
11	Certain of the transmission projects must
12	be in operation by the end of 2020 to assure the wind
13	projects qualify for PTCs. In response to this risk,
14	the Company indicates that the wind projects could
15	achieve interconnection to qualify without the
16	Aeolus-to-Bridger/Anticline line being complete by
17	that time.
18	In surrebuttal the Company has provided a
19	list of those transmission facilities that are
20	required by the end of 2020. For these projects,
21	time is of the essence. Failure to meet the schedule
22	on those facilities does pose significant risk to
23	ratepayers, particularly for any delays due to events
24	deemed not within the Company's control.
25	For the remaining facilities, delay may not

Page 107 jeopardize PTC qualification, but system operations 1 2 would need to be altered due to lack of a complete 3 Aeolus West upgrade. The Company acknowledges this 4 operational but dismisses the significance of the I find the Company's assertion that the 5 issue. 500 kV line is needed by 2020 to be at odds with its 6 7 assertion it's not a material if it's not in service by that time. Bottom line, there are material risks 8 9 left to the ratepayers to bear regarding the timing of the completion of the combined projects. 10

11 The cost of the Company owned wind projects 12 pose a cost risk to ratepayers that I and other 13 witnesses have raised and the concept of the need for hard cap on the bid costs recommended by the Oregon 14 independent evaluator. In its surrebuttal the 15 16 Company indicates its unwillingness to provide the 17 hard cap or similar cost certainty, despite its decision to forego PPAs that offer price certainty. 18

19 This cost risk and the cost risk associated 20 with the transmission projects remain a material risk 21 that ratepayers are being asked to bear. Based on 22 these issues with the Company's economic analysis and 23 the added risk that ratepayers are being asked to 24 bear, I recommend that the Company's application for 25 the combined projects be denied. And that concludes

1	Page 108 my summary.
2	MR. JETTER: Thank you, Mr. Peaco. That was a
3	little bit of a mouthful. I'm going to bring you a
4	water if the Commission would allow.
5	DANIEL PEACO: Thank you.
6	MR. JETTER: With that, I would tender Mr. Peaco
7	for cross-examination and questions from the
8	Commission.
9	CHAIR LEVAR: Did we get his testimony entered?
10	MR. JETTER: I believe you are correct. We have
11	not done that. The Division would move at this time
12	for entry of the direct, surrebuttal, and
13	supplemental rebuttal and surrebuttal of Mr. Peaco.
14	CHAIR LEVAR: If any party objects to that
15	motion, please indicate to me.
16	I'm not seeing any objection in the room,
17	so the motion is granted.
18	(Prefiled Testimony and Exhibits of D. Peaco
19	were received.)
20	MR. JETTER: Thank you. And now I will tender
21	Mr. Peaco for cross-examination and questions from
22	the Commission.
23	CHAIR LEVAR: Okay. Thank you.
24	Mr. Moore, do you have any questions?
25	MR. MOORE: No questions. Thank you.

	Deres 100
1	Page 109 CHAIR LEVAR: Mr. Russell?
2	MR. RUSSELL: No questions. Thank you.
3	CHAIR LEVAR: Mr. Baker?
4	MR. BAKER: No questions. Thank you.
5	CHAIR LEVAR: Ms. Hickey?
6	MS. HICKEY: No questions. Thank you.
7	CHAIR LEVAR: Mr. Holman?
8	MR. HOLMAN: No questions. Thank you.
9	CHAIR LEVAR: Mr. Michel?
10	MR. MICHEL: I have a few. Thank you,
11	Mr. Chair.
12	CROSS-EXAMINATION
13	BY MR. MICHEL:
14	Q. Good morning, Mr. Peaco. Is that how you
15	pronounce it?
16	A. Yes.
17	Q. My name is Steven Michel. I'm with Western
18	Resource Advocates. Could you turn to your Direct at
19	page 49, line 766 and 67, roughly.
20	A. I'm sorry. The line numbers?
21	Q. 766 and 767.
22	A. I'm there.
23	Q. There you testify that there is currently
24	no policy imposing a price on carbon emissions.
25	Would you agree that there is carbon regulation, by

Page 110 1 that I mean a cap and trade in the northeastern part 2 of the United States called the Regional Greenhouse 3 Gas Initiative? 4 Α. Yes, I'm familiar with that. Okay. And also California and some 5 0. 6 Canadian provinces currently have a cap and trade called the Western Climate Initiative? 7 8 Α. Yes. 9 ο. And in the EU there's an emissions trading program going on -- is that right? -- in the European 10 11 Union for --12 Α. I'm less familiar, but I understand that's 13 right. 14 Ο. Okay. And the world's largest CO2 program was launched in China last December. Are you 15 familiar with that? 16 17 Α. T'm not. 18 Okay. Are you familiar with the 0. Paris Accord where 195 nations have signed an 19 international accord to limit CO2 emissions in each 20 21 of their countries? 2.2 Α. Yes, I am. 23 0. And the U.S. did sign that Paris Accord and although the President has indicated his intent to 24 withdraw from that accord, that has not been done 25

Page 111 1 yet; is that right? 2 Α. That's my understanding. And Oregon has been considering a cap and 3 0. 4 trade legislation this past year and there is anticipation it will be renewed next year? 5 I'm not familiar with that. 6 Α. Okay. Are you familiar with the 7 0. Salt Lake City resolution that was recently passed to 8 limit carbon pollution? 9 10 Α. No. 11 Okay. Are you -- not sure how long you've Q. 12 been in Utah, but under Governor Huntsman do you 13 recall that Utah was part of the Western Climate Initiative which was a cap and trade program being 14 designed for the Western United States? 15 16 Α. I'm not real --17 You're not --Q. -- familiar with that. 18 Α. -- familiar with that. 19 Q. 20 So summarizing all that, would you Okay. 21 agree there are in fact quite a few policies in place 22 being considered right now, either in place or being 23 considered now, to limit CO2 emissions although admittedly there isn't one currently in Utah? 24 25 I guess that was my point. My point was Α.

1	Page 112 more to focus on things that had bearing on this
2	case.
3	Q. Okay. Could you turn to your March 16
4	testimony.
5	A. Okay.
6	Q. And page four specifically.
7	A. I am there.
8	Q. At lines 56 through 64 you describe and
9	I believe you talked about this a bit in your
10	summary your recommendation that the combined
11	projects be denied now with the expectation that they
12	could be implemented later as more information was
13	known or more circumstances were refined, if you
14	will.
15	Do you see that testimony?
16	A. I do.
17	Q. Okay. And just if the Commission went
18	down that path that you're recommending, would you
19	agree that most or all of the PTC benefits would be
20	lost from this project?
21	A. I do.
22	Q. Okay. And that's do you know the amount
23	of benefit that that is?
24	A. Not off the I don't know the number off
25	the top of my head, but it's a signature component of

Page 113 the current benefit structure. 1 2 Q. Would you accept that it's on the order of a billion dollars, give or take? 3 4 Α. I'm not -- vou'd have to refer me to the number because I'm not sure whether --5 That's fine. 6 Q. Okay. -- what form of the number you're quoting. 7 Α. It's somewhere in the record. 8 And that 0. 9 would certainly change the economics of the project regardless of whether -- whatever your current 10 11 evaluation of those economics are, those economics 12 would be substantially less beneficial in the future 13 if those PTCs were lost? 14 Α. Right. But the point here is the alternative is if you forego the PTCs now, you -- the 15 16 only way these projects are economic is with PTCs and bets that high gas prices and high carbon prices are 17 realized, and so it's conceivable that if high gas 18 prices and high carbon prices come to pass in the 19 20 future, those elements may be sufficient in and of 21 themselves to make a more beneficial case to 2.2 ratepayers at that time than we have today. Right 23 now I think high gas prices and high carbon prices in 24 the near term particularly are low-probability 25 outcomes.

Page 114 1 0. Could you turn to your April 17 testimony. 2 I'm sorry? Α. April 17 testimony. 3 Q. 4 Α. Okay. 5 0. And at page eight -- and I believe you 6 described this in your summary as well -- describe the combined projects as an economic opportunity; is 7 that right? 8 9 Α. What line are you at? 10 Well, specifically line 47, 47 -- oh, 147. 0. 11 I'm sorry. 12 Α. Okay. 13 Do you see that? Q. 14 Α. Yes. And you say that as an economic opportunity 15 Q. project there must be a high likelihood of 16 significant benefits to ratepayers? 17 18 Α. Correct. 19 Q. And by that, by an economic opportunity project, do you mean that in general system 20 21 reliability would not be impaired or jeopardized if 22 the combined projects did not go forward? Is that 23 what you mean by this is an economic opportunity project as opposed to a capacity need, for example? 24 25 I'm sorry. Could you state the question --Α.

Page 115 I'm not sure if I followed your question. 1 2 Let me try and rephrase. By an Q. Yes. economic opportunity project, do you mean in general 3 4 that system reliability would not be impaired if the combined projects did not go forward? 5 6 Α. Yes, I think I stated that in my opening 7 remarks. 8 Q. You may have. But certainly costs to 9 customers could be impacted depending on whether an economic opportunity is taken or not? 10 11 I guess I'm not sure what you mean. Α. 12 Q. Well, that depending on the Commission's 13 decision in this case, that will impact -- that will have an economic impact on PacifiCorp customers in 14 terms of higher rates or lower rates over time? 15 16 Α. Well, as I described in my opening remarks, it's my testimony that there's fairly little prospect 17 of significant benefits to be had from these projects 18 as currently proposed, and so whether they go forward 19 or not, there is likely to be better off than they 20 21 are to be worse off by not doing the project. 22 Q. That wasn't my question. My question was whether or not the Commission's decision in this 23 case, although it may not impact reliability, if it's 24 an economic opportunity project as you described, it 25

	D 112
1	Page 116 will impact the economic position of PacifiCorp's
2	customers through higher rates or lower rates
3	depending on whether the Commission determines that
4	the project offers economic benefits or detriments?
5	A. I guess I'm not following your question.
6	Q. Still not following my question?
7	A. No.
8	Q. I'll try one more time and then I'll give
9	up. As an economic opportunity project, you would
10	agree that the outcome of this case is going to have
11	an impact on PacifiCorp customers?
12	A. I guess the focus of my testimony is to say
13	that the real issue here is whether it does have
14	an present a net economic opportunity to customers
15	or not.
16	Q. Okay. But it will have an economic the
17	decision in this case is going to have an economic
18	impact, whether it's to maintain the status quo or to
19	not maintain the status quo? That's going to have an
20	economic impact on customers?
21	A. I presume. I guess
22	Q. Okay. And you testified that as an
23	economic opportunity project, you suggest a standard
24	that says that the project should not be approved
25	unless there is a high likelihood of significant
1	

1	Page 117 benefits. Do you see that?
2	A. Yes.
3	Q. Okay. And what do you consider a high
4	likelihood?
5	A. Well, first, I would state that that
6	phraseology comes out comes directly from the
7	Company's testimony offered in both the 39 and the 40
8	dockets here as to what they held out initially as
9	what they were offering customers. I would consider
10	a high likelihood meaning that across the range of
11	risks and uncertainties that we have confidence that
12	there's a limited downside risk and that that can be
13	managed and that the preponderance of analyses,
14	particularly those that most likely today should show
15	strength, and in particular my view is I tend to
16	weight put more weight in the scenarios to the
17	low-gas/low-carbon scenarios.
18	Those are the ones that are more consistent
19	with current conditions, and those cases perform
20	particularly poorly, and laying on top of that the
21	additional risk that we've identified, I feel like
22	there's a material downside risk in a number of these
23	cases that would be substantially adverse to
24	customers, and that does not in any way comport with
25	a high likelihood of customer benefits.

Page 118 1 0. Well, that wasn't exactly the kind of --2 the concept that I was trying to ask you to respond to, which is -- maybe I can deal with this through a 3 4 simple example. If the Commission expects that approving these projects will have an economic 5 benefit for customers, should it do so? 6 If the Commission makes the determination 7 Α. based on what it has before it in this record that it 8 9 feels that there's positive economic benefits 10 sufficient to support the project, then they can do 11 that. 12 0. And your testimony is that they should do 13 that if that --14 Α. My testimony ---- if that is their determination? 15 Q. My testimony is that I don't feel that that 16 Α. case is made, but they could reach a different 17 conclusion. 18 19 ο. And if they did reach that conclusion, then the standard that you are proposing they apply is 20 21 that if they reach that conclusion they should 22 approve the project? 23 Α. Yeah, it's -- I think this case totally hinges on how likely there is for benefits to 24 25 customers.

Page 119 I think that's all I have. 1 MR. MICHEL: Okay. 2 Thank you very much, Mr. Peaco. 3 DANIEL PEACO: You're welcome. 4 CHAIR LEVAR: Thank you, Mr. Michel. I think it makes sense to take a recess at 5 this point before Mr. Lowney's cross-examination. 6 So why don't we recess until 1:00. 7 (A break was taken.) 8 Before we move to the next 9 CHATR LEVAR: cross-examination, we have reconsidered the previous 10 11 ruling on Mr. Lowney's objection during Mr. Peaco's 12 verbal summary statement. We conclude that a 13 fairness issue exists when the scheduling order does not provide for live surrebuttal and a party adds new 14 15 material to the testimony summary without first requesting leave to do so, which would afford other 16 parties an opportunity to object before being 17 ambushed by new material. 18 19 We conclude that any new information stated 20 by Mr. Peaco verbally this morning that was not 21 contained in his written testimony should not 2.2 properly be in the record at this point. We conclude 23 any information stated by Mr. Peaco this morning that 24 was properly a summary of his written testimony is 25 already in the record through his written testimony

1	Page 120 that was entered this morning, so consistent with
2	those conclusions, we strike the entirety of
3	Mr. Peaco's verbal statement on the record this
4	morning.
5	And with that, we'll move to Mr. Lowney's
6	cross-examination.
7	MR. LOWNEY: Thank you. And as a preliminary
8	matter, I just want to let everyone know I
9	distributed the cross-examination exhibits that we
10	intend to use, so the Commission should each have a
11	copy of that. And one item to flag, you'll note that
12	one of the cross-examination exhibits is on pink
13	paper. It was a data response that was referring to
14	highly confidential attachments. The text of the
15	data response itself that is in front of you is not
16	highly confidential, and so it's acceptable.
17	CHAIR LEVAR: So nothing in these papers is
18	confidential or highly confidential?
19	MR. LOWNEY: Correct.
20	CHAIR LEVAR: Thank you.
21	CROSS-EXAMINATION
22	BY MR. LOWNEY:
23	Q. Good afternoon, Mr. Peaco.
24	A. Good afternoon.
25	Q. If we could start if you could turn,

Page 121 1 please, to your supplemental rebuttal testimony, that 2 was the April testimony on lines 121 to 122. 3 Α. I'm there. 4 And in the sentence that begins right at 0. the end of line 121 and then continues on to the top 5 6 of the next page, you say "The Company did not describe the incremental wind as fulfilling a 7 resource need," and you're referring there to the 8 Company's direct testimony; is that correct? 9 10 Α. Yes. 11 And then on lines 123 to 125, you testify, Q. 12 quote, "In fact, Mr. Link specifically noted that the 13 resource balance analysis performed in the 2017 IRP showed no need for incremental capacity until 2028 14 and had no mention of FOTs as a factor." 15 16 Did you see that testimony? 17 Yes. Α. 18 And you cite in that as support for that Q. statement down in Footnote 7, the direct testimony of 19 Mr. Link, lines 111 to 115. 20 21 Do you see that? 2.2 Α. Yes. 23 0. Do you have Mr. Link's direct testimony in front of you? 24 25 I do not. Α.

1	Page 122 Q. I can provide you an excerpt with this page
2	on it.
3	All right. And I've just handed you an
4	excerpt from Mr. Link's testimony that includes the
5	selected line numbers you quote in this testimony,
6	and if we look at those lines, Lines 111 to 115,
7	Mr. Link testified that "The loaded resource balance
8	developed for the 2017 IRP shows that PacifiCorp
9	would not require incremental system capacity to meet
10	its 13 percent planning reserve margin until 2028,
11	accounting for assumed coal plant retirements and
12	incremental energy efficiency savings and available
13	wholesale power market purchase opportunities."
14	Do you see that?
15	A. Yes.
16	Q. Is it your understanding that wholesale
17	power market purchase opportunities are also known as
18	FOTs, or front office transactions?
19	A. I'm not it's not clear to me that's what
20	this is referring to. I mean they are wholesale
21	market transactions, but I am not sure that that was
22	what this testimony was referring to or not.
23	CHAIR LEVAR: I don't believe your microphone is
24	picking you up. Sorry.
25	DANIEL PEACO: Oh. Is that better?

Page 123 1 CHAIR LEVAR: Yes. 2 DANIEL PEACO: Okay. Sorry. It's just two subtle shades of green. 3 4 What exactly is your understanding of a 0. front office transaction then? 5 6 Α. They are a specific type of wholesale 7 market purchases. But they are not wholesale power market 8 0. 9 purchase opportunities? I'm unsure what the 10 distinction you're making here is. 11 My only point here is the language here is Α. 12 more general than identifying front office transactions here, so it's not clear specifically 13 what he was referring to in this passage. 14 15 And you made no mention in your testimony Q. where you quoted this or referred to this testimony 16 to clarify that in fact he did talk about power 17 market purchases. You just didn't use the magical 18 term "FOTs." Is that right? 19 20 Yeah, I didn't understand that he was Α. referring specifically to that. 21 22 Q. All right. Let's turn to Line 589 of your 23 supplemental rebuttal, the same April testimony we were just talking about. That's on page 33 at the 24 25 very top.

Page 124 1 Α. I'm there. 2 Q. And the sentence that begins right at the very top of that page states that the Company's 3 4 supplemental and second supplemental direct testimony included, quote, "for the first time, an assertion 5 that the combined projects address a resource need." 6 Do you see that testimony? 7 8 Α. Yes. And then earlier in your supplemental 9 0. rebuttal testimony on Lines 168 to -69 you testify 10 11 that "The Company's shift to a resource-need approach 12 at this juncture in the case should be rejected." 13 Does that sound like a fair 14 representation --15 I'm sorry? What was that reference? Α. 16 Line 168 and 169 in the same testimony. 0. 17 Yes. Α. Now, your direct testimony was filed on 18 Q. December 5, 2017; is that right? 19 20 Α. Correct. 21 0. And there was a technical conference in 22 this case that was held on October 11, 2017; correct? 23 Α. Yes. And you attended that conference; right? 24 Q. 25 I did. Α.

1	Page 125 Q. Before that conference, the Division
2	submitted questions to the Company that they wanted
3	to have addressed at that conference; is that
4	correct?
5	A. That's my recollection, but it was a while
6	ago.
7	Q. I can refer you to the document that I had
8	placed upon the witness stand. It's RMP
9	Cross-Exhibit 5.
10	A. I have that.
11	Q. And this is a document from the Division of
12	Public Utilities entitled Division of Public
13	Utilities questions for the October 11, 2017
14	Technical Conference.
15	It's dated October 4, 2017; is that
16	correct?
17	A. Yes.
18	Q. And if I could direct your attention,
19	please, to page two, and this is under the heading
20	Primary Questions. The third primary question DPU
21	wanted the Company to address was to "provide a
22	detailed discussion of the reliability need for the
23	project, as opposed to economic benefits of the
24	project." Do you see that?
25	A. Yes.

Page 126 And then if you could turn to the page in 1 0. 2 that same cross-examination exhibit that's a PowerPoint slide entitled "Load and Resource 3 4 Balance," and this was a slide that was provided by 5 the Company to the parties at that technical conference; correct? 6 I believe so. 7 Α. 8 And this slide shows the Company's load and 0. 9 resource balance based on 2017 IRP through 2036; 10 correct? 11 Α. Yes. 12 And it shows, doesn't it, that without Q. 13 available FOTs, the Company has a capacity deficit in 14 every single year; correct? Correct. 15 Α. 16 And then the handout states, "The proposed 0. Wyoming wind resources are needed to reliably serve 17 load and reduce market reliance risk, an area of 18 19 concern raised by parties during review of the 2015 IRP." Do you see that? 20 21 Α. I do. 22 Q. And this was provided to you roughly 23 two months before you filed your direct testimony; 24 correct? 25 This was provide -- this was not --Α. Yes.

1	the testimony we talked referred to the Company's
2	direct testimony.
3	Q. I guess to be clear then, it's not true the
4	Company shifted positions in its January filing when
5	at least two months before you filed your testimony
6	the Company explained to you that the combined
7	projects were needed to meet a capacity deficit
8	identified in the 2017 IRP?
9	A. There was an extended discussion about that
10	at that technical conference, but there was no
11	evidence in the record to that effect.
12	Q. And that's the basis for your claim that
13	the Company changed its position?
14	A. Correct. It was comparing the direct
15	filing to the January filing.
16	Q. So you just ignored the technical
17	conference that was held?
18	A. This information was not in the record, and
19	we had an extensive discussion about both the
20	transmission and the resource need, and it wasn't
21	clear to me that there was any basis from this that
22	was driving the recommendation for these projects.
23	Q. Now, you mentioned that this was not in the
24	record, but you did in your testimony describe other
25	events from the October 11th technical workshop,

Page 128 didn't you? 1 2 Α. I probably did. I don't -- if you want --But you just chose to not address this 3 0. 4 particular issue? Well, this did not -- my recollection from 5 Α. 6 this, it wasn't persuasive to me that the -- the point that I went to is after discussing this --7 Mr. Link's primary testimony, we didn't meet capacity 8 9 until 2028. That was the punch line of their 10 assessment. So how were we supposed to understand 11 that? 12 0. I guess going back to what we just talked 13 about, Mr. Link's direct testimony said, "We didn't 14 meet capacity after accounting for available market 15 transactions"; correct? And that same explanation is set forth in this document you received at the 16 17 October 11 technical conference, and you chose to ignore it and instead mischaracterize the Company's 18 19 case as having changed positions in January; correct? 20 I disagree with that representation, but I Α. 21 understand your point. 22 Q. Okay. Let's move on. If you could turn to 23 Line 199 of your supplemental rebuttal testimony, please. This is describing the transmission 24 projects, and I'd like to focus your attention on 25

Page 129 sort of the second clause of the sentence that's on 1 2 Line 199, and it states, "Subsequent responses to data requests confirm that there's no reliability 3 4 need for the transmission project in the system absent the new wind projects." 5 6 Do you see that testimony? I do. 7 Α. 8 And, again, you cite to a response to Q. 9 DPU 8.1 as the basis for that statement; correct? 10 Α. Yes. 11 And I notice that you did not attach that Q. 12 response to your testimony, did you? 13 Α. T did not. 14 0. And if you could direct your attention, please, to the document I've given you that's labeled 15 16 RMP Cross-Exhibit 6. 17 T have that. Α. 18 Q. And that's the response to DPU Data Request 8.1, isn't it? 19 20 Α. Yes. 21 And the request in this case in DPU 8.1 0. 22 states that "During the October 11, 2017 technical 23 conference, the Company stated that the most recent area reliability study did not show a need for the 24 proposed transmission project to meet reliability 25

Page 130 1 standards. Please confirm this statement and provide 2 the most recent applicable area study." Do you see that? 3 4 Α. Yes. 5 0. The Company's response is "The statement 6 was intended to convey that the Company is currently in compliance with the North American Electric 7 Reliability Corporation, or NERC, TPL-001-4 Standard, 8 9 Transmission System Planning Performance 10 Requirements." And the Company attached its most recent TPL-001-4 annual assessment to that data 11 12 response; correct? 13 Yes. Α. 14 Ο. And if I could just direct your attention to page two of this exhibit, I would note that this 15 is the attachment that was provided. It's a fairly 16 large document, so I've only provided the first 17 18 couple of pages, and in some places is marked 19 confidential. I'm told it's actually a confidential document, and certainly the sections I'm going to be 20 21 referring to are not. 22 So this was the summary report for TPL 2016 23 Assessment, provided -- or published on December 9, 24 2016 that was provided to you in discovery; correct? 25 Α. Yes.

1	Page 131
	Q. And if you could turn to page three of the
2	exhibit, which is page five of the report, and this
3	is the Summary Introduction section. And if I could
4	direct your attention to the last sentence in the
5	first paragraph, which states, "The purpose of this
6	assessment is to demonstrate that PacifiCorp's Bulk
7	Electric System is planned such that the
8	interconnected transmission system can be operated
9	reliably over a wide range of system conditions
10	throughout the 10-year transmission planning
11	horizon." Do you see that?
12	A. Yes.
13	Q. And then down, the first sentence of the
14	third paragraph says, "This assessment takes into
15	account all planned projects that are expected to be
16	completed and in-service for each study season."
17	Do you see that?
18	A. Yes.
19	Q. Now, Mr. Vail's testimony in this case, his
20	direct testimony stated that the
21	Aeolus-to-Bridger/Anticline transmission line has
22	been included in this annual assessment as part of
23	the Company's short-term and long-term plans to
24	dependably meet NERC and REC reliability
25	requirements." Correct?
1	

Page 132 1 Could you point me to that. Α. 2 Q. And actually, the stapled package I Yep. handed you that had Mr. Link's testimony in it also 3 4 has this page of Mr. Vail's. So it's the third page of the handout I gave you. It's direct testimony of 5 6 Mr. Vail at page 20. I have it. 7 Α. Lines 461 to 466 is the section I just 8 Q. 9 quoted. 10 I see that. Α. 11 And so while you testified there's no Q. 12 reliability need for this project, your testimony 13 fails to note that the Company's reliability studies specifically do call for the construction of this 14 project to reliably meet the requirements over the 15 16 next ten years; correct? 17 Give me a minute. Α. MR. JETTER: I'm going to object to that 18 question. It assumes facts not in the evidence. 19 The 20 form of the question suggests that it calls for that 21 to be part of it, and I would suggest that an 22 accurate representation is that the study included 23 it. 24 CHAIR LEVAR: Could you repeat the question you asked and respond to the objection. 25

1	Page 133 MR. LOWNEY: I guess the question is Mr. Peaco's
2	testimony is that there's no reliability for this
3	project. He cited to a data response that included
4	this study, and this study includes this project as a
5	component of the Company's short- and long-term
6	reliability assessments. I'm just asking him to
7	confirm that. He didn't attach this data request to
8	his testimony, and so I am just wanting to clarify
9	exactly what it says.
10	MR. JETTER: I'm okay with that question as far
11	as it's included rather than calls for. I think
12	those that's a meaningful difference in how that's
13	phrased.
14	CHAIR LEVAR: Okay.
15	MR. LOWNEY: And that's fair. I have no
16	problem.
17	DANIEL PEACO: Could I have your question again.
18	Q. I guess could you please confirm your
19	testimony stated there's no reliability need for this
20	<pre>project; correct?</pre>
21	A. Correct. Independent of the wind.
22	Q. And you cited to this data response as the
23	basis for that statement; correct?
24	A. Correct.
25	Q. And this data response states that this
1	

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project is included in the Company's long-term and
short-term plan to meet its reliability requirements;
correct?

A. Well, the caveat, the document you show me on page 66 of the document basically says that the Gateway projects are coupled with assumptions about moving wind across Wyoming, and so I took from this is that the Gateway -- sensitivities that show the Gateway projects also included the planned wind projects.

My testimony was that there's no study that we've been presented here or in our most recent request to show a study that looks at the need for any of the Gateway projects absent any wind additions in western Wyoming. My understanding of this report is the Gateway projects were studied including the assumptions of wind generation.

Q. And what's important, though, is I think in page 66 you referred to it states that there's a sensitivity that considered accelerating the construction of these projects from 2024 based on a 2021 heavy summer case; correct? So this plan under the normal course called for construction of the Segment D2 in 2024; correct?

25 A. Yes. But you don't have here the

Page 135 1 underlying studying assumptions -- I mean I don't 2 have the part of the document here that states what's 3 in the base case. 4 Just to be clear, this project -- excuse 0. me -- this study was completed in December of 2016 5 before these new wind projects were in development; 6 7 correct? 8 Α. That's not correct. 9 ο. Well, the date on the document says 2016, December 2016? 10 11 Α. But the Company started developing the 12 projects in 2016. 13 On what basis do you make that claim? Q. 14 Α. Well, just to meet the Safe Harbor requirements they started developing the projects in 15 2016. 16 And that's the only basis for that 17 Q. 18 statement? And the submissions to the NTTG studies. 19 Α. The Company had submitted 1100 megawatts of wind to 20 21 be included in those studies in 2016. It included 22 more wind in prior submission to NTTG studies. 23 0. And I guess this document, though, says that new wind may accelerate the need for projects, 24 not dictate the need for the projects? 25

Page 136 Where did you read that? 1 I'm sorry. Α. 2 Q. It's the page 66 you referred to we were 3 just talking about, the sensitivity case that calls 4 for accelerating the construction of the projects earlier than 2024. 5 6 Α. What it doesn't say is what the assumptions were in the non-accelerated case, and I'm assuming 7 the non-accelerated case -- that part of it's not 8 9 here -- has the wind coming in later than 2020. 10 And that's your assumption? 0. 11 That was my -- that's my recollection, but Α. 12 I can't verify that because that's part of the 13 document that's not here. 14 Ο. And you agree the Company has testified that if transmission line is built in 2024, it would 15 add almost \$300 million to each of the net benefit 16 cases for the projects -- for the combined projects. 17 Well, that's an absurd statement. You have 18 Α. 19 no justification for building this line absent 20 building wind, and we asked that question 21 specifically in discovery in Set 26, and the only 2.2 thing provided to us was the NTTG study as the basis for that, and that study plainly has 1100 megawatts 23 of wind presumed in the analysis. 24 25 And that's what I take today as the

1	Page 137 Company's most recent statement as to what the
2	justification is for the need of the line independent
3	of wind and they you provided nothing that showed
4	us a study that didn't have any wind in it but the
5	Gateway projects.
6	Q. Well, the study we just talked about.
7	A. No. I think I just told you is that I
8	believe the 2024 version also has wind in it, but we
9	don't have that in front of us.
10	Q. But you didn't attach it to your testimony,
11	though, or include any of this explanation, did you?
12	A. That was my conclusion from reviewing the
13	study, and it was confirmed by the more recent
14	responses to request.
15	Q. All right. Let's move on. If you could
16	turn to your direct testimony, please.
17	A. I'm there.
18	Q. And page 25.
19	A. I'm there.
20	Q. On Line 380 and carrying over to Line 389
21	you describe concerns that you had with the
22	extrapolation methodology used by the Company in the
23	30-year analysis. Do you see that?
24	A. Yes.
25	Q. If I could direct your attention to

Page 138 Lines 1056 and 1058 of the same testimony. 1 2 Α. I'm there. And on Lines 1056 to -58 you again 3 0. 4 reiterate that the longer-term studies are problematic; correct? 5 6 Α. Yes. And then if you turn to lines 1088 of the 7 0. same testimony? 8 9 Α. Yes. You reiterate that much of the benefit of 10 0. 11 the Company's analysis is derived from years 20 to 30 12 of the projects and that those benefits have been 13 estimated using an extrapolation analysis that is 14 problematic. Do you see that? 15 Α. Yeah. I just happen to note here this 16 looks like it's a remnant from my testimony in 39 17 because it refers to the life extension period. So I believe this statement should be removed because it 18 19 clearly was a remnant from my 39 testimony. 20 I suspected that, and I don't actually want Q. 21 to ask about the life extension piece of it. I just 22 wanted to confirm that you were critical of the 23 extrapolation methodology used in the studies through 24 2050. 25 I was. Α.

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1	Q. And we can go there, but I think it might
2	be easier to just have you agree that in your
3	April 17th testimony you reiterated quite extensively
4	the concerns that you had over those 2050 studies.
5	Would you agree?
6	A. What page are you referring to?
7	Q. It's page 27.
8	A. Okay. I'm there.
9	Q. And on that page you claim that the time
10	period used for the extrapolation methodology is not
11	representative of the period covered by the
12	extrapolation and you claim the extrapolation
13	produces anomalous results. You fault the
14	extrapolation methodology for not using the IRP
15	models. Do you see that?
16	A. Yes.
17	Q. If you could turn back one page to page 25
18	of your April 17 testimony, Table 1 shows
19	benefit-to-cost ratios you calculated; correct?
20	A. Yes.
21	Q. And you made those calculations using that
22	very same 30-year analysis you have repeatedly said
23	is problematic; correct?
24	A. Correct.
25	Q. And the benefit-to-cost ratios you
1	

Page 140 calculated show that in seven of nine scenarios the 1 2 combined projects will produce net customer benefits; 3 correct? 4 Α. That's the benefit/cost ratios that result from the Company's analysis. That's correct. 5 6 Q. Would you agree that if you were to take the simple average of all of those results, it's 7 roughly 1.09, indicating that on average the net 8 9 benefits are roughly 10 percent higher than the 10 costs? I haven't done that calculation. 11 Α. Ι 12 disagree with the value of that calculation then, but 13 I'll take your representation that that's what the 14 math produces. 15 Well, I believe in your summary you testify Q. 16 that you disagree with that methodology of using a simple average; correct? 17 18 Α. Yes. 19 ο. And I believe when you did so you indicated that is the Company's methodology is that -- is my 20 21 recollection correct? 2.2 Α. The Company's risk-weighted methodology? 23 0. Yes. 24 The Company has used the risk-weighted Α. 25 methodology in its -- I think its last surrebuttal

1	Page 141 testimony.
2	Q. If I could just direct your attention,
3	please, to Mr. Link's surrebuttal testimony, page 60.
4	A. Is that here?
5	Q. I don't think that is in the handout I
6	provided you. Perhaps your counsel could provide you
7	a copy.
8	MR. JETTER: Which set of Link's testimony?
9	MR. LOWNEY: This would be Mr. Link's
10	surrebuttal testimony.
11	MR. JETTER: That's the first round of
12	surrebuttal in this docket or second surrebuttal?
13	MR. LOWNEY: That would be May of 2018.
14	MR. JETTER: Okay.
15	MS. MCDOWELL: Justin, can I give this to him?
16	MR. JETTER: Yeah. Thank you.
17	A. Sorry. What page?
18	Q. Page 60.
19	A. Okay. I'm there.
20	Q. If you look down on Lines 1344, that's
21	where Mr. Link calculated the 1.09 average that we
22	just discussed.
23	A. I see that.
24	Q. And then it begins on Line 1347 where the
25	Company describes in its testimony that the

1	Page 142 methodology that uses a simple average to calculate a
2	risk-weighted benefit was actually the methodology
3	proposed by Division's expert witness in the
4	Jim Bridger SCR case. Do you see that testimony
5	there?
6	A. I see that.
7	Q. And so, in fact, rather than being the
8	Company's proposal, this is DPU's proposal from a
9	prior case; isn't that true?
10	MR. JETTER: I object to that. I think that
11	misrepresents the facts in that docket.
12	CHAIR LEVAR: Do you want to respond to the
13	objection?
14	MR. LOWNEY: Well, I'm not sure what is
15	misrepresenting the facts. I'm not 100 percent sure
16	how to respond.
17	MR. JETTER: In that docket the Division
18	proposed a weighted-average method. The Company
19	response in testimony was that it didn't perform that
20	and couldn't perform that because it didn't believe
21	that each scenario is equally weighted or had any
22	specific risk value. The Division's witness in the
23	final surrebuttal in that docket then acquiesced that
24	was a way to do it. I don't think they recommended
25	it at any point.

1	Page 143 MR. LOWNEY: I guess I would just say the
2	testimony speaks for itself. The quote here was from
3	both prefiled as well as testimony that was presented
4	live at the hearing by DPU's expert. So I'm not
5	intending to represent what that expert was thinking.
6	I'm just noting that's what was in the record in that
7	case.
8	CHAIR LEVAR: To deal with that objection, I do
9	not have that testimony in front of me. I don't know
10	that I can really deal with the objection
11	without having it in front of me.
12	MR. LOWNEY: It's quoted in Mr. Link's testimony
13	is where I'm reading it from.
14	CHAIR LEVAR: Okay. And I haven't gone to
15	there. So what page are you on?
16	MR. LOWNEY: I'm sorry. It's page 60 of
17	Mr. Link's surrebuttal testimony from May of 2018,
18	the last round of testimony that was filed.
19	CHAIR LEVAR: Do you have it on paper? It takes
20	me a minute to get to it on the computer. Sorry, I
21	just want to review this as consider the objection.
22	I think I'm going to allow a question based
23	on these statements that Mr. Link has quoted.
24	Mr. Jetter will have an opportunity for redirect if
25	you want to clarify what you believe the Division's

Page 144 1 position was in that docket, but I'm going to allow 2 the question to be asked based on this. 0. And my only purpose in asking the question 3 4 was just to clarify the record that this was the recommendation made by DPU's expert witness and that 5 was explained by Mr. Link, so it's incorrect to 6 characterize it as Mr. Link's opinion; correct, 7 Mr. Peaco? 8 No, but it -- that's not the basis for my 9 Α. statement. My statement this morning which was 10 11 referring to what Mr. Link presented as risk-weighted 12 benefit in the surrebuttal testimony, so regardless of whatever qualifier you put on it, that's a number 13 that was put before the Commission as a risk-weighted 14 15 benefit in the surrebuttal testimony. And that was what I was referring to this 16 morning in particular, and I was not party to this 17 docket or consultant with the DPU at the time, and 18 this is not a methodology that I would recommend to 19 20 apply to this case or any other case. 21 0. All right. If we could turn back to your 22 supplemental rebuttal testimony, please, page 35. 23 Α. I'm sorry? 35? 24 0. Yes. And this page contains two tables, Table 3 and Table 4, and those reflect the updated 25

1	Page 145 net benefit calculations for the combined projects;
2	correct?
3	A. Yes, these are the Company's updated
4	benefit numbers.
5	Q. And if I could just direct your attention
6	to Table 4 first, that is the 20-year study analysis
7	that relies on the Company's IRP models and IRP
8	planning horizons; correct?
9	A. Correct.
10	Q. And would you agree that if you had
11	calculated the benefit-to-cost ratios that we just
12	discussed using the 20-year results, they would have
13	been higher in every single case?
14	A. Perhaps. But you're probably right, but I
15	didn't compute them because I felt the
16	20-year analysis were incomplete. They don't include
17	the full cost and benefits of the project, and so to
18	my mind, a 20-year analysis is not a meaningful piece
19	of information to be considered in judging the value
20	of projects with much longer lives.
21	Q. But you don't disagree the results of the
22	20-year study show benefits in every single
23	price-policy scenario and in higher benefits than the
24	30-year studies
25	A. That's an interesting statement

Page 146 1 -- that you're relying on? 0. 2 Α. -- but I don't think it's relevant to the 3 decision. 4 ο. Between Table 3 -- I guess I should 5 clarify -- Table 3 shows the 30-year results that you 6 relied on for your benefit-to-cost ratios; correct? 7 I'm sorry? Α. 8 0. Table 3 shows the study results that you 9 relied on for your benefit-to-cost ratios; correct? 10 Α. Correct. 11 And so between Table 3 and Table 4, there's Q. 12 a combination of four different study techniques for 13 each of the nine price-policy scenarios; correct? The SO model, the PaR, stochastic mean, the PaR 14 risk-adjusted, and the annual revenue requirement 15 calculation; correct? 16 17 Α. Okay. 18 0. So there's 36 total study results presented in these tables? 19 20 Α. Yes. 21 And of those, 34 of them show net benefits 0. 22 to customers; correct? 23 Α. As I said, none of the numbers in Table 4 24 are of any value to my way of thinking about valuing 25 the project, so we really have -- the 30-year

Page 147 1 analysis was the focus of my testimony. 2 Now, your dismissal of the 20-year study Q. results is at odds with the Utah independent 3 4 evaluator's reliance on those very same results; 5 correct? I'm not familiar with what he relied on. 6 Α. Ι think -- I'm not familiar with his analysis. 7 Do you have the independent evaluator's 8 Q. 9 report? 10 I do not. Α. 11 CHAIR LEVAR: If you need a redacted copy, you 12 can take this, and I can share up here at the table. 13 Is that what you're looking for? MR. LOWNEY: Yeah, eventually we'll need an 14 unredacted copy, but a redacted is fine for the 15 16 moment. 17 CHAIR LEVAR: Here's a redacted one. 18 MR. LOWNEY: Thank you. 19 0. Now, if you could turn first to page 17 of that report, and the 20-year studies that we just 20 21 discussed rely on the SO and PaR models; correct? 2.2 Α. I am sorry. Where are you referring? On 23 page 17 I don't see. I guess I was doing a preparatory question 24 0. just to confirm the results in Table 4, the 20-year 25

Page 148
1 results that you're dismissive of, rely on the SO and
2 PaR model; correct?

3 A. Correct.

4 And then on page 17 of the Utah independent 0. evaluator's report, the first full bullet that begins 5 with the sentence "the evaluation process" includes 6 this sentence. I believe it's the second one in the 7 8 paragraph that says "Furthermore, the model 9 methodology is consistent with and likely exceeds 10 industry standards applied by others for conducting 11 such a price and risk analysis." Do you see that? 12 Α. I see that. 13 And then if I could direct your attention 0. 14 to page 68 of that report and Table 18 that's on that 15 page? 16 CHAIR LEVAR: Just a reminder from a couple days ago, there might be page number differences between 17 different versions of the report. 18 Table 18 is what I'm looking for. 19 ο. It's on page 68 of the copy I have. Is that --20 21 Α. That's Table 20, so we're referring to 2.2 Table 18? 23 0. Correct. 24 Α. Okav. I'm there. And Table 18 shows the updated portfolio 25 Q.

Page 149 results for the SO model scenarios. Do you see that? 1 2 Α. I see that. Those numbers that are reported are same 3 0. 4 numbers that are reported in your Table 4; correct? The first column that begins with in low gas/zero CO2 5 column, benefits of 185 --6 7 I see that. Okay. Α. -- million dollars. 8 Q. 9 Α. Okay. 10 While you were dismissive of these 20-year 0. 11 results, the independent evaluator clearly relied on 12 those results when making his assessments of the 13 value of the wind projects; correct? 14 Α. Well, I see the numbers are in here. Ι guess I would have to read to figure out exactly how 15 16 he relied on that, which is what your question is; correct? 17 18 Q. If you could turn to page 71 of that report, please. 19 20 I'm sorry. You're going to have to give Α. 21 me --22 Q. Sorry. So this would be Table 20 under the 23 second bullet point, and the bullet point in the left-hand column is "The solicitation process must be 24 designed to lead to the acquisition of electricity at 25

Page 150 the lowest reasonable cost." 1 2 Α. That's page 68 of this copy. And the paragraph in the right-hand column 3 0. begins with "in our view." 4 Α. 5 Uh-huh. 6 Q. And the second sentence says, "The bid evaluation selection process was designed to the lead 7 to the acquisition of wind-generated electricity at 8 9 the lowest reasonable cost based on detailed, state-of-the-art portfolio evaluation methodology." 10 11 Do you see that? 12 Α. Yes. 13 So, again, the detailed portfolio Q. 14 evaluation methodology that the Utah independent evaluator relied on is the same detailed analysis you 15 16 claim is totally worthless in this case; right? 17 Although I heard him testify Α. Yes. 18 yesterday that there was limited transparency, so I'm 19 not sure how much he did an independent review of that based upon his testimony yesterday. 20 21 0. All right. If we could go back to your 22 April testimony, your supplemental rebuttal, 23 lines 948? 24 Α. Thank you, Commissioner. 25 CHAIR LEVAR: Thank you.

Page 151 1 I'm sorry? The page reference again. Α. 2 Q. It's page 54, and there's some confidential --3 4 Α. Which testimony? I'm sorry. Your supplemental rebuttal, the 5 0. April testimony that was filed. 6 7 Α. Thank you. Okay. I'm there. 8 And, actually, before I ask this I may 9 Q. 10 just -- I'm going to give you a copy of the 11 unredacted version of the IE report, and you'll note 12 that this confidential information both to page 54 13 and in the IE report, I would like to avoid using the specific names and number values that are 14 confidential if at all possible. 15 16 Α. Okay. But obviously if you need to, feel free to 17 Q. go there. Now, beginning on lines 948, you testified 18 that there is a potential option that could have 19 yielded more benefits than the options that were 20 21 actually selected; correct? 2.2 Α. I'm sorry? What line? 23 0. Well, it's the question posed on Line 948, so it's sort of the whole question and answer that 24 begins on Line 948. 25

Page 152 1 Α. Yes. 2 Q. And without going into the name of the particular project, it's described on lines 951 and 3 4 952. 5 Α. Yes, I see that. And you claim on Line 953 that "Mr. Link 6 Q. concluded that this scenario does not yield 7 preferable results." Do you see that? 8 9 Α. Yes. 10 And then you accuse him on Line 954 of only 0. 11 selectively reporting the modeling results? 12 Α. Right. 13 Is that correct? Q. 14 Α. That's correct. 15 And then you refer to a number on Line 956, Q. and I believe that number actually is a public 16 number. It's in the public version of the IE report, 17 so I think I can say it, and that is the \$223 million 18 19 figure. 20 Α. Okay. 21 0. And so your claim here is that the 22 Company's preferred portfolio has \$167 million in 23 benefits, and you claim that the particular scenario you're describing here produces benefits of 24 \$223 million; correct? 25

Page 153 1 Α. Yes. 2 Q. Okay. Now, if I could direct your attention, please, to that page 69 of the IE report 3 4 that I handed you, and unfortunately, I just have a copy here, so it's the paragraph that begins "for the 5 6 400 megawatts PPA assessment." Do you see that 7 paragraph? I do. Α. 8 9 0. And that paragraph is describing the very same sensitivity you're describing on page 54 of your 10 11 testimony; correct? 12 Α. Give me a minute. 13 Appears to be, yes. 14 Ο. And the results that you report in page 54 of your testimony are not the results that the Utah 15 16 independent evaluator reported; correct? 17 Yeah. Our numbers came from Mr. Link's Α. 18 work papers, so I can't -- I don't know -- I can't 19 attest to how these numbers were generated. This result was -- the result in my testimony which the 20 21 reason it was redacted is because it came from the 22 confidential work papers provided to us by Mr. Link, 23 and so I'm not sure how this analysis was done. Well, I would just point out that the 24 0. \$223 million figure you cite to relates to a 25

1	Page 154 different sensitivity analysis involving a different
2	set of potential resources, and we can look at that
3	if you turn to page 65 of the Utah independent
4	evaluator report.
5	A. Okay.
6	Q. And the first paragraph that begins after
7	Table 16 describes a sensitivity analysis that was
8	provided by PacifiCorp at the request of the IE's
9	I'll give you a minute to read it, but if you look at
10	the very top of line 65, you'll see the \$223 million
11	figure that you reported that you took from
12	Mr. Link's work papers. You'll see it relates to
13	this different sensitivity analysis.
14	A. Page 65?
15	Q. Page 65, bottom of the page, carried over
16	to the top of page 66.
17	A. I see the number. I'm not I'd have to
18	go back and look at the work papers to see whether
19	we're talking about the same numbers or not.
20	Q. You didn't attach those work papers to your
21	testimony, did you?
22	A. No. I just provided a reference to them,
23	but I didn't attach them.
24	Q. But you would agree it's quite possible you
25	were inadvertently taking a number from this IE

Page 155 sensitivity and applying it to the sensitivity you 1 2 were describing on page 54 of your testimony; right? Α. We didn't rely on the IE report for that. 3 4 We relied on the work papers. Well, I understand that. I'm just telling 5 0. you that the IE's report describes the exact same 6 sensitivity you described in your testimony with 7 different numbers. The IE report also describes the 8 9 numbers you identify in your testimony relating to a different sensitivity. So it's possible the 10 11 independent evaluator in Utah and Mr. Link were 12 confused about the results, or it's more likely that perhaps you were confused by the results? 13 14 MR. JETTER: I'm going to object to that question. There was an opening statement 15 accompanying it that makes a number of assertions 16 that the witness has not confirmed. 17 18 MR. LOWNEY: All right. We can move on. 19 CHAIR LEVAR: You're withdrawing the question? 20 MR. LOWNEY: I'll withdraw that question. 21 If you could turn to your supplemental 0. 22 rebuttal testimony, please, on lines 960 to 962. 23 Α. I'm there. And you claim there "The Company has not 24 0. studied sufficient transmission alternatives to 25

1	Page 156 demonstrate that the combined projects are
2	least-cost, least-risk solution to resource need."
3	Do you see that?
4	A. Correct.
5	Q. And then carried over to the next page in
6	the answer to that, beginning on line let's see
7	969 you testify about an analysis regarding the
8	closure of the Dave Johnston coal plant. Do you see
9	that?
10	A. Correct.
11	Q. And you state beginning on line 971, "The
12	study concluded that 230 kV upgrades could be used to
13	reliably integrate the incremental wind, but the
14	Company has not evaluated the economic benefits of
15	such a solution." Do you see that?
16	A. Yes.
17	Q. Isn't it true that Mr. Vail's supplemental
18	direct testimony specifically said the Company did
19	perform that economic analysis and that the
20	reinforcement projects were in fact more expensive
21	than construction of the Aeolus-to-Bridger/Anticline
22	line?
23	A. I recall that statement, but I don't recall
24	seeing that study.
25	Q. If I could direct your attention, please,

1	Page 157 to Cross-examination Exhibit 7 and this is the
2	yellow excuse me the pink piece of paper that
3	is no longer pink. And this is a discovery response
4	that was provided to the Division on January 30 of
5	2018. Do you see that?
6	A. I see that.
7	Q. And it refers to the Dave Johnston
8	retirement analysis that was attached to a previous
9	data request? Do you see that?
10	A. I see that.
11	Q. And if you look at the response under
12	Subpart 1, it specifically states that "The Company
13	has estimated the capital cost of the Dave Johnston
14	Retirement Analysis as \$810.3 million."
15	Do you see that?
16	A. I see that.
17	Q. And you would agree that that's over
18	\$100 million more than the construction of the
19	Aeolus-to-Bridger/Anticline line; correct?
20	A. Yes.
21	Q. And you were provided with this before you
22	filed your supplemental rebuttal testimony in April,
23	and yet you still claim the Company did not perform
24	this analysis?
25	A. Well, that's the cost estimated for the
1	

Page 158 1 element, but there's no economic analysis of the 2 entire project there. Well, you would agree this indicates that 3 0. 4 it's more expensive to upgrade the 230 kV system than it is to build the transmission line; correct? 5 6 Α. For that particular -- you're comparing apples and oranges here. This was a study on a 7 retirement of Dave Johnston. It's not clear to me 8 9 whether that compares to the study we're talking 10 about above. 11 Well, in your testimony you describe a Q. 12 separate analysis on whether it could retire the 13 Dave Johnston coal plant early, and this data response is referring to a study that looked at 14 whether or not they could retire the Dave Johnston 15 plant early and in so doing avoid construction of the 16 500 kV line and instead upgrade the 230 kV system; 17 18 right? 19 MR. JETTER: I'm going to object, again, to 20 that. It's misrepresenting what's being shown here. 21 CHAIR LEVAR: Do you want to respond to the 22 objection? 23 MR. JETTER: This document says nothing about cost -- the incremental cost of retiring early. It 24 says the capital cost of retiring, and that's a very 25

Page 159 1 different fact pattern from what was described in 2 that question. 3 CHAIR LEVAR: Do you want to respond to the 4 objection or do you want to reword the question? I'm fine letting the document speak 5 MR. LOWNEY: for itself, so I will rephrase. 6 This document states that the Dave Johnston 7 0. Retirement Analysis had an estimated capital cost of 8 \$810.3 million; correct? 9 10 Α. Yes. But I don't know what's comprised in 11 that number, if that's all transmission or if that's 12 expenditures to actually retire the plant. There's 13 no information in here on that. 14 Ο. Well, you received this data response, however, and you never bothered to recognize it or 15 reference it or refer to it at all in your testimony? 16 17 Α. Because it was --18 0. You just said the Company hasn't performed 19 any of this analysis; right? 20 Well, if this is all we have, then they Α. 21 haven't completed the analysis. 22 Q. Just to be clear, that \$810 million figure 23 is the figure for the transmission system improvements related to the retirement of the 24 Dave Johnston plant; correct? 25

1	Page 160 MR. JETTER: I'm going to object and move to
2	strike that question. The witness excuse me
3	counsel for Rocky Mountain Power is testifying.
4	MR. LOWNEY: That's what the data response says.
5	The data response asked "Please provide a cost
6	estimate for the listed transmission system
7	improvements along with any supporting documentation.
8	The response says, "The Company has
9	estimated the capital cost of the Dave Johnston
10	Retirement Analysis at \$810.3 million.
11	CHAIR LEVAR: And what was the question that was
12	being objected to?
13	MR. LOWNEY: Well, I was just trying to clarify
14	with Mr. Peaco since he said he didn't know what that
15	\$810 million figure referred to, and according to
16	data response, it referred to the transmission system
17	improvements.
18	MR. JETTER: I don't agree that's clear from the
19	record on this.
20	CHAIR LEVAR: I think referring back to the
21	question that's being responded to is a fair question
22	to ask Mr. Peaco.
23	A. The response does not state that it's
24	simply the transmission cost, and so I have no way of
25	knowing whether it's responsive to the question or

Page 161 1 not. 2 Q. All right. And you didn't challenge this data response request when it was received; right? 3 4 Α. Challenge it? 5 0. If it was nonresponsive, you never raised 6 that with the Company, did you? We didn't. 7 Α. 8 Okay. If we could go back to your Q. 9 supplemental rebuttal testimony, please. On lines 10 356 --11 I'm there. Α. 12 Q. All right. I am going to focus on 357, 13 Line 357. You testify that "If the combined projects 14 are not built despite the Company's assertion to the contrary, ratepayers will be reliably served at a 15 reasonable cost in the future." Do you see that? 16 17 Α. Yes. And you continue that "there is therefore 18 0. little downside risk for customers in the combined 19 projects' absence." Do you see that? 20 21 Α. Yes. 22 Q. Now, you agree that -- well, actually, 23 let's turn back to page 35 of your testimony. Look at Table 3. 24 25 I'm there. Α.

Page 162 Now, in terms of downside risk in the 1 0. 2 low gas/zero CO2 scenario, the Company's analysis shows there's a net cost of \$184 million; correct? 3 4 Α. Correct. And in a high gas/high CO2 scenario, the 5 0. 6 Company's analysis shows that not pursuing the combined projects results in a net customer cost of 7 \$635 million; correct? 8 9 Α. That's what the Company's analysis shows; 10 correct. 11 So based on this analysis, there is a much Q. 12 larger downside risk of foregoing the projects than 13 moving forward with the projects; correct? 14 Α. Well, if you accept the Company's analysis, which I clearly don't, because it ignores -- it adds 15 16 a number of elements that I disagree with. Ιt doesn't include a consideration of all the risks that 17 I've identified, and when you factor those things in, 18 it's a much different picture. And that's the basis 19 20 for my statement on page 19. 21 0. I'd like to ask a question although I 22 guess -- I was going to ask question about something 23 that was provided in your summary, but I think I will skip that giving the Commission's ruling on that 24 25 summary.

1	Page 163 But I do have some follow-up questions to
2	some of your answers to questioning from counsel for
3	Western Resource Advocates.
4	Do you recall when you were being asked
5	questions about various carbon regulation policies
6	and plans that were in place?
7	A. Yes.
8	Q. My recollection was that you said that
9	those various plans that were being discussed are
10	irrelevant to the issues in this case. Is my
11	recollection correct about your testimony on that
12	point?
13	A. He was asking about things like RGGI and
14	New England which have no bearing on the market that
15	these assets are operating in. That was the context
16	of my I think that's response you're referring to?
17	Q. Yes.
18	A. Yes.
19	Q. Just to refresh your memory, I believe
20	Mr. Michel also asked you about a cap and trade
21	program in California?
22	A. Yes.
23	Q. Do you recall that? And are you aware that
24	the Company has service territory and is subject to
25	regulations in California?

Page 164 1 Α. I understand that. 2 Q. And you were also asked questions about a cap and trade program that was being considered in 3 4 Oregon; correct? 5 Α. I was. 6 Q. And the Company is regulated by Oregon as well; correct? 7 8 Α. Yes. 9 ο. And are you also aware that there's cap and 10 trade legislation that's being considered in the 11 state of Washington? 12 Α. I'm not familiar, no. But you are familiar, I assume, with the 13 0. 14 fact the Company is regulated in Washington; correct? 15 I understand that, yes. Α. 16 And you're also asked about a policy -- and 0. I may be misstating it, but a policy or resolution 17 passed by the city of Salt Lake. Do you recall that? 18 I recall that. 19 Α. 20 And the city of Salt Lake is a customer of Q. 21 Rocky Mountain Power; correct? 2.2 Α. I believe so, yeah. That's my understanding. 23 24 Thank you, Mr. Peaco. MR. LOWNEY: 25 I have no further questions, and I would

Page 165 1 just move to admit into the record Cross-examination 2 Exhibits labeled 5, 6, and 7. 3 CHAIR LEVAR: Okay. If anyone objects to that 4 motion, please let me know. I'm not seeing any objections, so the 5 6 motion is granted. (RMP Cross Exhibits 5, 6, and 7 were received.) 7 8 Mr. Jetter, you're free to do any redirect. 9 MR. JETTER: Thank you. May I have just a moment to prepare a few things? 10 11 CHAIR LEVAR: Yes. Would you recommend a short 12 recess or do you need a quick moment to -- while we 13 wait? 14 MR. JETTER: How about something like five minutes? Three minutes would be great. 15 16 CHAIR LEVAR: Okay. Why don't we recess for 17 five minutes and reconvene at 2:00. 18 MR. JETTER: Thank you. (A break was taken, 1:55 to 2:03) 19 20 CHAIR LEVAR: Okay. We're back on the record. 21 Thank you. 2.2 Mr. Jetter. 23 MR. JETTER: Thank you. 24 111 25 111

1	Page 166 REDIRECT EXAMINATION
2	BY MR. JETTER:
3	Q. Mr. Peaco, during the brief recess I handed
4	you a document that I believe has been previously
5	identified as DPU Cross-Exhibit 3. It's the would
6	you read the cover of what that document is. Just on
7	the first page.
8	A. It's not marked. This one?
9	Q. That's it, yes.
10	A. This is the redacted testimony of
11	Rick T. Link, dated February 23 in Docket 12-035-92.
12	Q. Thank you. And would you turn to page 32
13	of that and
14	A. I'm there.
15	Q read the highlighted portion.
16	A. You want the question as well?
17	Q. Yes, please.
18	A. So the question is "Have you assigned
19	probabilities to each of these scenarios to arrive at
20	a weighted PVRR(d) result?" The answer is "No. The
21	DPU has taken the position that the PVRR(d) results
22	from the Company's natural gas and CO2 price
23	scenarios should be weighted by scenario of specific
24	probability representing the likelihood that each
25	case would actually occur.

1	Page 167 "While such an approach would, as a matter
2	of convenience, produce a single PVRR(d) outcome,
3	it's problematic in that there's no way to develop
4	empirically derived probability assumptions. Rather
5	assigning probability assumptions would be a highly
6	subjective exercise largely informed by individual
7	opinion."
8	Q. Thank you. Would you then please turn to
9	page 34 of that document, and, again, I've
10	highlighted a question and the first sentence of the
11	answer, I believe. Would you please read that.
12	A. Yes. Question is "Absent assigning
13	probabilities to each scenario, how does the Company
14	consider the uncertainty of future natural gas
15	prices?" And the highlighted part of the answer is
16	"A useful metric is to compare the potential range of
17	future natural gas price scenarios in the context of
18	historical natural gas prices."
19	Q. Thank you. And is it your understanding of
20	the meaning of the testimony in the first section
21	that I had asked you to read to indicate that the
22	price-policy scenarios in that docket that may
23	have well, the price-policy scenarios used in that
24	docket, the Company did not believe that they were
25	it was a reasonable method to assign probability

	Page 168
1	equally to all of them?
2	A. My understanding is that the Company's
3	testimony here is that there was no meaningful way to
4	assign probabilities to those scenarios.
5	Q. Okay. And so if you were going to assign
6	probabilities to the various scenarios, would it be
7	reasonable, do you think, to use historical prices as
8	some sort of a guide to the future, given the second
9	answer that you just read?
10	A. Well, I think that you clearly would want
11	to look at historical data and data you have on
12	forward information, but I also agree that there's
13	assigning probabilities to scenarios like that is
14	judgment, and part of that judgment would be informed
15	by what you understand about the history of pricing
16	and how that informs what you understand about likely
17	future outcomes.
18	Q. Thank you. And then those are the only
19	questions from that document I have for you. But I'd
20	like you to, if you still have it in front of you, to
21	take a look at what's been labeled and given to you
22	as RMP Cross-Exhibit 6.
23	A. I have that.
24	Q. Would you turn to what's marked at the
25	bottom of the document as page 66 that you looked at

1	Page 169
2	A. Okay.
3	Q. There's a title heading that is 5.7.5, and
4	it reads "Advancement of Gateway Projects." Have you
5	found that?
6	A. Yes.
7	Q. Okay. Would you read the last full
8	sentence of that paragraph underneath.
9	A. "They are designed to create transfer paths
10	to move wind generation from Wyoming to the Wasatch
11	Front load center in Utah and to the west."
12	Q. When that sentence describes "they," is it
13	accurate to represent that "they" is describing the
14	Gateway projects?
15	A. Yes. This section talks about what's
16	called the Energy Gateway projects.
17	Q. Okay. Do you have any reason to dispute
18	that that conclusion that they, the Gateway Energy
19	projects are designed to create a transfer path to
20	move wind generation from Wyoming to Wasatch Front?
21	A. That was clearly my understanding of how
22	they were presenting it here and everywhere else
23	every other study we've looked at.
24	Q. Thank you. Next I would like to refer you
25	to the IE report.

Page 170 1 Α. Okay. 2 And on that report, would you please turn Q. to the bottom of page 65. 3 4 Α. You may want to identify the header for 5 those that are --6 Q. Yes. And so on that page is there a Table 16, Revised Portfolio Results for SO Model 7 Scenarios. And what I'm looking at and referring you 8 to is underneath that Table 16, there is a paragraph 9 that begins "PacifiCorp." 10 11 Yes, I have that. Α. 12 Q. In the fifth line down, a sentence begins 13 "The Oregon IE requested." 14 Α. Yes. Would you please read -- it's a little bit 15 Q. 16 lengthy, but read the remainder of that paragraph which on my copy goes three lines onto page 66. 17 Okay. "The Oregon IE requested a 18 Α. 19 sensitivity where the PTC benefits produced by BTA 20 and the benchmark options would be levelized over the 21 full 30-year life of the project. A second issue 22 raised by the IEs is whether the term of the analysis 23 through 2036, approximately 16 years, and the real levelized cost of treatment for capital revenue 24 requirements adequately reflects all capital costs 25

1	Page 171 associated with utility ownership options over
2	30-year project life.
3	"In response PacifiCorp completed an
4	analysis of the expected benefits and costs through
5	2050, comparing the results of PacifiCorp's selected
6	portfolio and the IE sensitivity case. In the
7	presentation, PacifiCorp concluded the PVRR(d)
8	benefits through 2036 from the final shortlist
9	portfolio totaled 343 million, and the benefits from
10	the IE sensitivity with the PPA included total
11	227 million. Through 2050 the benefits from the
12	final shortlist bid portfolio of 223 million are
13	closely aligned with IE sensitivity bid portfolio
14	that produced an estimated 224 million in benefits.
15	The revised shortlist portfolio provides greater term
16	benefits.
17	Q. Thank you. And then I would like to have
18	you turn to page 71, and this is something that was
19	asked about earlier, and I'm just going to read this
20	briefly. It states the bid evaluation process was
21	designed to
22	A. Sorry. Just to be clear, this is in
23	Table 20?
24	Q. Yes.
25	A. And

Page 172 1 0. And this is to the right-hand side of the 2 bullet Solicitation Process. 3 Α. Okay. 4 And this states that -- is this accurate it 0. states "The bid evaluation and selection process was 5 6 designed to the lead to the acquisition of wind-generated electricity at the lowest reasonable 7 cost based on detailed state-of-the-art portfolio 8 9 valuation methodology used. 10 "The steps taken to achieve comparability 11 between utility cost of service, resources, and 12 third-party firm-priced bids and flexibility afforded 13 bidders a range of eligible resources and alternatives" -- and that continues on. 14 Do you know if they were referring in that 15 section to the 20-year or 16-year analysis or the 16 analysis through 2050? 17 18 Α. It surely doesn't say that -- state that in 19 this text. 20 Okay. And just a final follow-up comparing Q. 21 the bullet point to what's in the paragraph, do you 22 believe there's a difference between designing an RFP 23 this is, quote, going to lead to, quote, the 24 acquisition of wind-generated electricity at the lowest reasonable cost -- is that the same thing as 25

Page 173 the bullet point states that "The solicitation 1 2 process must be designed to lead to the acquisition of electricity at the lowest reasonable cost"? 3 4 Α. No. This would be evaluating the more 5 limited universe of projects that were eligible for bid in the RFP, and the methods of comparing them 6 side by side might be different than if you're 7 8 looking more -- comparing less homogeneous resource 9 options. 10 0. Thank you. And if you were evaluating 11 price-policy scenarios, would it be reasonable, in 12 the event that you were looking for generation to 13 provide capacity, to compare price-policy scenarios of all of the potential generation sources that might 14 be available? 15 16 I'm sorry. Could you --Α. 17 MR. LOWNEY: Objection. This is outside the 18 scope of cross-examination. 19 CHAIR LEVAR: Do want to respond to the objection, Mr. Jetter? 20 21 MR. JETTER: Actually, I'll withdraw the 2.2 question. I think it's pretty well established what 23 our position is there. 24 I have no further questions, Mr. Peaco. 25 Thank you.

Page 174 1 CHAIR LEVAR: Thank you. 2 Mr. Michel, do you have any recross? MR. MICHEL: I do not. 3 4 CHAIR LEVAR: Mr. Lowney. MR. LOWNEY: Yes, I just have I think one 5 6 question, and unfortunately I think it requires the IE report that you just handed back to 7 Commissioner White. 8 9 RECROSS-EXAMINATION BY MR. LOWNEY: 10 11 Following up on a question you were just Q. 12 asked about page 71 of that report where it was 13 describing a bid evaluation and portfolio evaluation 14 process. This is back on the Table 20? 15 Α. 16 Yes, that's correct. Q. 17 Α. Okay. And you just answered that you didn't know 18 Q. 19 from reading that text whether or not that was referring to a 20-year or 30-year study. 20 21 Α. Correct. 22 Q. Now, if I could just direct your attention 23 to page 35 of the same report, and Footnote 16 on that page describes how the system optimizer model 24 produces unique resource portfolios across a range of 25

Page 175 different planning assumptions, and it does that over 1 2 a 20-year forecast period. Do you see that? Α. I see that. 3 4 ο. And so when this is describing the bid evaluation -- and I should clarify this is -- the 5 footnote on page 35 is describing how the Company was 6 going to develop portfolios to evaluate the bids in 7 the RFP; correct? 8 Give me a minute. 9 Α. 10 That's what it's describing there. This is 11 for the final shortlist. 12 0. Yeah. So when -- on page 71, it's referring to the bid evaluation and selection 13 It's fair to assume, wouldn't you agree, 14 process. that it's describing the SO model results over the 15 16 20-year planning period described in Footnote 16? 17 It may well be. It's just that it's not Α. 18 clear from this text that's what they are intending 19 to refer to. 20 MR. LOWNEY: Thank you. I have no further 21 questions. 2.2 CHAIR LEVAR: Okay. Thank you. 23 Commissioner Clark, do you have any 24 questions? 25 COMMISSIONER CLARK: No questions. Thank you.

1	Page 176 CHAIR LEVAR: Commissioner White?
2	COMMISSIONER WHITE: I just have a couple. The
3	first question I have is, you know, in terms of the
4	pricing and modeling scenarios that Rocky Mountain
5	Power has used to essentially to demonstrate
6	potential benefits for these projects, I recognize
7	there's disagreement in terms of, I guess, how those
8	are modeled, 20 versus or levelized or some nominal,
9	but let me ask you this:
10	Do you take issue with the underlying data
11	inputs? And specifically what I'm talking about is
12	the official forward price curve.
13	DANIEL PEACO: We didn't the official forward
14	price curve was not something that was an input
15	that didn't rise to the level of getting a lot of
16	focus from us so we haven't I don't have we
17	didn't spend a lot of time looking at the critique
18	for that.
19	I think there's some concerns there, but
20	there were other input assumptions that we were more
21	focused on. For example, we talked about the
22	omission of certain transmission costs and how some
23	of those other inputs were there were things that
24	seemed important enough to materially change the
25	answer. So that was our focus. I didn't spend a lot

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1	of time looking at that particular input.
2	COMMISSIONER WHITE: The reason why let me
3	just preface it by saying part of the reason why I'm
4	curious to hear if you have any concerns about it is
5	you probably recognize the Commission or the Company
6	utilizes that data stream for a lot of purposes.
7	DANIEL PEACO: Yeah.
8	COMMISSIONER WHITE: You know, cost, IRP
9	planning, et cetera.
10	DANIEL PEACO: It does concern me looking at the
11	gas prices there that there's the way it's
12	developed there's a very rapid acceleration in about
13	year five of the forecast, sort of briding between
14	the short-term forecast and that longer-term forward
15	price curve forecast, and that creates a lot of
16	separation between the low and the mid case, and so
17	that gives me some concern.
18	And, obviously, my testimony puts a fair
19	amount of weight looking at the lower cases because
20	that's those cases are fairly consistent with
21	short-term market outlooks for where gas prices are
22	going, and that jump in the gas prices in I forget
23	exactly when it happens raises some questions in
24	my mind, but we didn't have an opportunity really to
25	dig into why that would occur.

1	Page 178 COMMISSIONER WHITE: Is there another potential
2	option for a dataset that you would recommend or
3	would be more valid or more
4	DANIEL PEACO: Well, the Company retained
5	third-party forecast, and I think that I've seen
6	other entities that retain more than one of those and
7	use some sort of composite of those, but everyone has
8	their own different methodology on that, so that's
9	another way to do it.
10	I think that it's you do see even if
11	you do that you do see some significant variability
12	in the market forecaster's perceptions of where the
13	reference case is and where the range would go, and
14	so looking at those kind of help give a better sense
15	of where any particular forecast lands there, but
16	that's expensive to buy those forecasts and compare
17	them.
18	COMMISSIONER WHITE: Let me ask you about need.
19	And this is I'm going to, if it's okay, reference
20	back to some a comment made by Mr. Peterson
21	earlier when there was a discussion about I am
22	going to try to not mischaracterize this, but there
23	was a discussion about the Division's past position
24	on Front Office Transactions and how that they have
25	taken positions at a time apparently that they would
1	

	Page 179
1	prefer not to have such heavy reliance on that.
2	But Mr. Peterson, if I understand and
3	clarify that, if they were going to rely on another
4	option, it would be a high-capacity resource. And so
5	what would that look like? I mean what does that
6	look like to you?
7	DANIEL PEACO: Well, my understanding of the
8	Company's use of Front Office Transactions is what
9	I would say that they plan to have some amount of net
10	short position and rely on the short-term market to
11	balance it. That's a some utilities do that to
12	make sure that they it's basically to hedge
13	against low-growth risk. You leave some amount of
14	your portfolio left in the short-term market and then
15	you can buy exactly what you need based upon next
16	year's forecast as opposed to a long-term forecast.
17	So that's kind of why I understood the
18	Company was using a so they are leaving themselves
19	a bit net short knowing that their neighbors have
20	some surplus capacity, but when the Company pivoted
21	to say that the combined projects were really a
22	resource need to meet capacity in the same way that
23	they are using front office transactions, that to me
24	connotes there's certain types of resources where you
25	would if you were going to build new you would

1	Page 180 probably build a combustion turbine.
2	If you're in a market where there's surplus
3	market, there may be other kinds of bilateral
4	transactions with neighbors where you could buy some
5	capacity for a period of years through some sort of
6	thing, and so I think that was what Mr. Peterson was
7	talking about was that if you really are focusing on
8	filling a need just to make sure you have enough
9	capacity to meet the reserve, it's really a peaking
10	resource. It's something that qualifies to meet
11	reserve margin. That's an entirely different
12	resource than a wind source that has fairly limited
13	amount of capacity contribution or reserve margin.
14	So you would look at that and the way I
15	would view that is or the way I think about why I
16	don't really see that the Company was targeting to
17	reduce front office transactions in its resource plan
18	with this proposal because, if that was really the
19	point, they would want to know whether there was
20	other kinds of surplus capacity in the market they
21	could buy for a period of time and mitigate their
22	reliance on prospective future front office
23	transactions, and that's my understanding of what
24	Mr. Peterson was talking about.
25	COMMISSIONER WHITE: So if the Company were to

Page 181 design an RFP to essentially address or replace what 1 2 the FOTs are providing right now, you're saying it 3 would likely be a CT? 4 DANIEL PEACO: Yeah. If the Company came to me 5 or to you and said "Our resource plan says, you know, 6 we're going to have to rely too extensively on prospective future front office transactions and we 7 need to close that gap, and the front office 8 9 transactions are basically serving to fill our --10 help us meet our reserve margin requirements," then I 11 would say that's sort of a capacity resource option. 12 And if you've got resource options in the

13 market, whether it's demand response or bilateral transactions with a neighbor that's got surplus 14 15 capacity, you may be able to do far better than maybe the front office transaction assumption or actually 16 building a combustion turbine on some other peaking 17 resource. I would design the RFP to solicit those 18 kinds of resources and not limit it to wind in 19 20 certain location.

21 COMMISSIONER WHITE: Let me ask you about solar.
22 Would that fit the bill in a similar respect as a
23 CT or --

24 DANIEL PEACO: Solar, the way I understand the 25 investment, that has more of a -- if you compare

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1	Page 182 nameplate to actual reserve margin contributions,
2	solar does a better job of that than wind does. And
3	so for every megawatts of installed megawatts of
4	solar, you get more capacity contribution from that
5	than you would from wind, and so from a capacity
6	resource perspective, solar would contribute somewhat
7	more than wind, but it wouldn't be the same as a
8	combustion turbine.
9	COMMISSIONER WHITE: So if the Company were to
10	design an all-source RFP solar, wind but
11	ultimately it sounds like probably what it would
12	likely if you were to specifically look for those
13	characteristics it would be a CT. If you were to
14	compare again, this is completely hypothetical
15	because we haven't gone to market on this, et cetera.
16	But if you were to compare the potential
17	costs of a CT I am just looking at the, you know,
18	even the worst couple case scenarios, the 2036 and
19	2050, there's still a cost there, I guess; right? I

20 mean how would you compare that?

DANIEL PEACO: Yeah. No, the Company's IRP modeling obviously has CTs in it and not selected. Apparently, they are not economic in the short-run relatively to their assumptions about FOTs, but there may be other market responses for capacity that are

	- 100
1	Page 183 more cost effective than building a new CT. You're
2	not going to understand that market response from the
3	kind of RFP that they ran, either for the solar or
4	for the wind.
5	COMMISSIONER WHITE: Help me understand how wind
6	or solar could meet how does that compare? What
7	does that provide relative to what the FOTs are
8	providing now?
9	DANIEL PEACO: Well, the combined wind projects
10	has about 180 megawatts of capacity margin
11	contribution, so my understanding the way the Company
12	has represented it, that there would be 180 megawatts
13	less FOTs they would need if the projects were built,
14	so of the thousand or so megawatts of FOTs that
15	they've talked about in their plan, it would displace
16	a small fraction of those.
17	COMMISSIONER WHITE: I have no further
18	questions. Thank you.
19	CHAIR LEVAR: And I don't have anything else, so
20	thank you for your testimony today, Mr. Peaco.
21	DANIEL PEACO: Thank you.
22	CHAIR LEVAR: Anything else from the Division?
23	MR. JETTER: No. The Division has presented all
24	of its witnesses, so I believe our case is concluded.
25	CHAIR LEVAR: Okay. Thank you.

Page 184 1 Mr. Moore? 2 MR. MOORE: The Office would like to call Mr. Bela Vastaq. 3 4 CHAIR LEVAR: Mr. Vastaq, do you swear to tell 5 the truth? 6 BELA VASTAG: Yes, I do. 7 CHAIR LEVAR: Thank you. 8 BELA VASTAG, 9 called as a witness on behalf of the Office, being duly sworn, was examined and testified as follows: 10 11 DIRECT EXAMINATION 12 BY MR. MOORE: 13 Could you please state your name and spell 0. 14 it and state for whom you are employed. My name is Bela Vastag, Bela 15 Α. Yes. V-a-s-t-a-g, and I work for the Utah Office of 16 Consumer Services. 17 18 In your employment with the Office, have 0. 19 you had the opportunities to review the testimony in 20 this docket in the discovery? 21 Α. Yes. 22 Q. Did you prepare or cause to be prepared a 23 December 5th direct testimony, a January 16 rebuttal testimony, and April 17, 2018 second rebuttal 24 testimony together with exhibits? 25

Page 185 1 Α. Yes. 2 Q. Do you have any changes to this testimony 3 at this time? 4 Α. No changes. And if I asked you those same questions, 5 0. 6 would your answers be the same? 7 Α. Yes. MR. MOORE: At this point the Office would move 8 9 for admission of Mr. Vastag's prefiled testimony. 10 CHAIR LEVAR: If anyone objects to that motion, 11 please indicate to me. 12 I'm not seeing any objection, so the motion 13 is granted. (Prefiled Testimony and Exhibits of B. Vastag 14 15 were received.) 16 Have you prepared a summary of your Q. testimony? 17 Yes, I have. 18 Α. 19 Q. Please proceed. 20 Good afternoon, Commissioners. The Office Α. 21 of Consumer Services recommends that the Commission 22 deny Rocky Mountain Power's request for approval to 23 construct the proposed new wind and new transmission 24 projects. The Company has not demonstrated that these new resources would provide ratepayers the 25

1	Page 186 lowest-cost electricity, considering risk as required
2	by law in Utah Code Sections 54-17-302 and 54-17-402.
3	The Office bases its conclusion primarily on the four
4	following reasons:
5	No. 1, frequent, selective, and last-minute
6	resource modeling changes by the Company and also
7	disputed IRP and RFP processes make it uncertain if
8	the final proposed set of projects are lowest cost.
9	For example, it appears that solar resources, wind
10	resources in other locations and/or some PPA wind
11	resources may be lower cost than the Company's
12	proposed projects. Due to the flawed process, we
13	cannot conclude that the proposed resources are,
14	quote, "lowest reasonable cost to retail customers,"
15	unquote as required by Utah law.
16	No. 2, the size of the their proposal
17	calling for approximately \$2 billion of investments
18	and also an accelerated timeline for the proposed
19	projects, places substantial risks on ratepayers.
20	These risks to rates include potential cost overruns,
21	project delays, under-production of energy, and
22	possibly less than full captures of PTCs. These
23	risks could easily turn forecasted future net
24	benefits into actual net costs for ratepayers,
25	unnecessarily raising electricity rates.
1	

Page 187 No. 3, the proposed projects are not needed 1 2 to reliably and cost effectively serve ratepayers. 3 Therefore, it is unacceptable to expose ratepayers to 4 the risks associated with the proposed very large investment of funds over a very tight timeline in 5 order to pursue an economic opportunity that may or 6 7 may not prove out. No. 4, uncertainty in the Multi-State 8 9 Process, or MSP, for cost allocation makes this a very risky time for the Company to embark on such a 10 11 large resource acquisition. The current MSP 12 agreement ends in 2019, and it is unknown what MSP 13 cost allocation framework will be in place when the proposed projects are to be in service at the end of 14 20/20.15 16 As we saw last week, the Oregon Public Utilities commission did not acknowledge the 17 Company's wind final shortlist, making cost recovery 18 in Oregon more uncertain and further heightening the 19 20 Office's concern regarding MSP risk. 21 However, if the Commission decides to 22 preapprove some form of the Company's proposed 23 projects, the Office recommends that the Commission place certain ratepayer-protection conditions on the 24 25 preapproval.

Page 188 The Company claims that such conditions are 1 2 outside of the regulatory compact. However, Utah law 3 for resource decisions, specifically Sections 4 54-17-302, Subsection (5)(b) and 54-17-402, Subsection (6)(b), provide that, quote, "The 5 Commission shall approve all or part of the resource 6 7 decision subject to conditions imposed by the Commission." The statutory framework under which the 8 9 Company's resource decisions have been brought forward envisions that the Commission can subject a 10 11 resource decision preapproval to conditions. 12 If the Commission decides to preapprove a 13 resource decision in this docket, the Office recommends the following five ratepayer conditions --14 15 ratepayers' protection conditions. Excuse me. 16 No. 1, the capital and O&M costs of the proposed projects should be capped at the Company's 17 most recent estimates in this docket. No. 2, PTC and 18 19 energy benefits should be guaranteed at 95 percent of 20 the forecasted amounts. No. 3, retail ratepayers' 21 share of the costs of the proposed transmission 22 facilities should be capped at 88 percent. 23 No. 4, risk from the expiration of the 24 current MSP cost allocation agreement in 2019 should 25 be mitigated by only preapproving a Utah

1	Page 189 jurisdictional amount for the proposed projects based
2	on the current allocation method and requiring that
3	the Company come before the Commission to explicitly
4	request approval if it seeks to recover costs from
5	Utah customers based on a different method.
6	No. 5, deny the use of the resource
7	tracking mechanism, or the RTM, the Office believes
8	that the Company can adequately recover its cost for
9	the proposed projects through the use of existing
10	regulatory processes such as a general case. And
11	that concludes my summary.
12	MR. MOORE: Mr. Vastag is available for
13	questions from the Commission and cross.
14	CHAIR LEVAR: Okay. Thank you.
15	Mr. Jetter, do you have any questions for
16	Mr. Vastag?
17	MR. JETTER: I have no questions. Thank you.
18	CHAIR LEVAR: And I may have missed it. Did we
19	get his testimony entered into evidence? I don't
20	remember if we did.
21	MR. MOORE: I believe I moved, but I'll move
22	again.
23	CHAIR LEVAR: Okay. I'm sorry if my memory is
24	bad.
25	MR. SNARR: He moved, but let's do it

1	Page 190 CHAIR LEVAR: He did? Okay. If you remember
2	it, we're good. I'll trust your memory.
3	MR. SNARR: My note says yes.
4	CHAIR LEVAR: Okay. Let's see.
5	Mr. Russell?
6	MR. RUSSELL: No questions. Thank you.
7	CHAIR LEVAR: Mr. Baker?
8	MR. BAKER: No questions. Thank you.
9	CHAIR LEVAR: Okay. Mr. Longson?
10	MR. LONGSON: No questions. Thank you.
11	CHAIR LEVAR: Mr. Holman.
12	MR. HOLMAN: No questions. Thank you.
13	CHAIR LEVAR: Mr. Michel.
14	MR. MICHEL: No questions, Mr. Chairman.
15	CHAIR LEVAR: Okay. Thank you.
16	Ms. McDowell or Mr. Lowney?
17	MR. LOWNEY: We actually have just a few
18	clarifying questions.
19	CROSS-EXAMINATION
20	BY MR. LOWNEY:
21	Q. Now and this has to do with the proposed
22	cap on capital costs that the Office is proposing in
23	this case, and there was some confusion yesterday
24	regarding the nature of that proposed cap. So I'm
25	just trying to get a little bit of clarity.

Page 191 1 Are you familiar with how we've been using 2 the term "soft" and "hard cap"? I've been present, and I believe that it's 3 Α. 4 not clear. Okay. I don't think it's clear either. 5 0. So 6 if I use the term "hard cap," what I mean by that 7 term is a cap on costs over which the Company 8 categorically cannot under any circumstances recover 9 any additional costs. And a "soft cap" was being used yesterday during some cross-examination would 10 11 refer to sort of the structure contemplated by Utah 12 statutes where the Commission would preapprove a 13 certain amount here; if an overrun occurs, it would 14 be on the Company to demonstrate what the prudence of whatever that overrun might be. 15 16 Is the capital and O&M cost cap that is being proposed by the Office a hard cap or a soft cap 17 as I've just described them? 18 19 Α. I believe we see that as more of a hard cap versus the jurisdictional amount for MSP, more of a 20 soft cap, where the Company would come back to the 21 2.2 Commission if additional costs -- or if the costs 23 changed. Okay. So under the first -- the first 24 0. condition you had, just the capital and O&M, ignoring 25

1	Page 192 for a moment the MSP issue, the Office's proposal
2	would be a cap based on current estimates and if the
3	Company goes over that cap, even if it's a prudent
4	overrun, no cost recovery; correct?
5	A. Correct.
6	MR. LOWNEY: Okay. I think that's all my
7	questions. Thank you.
8	CHAIR LEVAR: Does that lead to any redirect,
9	Mr. Moore?
10	MR. MOORE: No redirect.
11	CHAIR LEVAR: Okay. Commissioner Clark, do you
12	have any questions for Mr. Vastag?
13	COMMISSIONER CLARK: Mr. Vastag, on page three
14	of your testimony, the first bullet that appears
15	presents your view that the applicant ignores the
16	fact that a portfolio of solar projects resulting
17	from the 2017S RFP appears to provide greater
18	benefits and lower risks than its proposed new wind
19	and new transmission projects.
20	And if you have support for that statement
21	beyond that that appears in the discussion of
22	Mr. Hayet or in addition to it, I'd like to hear from
23	you now on that subject or else I can address my
24	questions to him.
25	BELA VASTAG: That analysis was primarily

1	Page 193 performed by Mr. Hayet, but the point of that
2	statement was that in Mr. Link's I believe it
3	would have been February testimony. I might have my
4	dates wrong. He discusses the comparison of benefits
5	between wind and solar in the 2036 time period but
6	did not discuss benefits in the 2050 period.
7	But when you refer to his attached work
8	papers, you could discover calculations that show
9	that in the 2050 30-year period, the solar portfolio
10	had considerably more benefits than the wind
11	portfolio, and Mr. Hayet describes that in his
12	testimony.
13	COMMISSIONER CLARK: Those are all my questions.
14	Thank you.
15	CHAIR LEVAR: Thank you.
16	Commissioner White?
17	COMMISSIONER WHITE: No questions. Thank you.
18	CHAIR LEVAR: And I don't have anything else.
19	So thank you, Mr. Vastag. We appreciate your
20	testimony today.
21	Mr. Moore?
22	MR. MOORE: The Office calls Phil Hayet.
23	CHAIR LEVAR: Mr. Hayet, I will do my best not
24	to mispronounce your name today.
25	PHILIP HAYET: Thank you.

Page 194 CHAIR LEVAR: That will be a record if I 1 2 accomplish that. 3 Do you swear to tell the truth? 4 PHILIP HAYET: I do. 5 CHAIR LEVAR: Thank you. 6 PHILIP HAYET, called as a witness on behalf of the Office, being 7 duly sworn, was examined and testified as follows: 8 9 DIRECT EXAMINATION BY MR. MOORE: 10 11 Could you please state and spell your name, Q. 12 state for whom you're employed and whom you are 13 testifying for today. 14 Α. My name is Philip M. Hayet. I'm vice president of J. Kennedy & Associates. I'm testifying 15 on behalf of the Office of Consumer Services. 16 17 Have you had an opportunity to review this ο. docket and the testimony in this docket in the 18 19 discovery? 20 Α. Yes. 21 Did you prepare December 5, 2017 redacted 0. 22 and confidential direct testimony; January 16, '1918' 23 rebuttal testimony; April 17, 2018 second rebuttal testimony and related exhibits? 24 25 Yes. Α.

Page 195 1 0. Do you have any changes to make to this 2 testimony now? 3 I have one. It's to do with the April Α. 4 testimony, Line 965, the two words "approve repowering" should be combined. 5 Other than that change, if I asked you 6 Q. these same questions would your answers be the same? 7 8 Α. Yes. At this point, Chairman LeVar, I 9 MR. MOORE: would move for the admission of Mr. Hayet's prefiled 10 11 testimony and exhibits. 12 CHAIR LEVAR: If anyone objects to that motion, 13 please indicate to me. 14 Okav. I'm not seeing any objections, so the motion is granted, and I'll try to remember that 15 we did that. 16 (Prefiled Testimony and Exhibits of P. Hayet 17 18 were received.) 19 0. Have you prepared a summary of your 20 testimony? 21 Α. Yes, I have. 22 Q. Please proceed. Okay. Good afternoon, Commissioners. 23 Α. In 24 my rounds of testimony, I have addressed concerns with the Company's combined projects proposal. While 25

	Page 196
1	the Company asserts that these projects will provide
2	net benefits to customers from PTCs and energy
3	benefits, there are risks that the benefits will not
4	materialize and that ratepayers in fact would be
5	harmed.
6	There is clearly a difference of opinion as
7	to whether the Company's proposed projects will, in
8	accordance with Utah Code Section 54-17-302, most
9	likely result in the acquisition, production, and
10	delivery at the lowest reasonable cost to customers,
11	which I do not believe they will. The requirement
12	does not just require the outcome to be likely, but
13	it requires the outcome to be most likely, which is a
14	more stringent standard, and the Company has not
15	demonstrated it has met that requirement.
16	Furthermore, the combined projects are not
17	needed and not required because there are other less
18	risky alternatives that would ensure the Company's
19	resource needs are satisfied, reliability is
20	maintained, and would most likely result in lowest
21	reasonable cost at the least risk to customers.
22	In my direct testimony, I discuss my review
23	of PacifiCorp's economic evaluations and explain
24	concerns about issues including the likely natural
25	gas/CO2 future, potential tax law changes, the risk

1	Page 197 of cost overruns, and the impacts of energy and PTC
2	benefits not fully materializing.
3	In my January rebuttal testimony, I
4	responded to the testimony of witnesses other than
5	PacifiCorp who supported the Company's application
6	but did not appropriately evaluate the risk to
7	ratepayers inherent in the Company's proposal. In my
8	May 2nd rebuttal testimony, I discuss my review of
9	the Company's revised economic analyses, and I
10	discuss the change in the way PacifiCorp
11	characterized projects as providing a unique economic
12	opportunity for ratepayers to projects that were
13	needed to meet an identified resource need.
14	In that testimony I noted that just like in
15	the repowering docket, the Company changed its
16	to-2036 modeling analysis midstream to include a
17	modification to the PTC modeling methodology which
18	biased the results in favor of selecting self-billed
19	benchmark resources and build and build transfer
20	agreement options as opposed to purchase power
21	agreement wind and solar options.
22	In addition to pointing out the bias in
23	PacifiCorp's modeling analysis, I also discuss risks
24	the Company ignored including the potential for cost
25	overruns, less energy production than anticipated,

Page 198 and delays in project completion resulting in the 1 2 loss of some or all of the production tax benefits. 3 I also reviewed the two IE reports and note 4 that the IEs identify problems with PacifiCorp's RFP as well including similar concerns that I have with 5 PacifiCorp's PTCs and capital revenue requirement 6 7 modeling. Ultimately, the Oregon IE paired its recommendation for acknowledgment with the 8 9 recommendation for ratepayer protections. The Utah IE expressed some frustration that the winning bids 10 11 were limited to those that had favorable queue 12 positions and he noted that based on the Company's 13 evaluation, it was unable to determine if wind resources would be more cost effective than solar and 14 15 potentially other resources. The Utah IE also recommended close 16 monitoring of capital costs and energy produced by 17 the wind resources. Finally, I evaluated the 18 19 Company's solar sensitivity analysis and found that 20 the Company's own to-2050 solar sensitivity results indicated that solar resources were more economic 21 2.2 than wind. 23 I continue to recommend the Commission deny 24 the Company's request. I remain unconvinced that 25 Company has proven that these projects requiring

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1	billions in investment would be necessary to meet a
2	reliability need. These projects have primarily been
3	justified in flawed modeling analysis, and the
4	benefits, if they actually materialize, are not
5	neither substantial nor assured and simply do not
6	outweigh the risk for ratepayers.

7 However, if the Commission ultimately is 8 persuaded to approve PacifiCorp's request regarding the combined projects, I recommend that it impose 9 conditions, and I note that this position is 10 11 supported by Western Resource Advocates and 12 Utah Clean Energy who both support the Company's request to construct the combined projects. 13 For the sake of brevity, I will not repeat the Office's list 14 of conditions as Mr. Vastag included those in his 15 16 summary.

17 With regard to modeling, the Company's story in this proceeding has been constantly evolving 18 to justify the projects. In the latest round of 19 20 testimony, the Company removed the Uinta project and 21 provided a completely new set of analyses to justify 22 its request. Previously, when it was anticipated 23 that the Company would be reporting much lower benefits after the tax law change, the Company 24 25 included 20-year results in its January supplemental

Page 200 direct filing that greatly increased the project 1 2 benefit largely due to the change the Company made to model PTC benefits as nominal costs instead of 3 levelized costs. 4 While the Company argues that it made the 5 6 modeling change to more accurately model PTCs in its 7 analysis, it is curious that in response to a discovery request, OCS 5.8, in September, the Company 8 9 actually justified that the accurate way to model PTCs in its economic analysis was using a levelized 10 11 representation. One problem with PacifiCorp's new 12 method is that capital revenue requirements and PTCs are now modeling -- modeled inconsistently. 13 14 While PacifiCorp now ensures the PTCs 15 benefits are modeled the same way, those benefits flow through to customer in rates, PacifiCorp does 16 17 not ensure the same thing occurs for capital revenue requirements. PacifiCorp's modeling change in the 18 20-year study leads to PTC benefits being maximized 19 20 while capital revenue requirements are minimized. 21 This modeling change resulted in 2.2 233 million in benefits being added to each 23 price-policy case and biased the results in favor of 24 the combined projects. To recognize the impact of modeling PTCs on a levelized basis, I point you to 25

Page 201 Figure 1 on page 18 of my testimony. Note that the two lines -- note that the two lines closest together reflect consistent modeling treatment of both PTCs and capital revenue requirements.

The dashed line reflects the Company's 5 preference for modeling PTCs as nominal values and 6 7 capital revenue requirements as levelized costs in the economic analysis. This representation results 8 9 in a significant amount of costs being excluded from the analysis in the to-2036 study, which ultimately 10 11 biases the results in favor of self-build wind 12 projects over PPA projects.

13 The Company's modeling representation removes costs from the study period through 20'6 14 which creates the illusion of the combined projects 15 being more beneficial in the analysis. 16 Table 2 on page 20 of my April testimony presents the results of 17 the three methods of modeling PTCs and capital 18 19 revenue requirements that have been discussed in this 20 proceeding.

The left-most column includes the Company's supplemental direct results, and the benefits in that column appear to be much greater than the benefits in the other two columns in which PTCs and capital revenue requirements model consistently.

1	Page 202 Based on my analysis my recommendation for
2	this proceeding is that Commission rely on the
3	nominal capital, nominal PTC results. It models PTC
4	and capital revenue requirements consistently and
5	similar to the way that costs and benefits will flow
6	through to customers in rates. The results in that
7	column indicate that the benefits of the combined
8	projects will either be insubstantial or harmful to
9	the ratepayers unless one expects that gas and CO2
10	prices will be in the medium-to-high range, which is
11	less likely.
12	Table 3 on page 23 of my testimony presents
13	the results of the analysis to 2050. I present the
14	results with and without terminal value which I
15	believe is a speculative benefit. It is also
16	inappropriate to include a terminal value benefit
17	without including corresponding costs such as
18	development costs, permitting fees, various other
19	owners' costs, O&M costs, and capital addition costs
20	as well as the remaining portion of the transmission
21	capital revenue requirements, which are excluded from
22	the analysis, which may significantly reduce those
23	benefits and which I would also note are also so far
24	out they may be speculative.
25	The interpretations of the to-2050 results

Page 203 is the same as for the to-2036 results. 1 In other 2 words, the benefits of the combined projects appear 3 to be either insubstantial or harmful to ratepayers 4 unless one expects that gas and CO2 prices will be in 5 the medium to the high range. 6 The Company also provided solar sensitivity cases that I discussed in my second rebuttal 7 8 testimony. The Company's to-2036 study concluded that solar resources were less economic than the 9 10 Company's proposed combined projects. Once again, 11 the Company relied on its revised PTC modeling 12 approach, but when I change PTCs to be modeled based 13 on the Company's old approach or when I modeled PTCs and capital revenue requirements to be consistent 14 using nominal costs, I found that the solar resources 15 16 were in fact significantly more economic than the combined projects in each of the cases the copy 17 evaluated. 18

For example, in the medium/medium case with nominal capital revenue requirements and PTCs, the solar sensitivity case was more economic than the combined projects by \$161 million. Also, though the Company did not discuss in testimony its own long-term to-2050 study results that were found in its work papers, those results showed that the solar

Page 204 1 sensitivity was more economic than wind by hundreds 2 of million of dollars. 3 This runs counter to the Company's 4 assertion that solar is beneficial in addition to In other words, the Company's results show 5 wind. that solar is more beneficial than wind. Not only 6 does it appear that solar projects would be more 7 economic, but solar projects also result in less risk 8 9 considering that the new that the Gateway 10 Transmission Segment D2 would not be required for 11 those resources, and since they are PPAs, the 12 commercial terms would generally protect ratepayers 13 from capital cost overruns, increases in O&M, and other energy/PTC production performance risks 14 15 associated with Company self-build projects. 16 In light of the fact the parties actually found the Company's own long-term economic analysis 17 were supportive of solar, Mr. Link responded by 18 19 indicating the Company place an increased focus on 20 the Company's to-2036 study. This is a bit of a 21 turnaround given the support the Company has 22 demonstrated up until now for its to-2050 analyses. 23 I also do not believe the Company has 24 considered significant risk that could affect the 25 combined projects including the possibility of cost

Page 205 overruns, lower wind energy production, and PTCs benefits, and I performed my own sensitivity analyses including a 5 percent capital cost increase case, a 5 percent energy reduction case, and a delay in the 5 transmission in-service date. 6 Based on these analyses, I determined a

5 small changes in assumptions could easily lead to 7 small changes in assumptions could easily lead to 8 more of the price-policy cases being uneconomic. For 9 the most, I found that when compared to the status 10 quo case, the combined projects would only be 11 economic in the moderate-to-high gas/CO2 cases when 12 additional risks were considered.

13 There have been some suggestions that some parties believe that natural gas prices will trend 14 15 downward. I don't think anyone has suggested that 16 gas prices won't go up over the long-term. However, the important question is at what growth rate? 17 Natural gas prices have trended in the three-dollar 18 19 price range over the past ten years, largely due to 20 the enormous quantities of natural gas that exist, 21 which has been brought about by significant advances 22 in extraction technology.

Mr. Link -- with regard to capacity need,
Mr. Link asserts that he has responded to claims that
PacifiCorp does not have a resource need. This is an

Page 206 1 important issue as several parties have argued that 2 the combined projects are risky economic opportunity 3 projects that could very likely harm ratepayers while 4 benefiting the Company.

Mr. Link has countered by claiming that the 5 6 combined projects are needed today. There is a sense 7 of urgency in this claim that is misplaced and leaves the impression that PacifiCorp's system could become 8 9 unreliable without the acquisition of the new wind resources, and it appears the Company's latest 10 11 position is that there are significant economic risks 12 to expose customers to purchasing from the market via 13 front office transactions.

This is not a new concern, which is why 14 15 PacifiCorp has studied this in the 2015 IRP, and found that the western markets show adequate market 16 depth for several years to come. In fact, it has 17 been PacifiCorp's practice for quite some time to 18 19 partly meet its 13 percent reserve margin based on 20 adding targeted resource and allowing a portion of 21 its capacity requirements to be satisfied by market 22 purchases.

I am not suggesting a large portion should be left to the whims in the market, but the acquisition of new wind resources amounts to just

1	Page 207 about 180 megawatts, which is not significant
2	relative to the size of PacifiCorp's system.
3	Concerning transmission needs, the Company
4	now claims there's no question the 140-mile, 500 kV
5	D2 segment would have been built by 2024 regardless.
6	By this logic, any other transmission line as part of
7	the Company's transmission plans will also need to be
8	built no matter what. This means a full build-out of
9	Gateway West Segment D1, Gateway South projects would
10	have to occur by 2024 no matter what. That will
11	require massive transmission investment, and I doubt
12	anybody truly believes those projects will be built
13	by then.
14	Also, there is no question the Company has
15	to manage congestion and other transmission issues in
16	eastern Wyoming, which is not an unusual task for a
17	utility. Even if the new transmission line and wind
18	resources are added, the Company will still have to
19	manage congestion and other transmission issues.
20	Consider that the Company claims right now
21	that not a single additional megawatt of generation
22	capacity could be added to the eastern Wyoming
23	transmission system and already the generation

24 capacity in that region exceeds the transfer limit.
25 Despite the Company's witnesses' contention

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1	regarding conditions, the Office's conditions are
2	necessary and the Commission has the authority to
3	impose conditions to protect the ratepayers'
4	interest, given the risky nature of those projects
5	that clearly are being proposed as economic
6	opportunity projects.
7	The Office's conditions are supported by
8	other parties, and even PacifiCorp has agreed to
9	eliminate the RTM in Wyoming, which it is opposing
10	here. Furthermore, other utilities in other states
11	have agreed to similar conditions associated with
12	similar projects, and they did not find them to be
13	unnecessary, unprecedented, unjustified.
14	This concludes my summary.
15	MR. MOORE: Mr. Hayet is available for cross and
16	questions from the Commission.
17	CHAIR LEVAR: Okay. Thank you.
18	Mr. Jetter, do you have any questions for
19	Mr. Hayet?
20	MR. JETTER: I have no questions. Thank you.
21	CHAIR LEVAR: Mr. Russell?
22	MR. RUSSELL: No. Thank you.
23	CHAIR LEVAR: Mr. Baker?
24	MR. BAKER: No questions. Thank you.
25	CHAIR LEVAR: Mr. Longson?

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1	MR. LONGSON: No questions. Thank you.
2	CHAIR LEVAR: Mr. Holman?
3	MR. HOLMAN: No questions. Thank you.
4	CHAIR LEVAR: Mr. Michel?
5	MR. MICHEL: Thank you, Mr.Chairman. I do have
6	some questions.
7	MS. MCDOWELL: I'm sorry. I don't want to
8	interrupt, but I thought maybe you would get to me in
9	a way I wouldn't interrupt you. I want to move to
10	strike the last sentence of Mr. Hayet's summary about
11	other utilities agreeing to similar conditions. I
12	don't know that that's anywhere in his testimony.
13	It's not something I'm familiar with and certainly
14	not something we've had a chance to respond to.
15	CHAIR LEVAR: Okay. Could I ask the court
16	reporter to read back to us that last sentence.
17	MS. MCDOWELL: It may be the penultimate
18	sentence.
19	(The following record was read:
20	"Furthermore, other utilities in other
21	states have agreed to similar conditions associated
22	with similar projects, and they did not find them to
23	be unnecessary, unprecedented, unjustified.")
24	CHAIR LEVAR: Are we looking at that sentence or
25	the one before it?

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1	MS. MCDOWELL: That's the sentence. To my
2	recollection, there is no testimony provided on that
3	point, so that would be additional testimony. Unless
4	Mr. Hayet can point to where it is, it's my
5	understanding it's not in his prefiled testimony.
6	PHILIP HAYET: My recollection I thought I
7	had it, but you've reminded me I do not believe it's
8	in there.
9	CHAIR LEVAR: Okay. Mr. Moore, do you want to
10	respond to the objection?
11	MR. MOORE: If it's not in his testimony,
12	considering your future rulings, we won't object to
13	the motion to strike.
14	CHAIR LEVAR: Okay. We will grant that motion
15	for that sentence. Thank you.
16	Mr. Michel.
17	MR. MICHEL: Thank you.
18	CROSS-EXAMINATION
19	BY MR. MICHEL:
20	Q. Good afternoon, Mr. Hayet is that
21	correct?
22	A. That is correct.
23	Q. Okay. I've been coached. My name is
24	Steve Michel, I'm with Western Resource Advocates.
25	Is it your position that approval and

Page 211 1 development of the combined projects would preclude 2 the Company from going forward with solar PPAs in the 3 future? 4 Α. No. I think they should evaluate solar in a future RFP or IRP. No. 5 6 Q. Okay. Could you turn to your second rebuttal testimony of April 17 and specifically page 7 Are you there? 8 22. 9 Α. Yes. 10 Okay. And here you testified that there's 0. 11 a high probability that the low CO2 case will 12 prevail. Is that a fair summary of the --13 Α. Yes. 14 Ο. -- discussion here? And by the low CO2 case, that is zero cost of CO2, basically no CO2 15 16 policy or regulation. Is that what that case represented in the Company's --17 While I don't believe that CO2 -- CO2 does 18 Α. 19 not currently exist, which argues for a zero, my 20 intention is to suggest somewhere -- I believe of all 21 cases, I give greater weighting to the Company's --22 to the range between the low gas and zero CO2 to the 23 Company's moderate gas and moderate CO2 cases. So I believe those are the bounds that I foresee that gas 24 25 will fluctuate in and CO2. I simply don't see any

Page 212 CO2 at the moment, and that's for sure. 1 2 Q. So I'm not sure where you're landing with 3 CO2 costs here. You seem to suggest the Commission 4 should place heavy reliance on the low CO2 case, and that low CO2 case is a zero price of carbon. 5 And I'm asking you if that -- if I'm correctly interpreting 6 7 your testimony. 8 Α. There is a range of CO2 prices, and you 9 have to interpret that the zero CO2 case -- they call 10 it the low CO2 case. There's a range in CO2 price 11 forecasts that could be from zero to where they reach 12 at the moderate. And I'm saying that I don't believe that -- I don't foresee CO2 any time soon, and if it 13 does, I think it's going to be at the low end of the 14 15 cost, and I think it likely would wind up being lower 16 than the mod that the Company has. And, therefore, I place greater weight on the results that fall within 17 that range in the price-policy scenarios. 18 The medium range is what dollar values? 19 Q. From what to what? Do you recall? 20 21 Α. I don't have that, but they have a graph in 2.2 their testimony. 23 0. What do you consider to be an appropriate CO2 price range for the Commission to value or to 24 25 evaluate in this case?

Page 213 1 Α. I think below what the Company -- in the 2 range between zero and what the Company uses for its 3 mod is what I'm saying, and, therefore, the results 4 that I place -- I place greater value on this set of results that fall below the medium gas/medium CO2 and 5 6 low qas/zero C02. But as you sit here right now, you don't 7 0. know what the medium CO2 case is? 8 I don't have a specific -- right now my 9 Α. belief is that it's a zero forecast, but I have --10 11 just as they have given weight to nine cases, my 12 preference is to give weight to the cases between the 13 zero and the medium case. 14 Ο. My question was whether you know what that medium case is as you're here testifying right now? 15 16 I would have to see the Company's and then Α. I would be able to --17 Okay. Well, then independent of the 18 0. Company's projection of a medium CO2 case, what do 19 you think is an appropriate carbon projection or 20 21 carbon cost projection for the Commission to 22 consider? It's something higher than zero but --23 Α. For analysis, price-policy cases, I do not believe that we are going to see anything above the 24 25 Company's medium future. I prefer and do believe

1	Page 214 that zero into the foreseeable future because we
2	neither have a CO2 policy in existence even when we
3	had a Democratic Congress, both houses of Congress,
4	we did not even we were unable to pass CO2
5	legislation.
6	Therefore, for the foreseeable future, I
7	don't see a CO2. By giving weight in terms of
8	looking at a set of price policies, I believe it's
9	more reasonable to give higher weighting to the cases
10	between the zero and the medium range.
11	Q. How many years is the foreseeable future?
12	A. I would say into the probably as I
13	don't think that we're going to see it any earlier
14	than 2030, which is one of the cases the Company has,
15	and that's the start of their CO2 forecast.
16	Q. What is your familiarity with the
17	Clean Power Plan?
18	A. I know that it's been stayed.
19	Q. Is it repealed? Is it in effect?
20	A. It's unlikely
21	Q. Is it still on the books?
22	A. It's unlikely to go into effect.
23	Q. Okay. Are you aware of whether there's a
24	proposal to repeal it?
25	A. I'm aware that it's simply stayed.

Page 215 1 0. Okay. Do you know what the EPA is 2 currently proposing with respect to the Clean Power 3 Plan? 4 Α. Currently proposing? 5 0. Yes. My understanding is that the EPA is 6 Α. evaluating it and trying to determine what its 7 obligations are. 8 Okay. Are you familiar with EPA's 9 ο. 10 endangerment finding --11 Α. Yes. 12 Q. -- in 2010? 13 I have a general understanding of that, Α. 14 yes. 15 Okay. What is the significance of an Q. 16 endangerment finding? 17 That CO2 was found to cause harm, but Α. that's been disputed, and that's why we're in the 18 situation we're in right now. I'm not suggesting any 19 20 personal belief of what will happen or what I believe 21 could happen with regard to CO2 cost. I'm simply 22 stating the reality of where we exist today. 23 0. Well, what I'm trying to understand is what your understanding is of the likelihood or 24 unlikelihood or possibility or impossibility of the 25

1	Page 216 Clean Power Plan being repealed.
2	A. I don't believe that it will go into effect
3	for the foreseeable future, and I think I've already
4	answered the question. I don't think we'll be seeing
5	CO2 costs certainly before 2030, if ever, and like I
6	said, if they do go into effect, they have a harmful
7	impact, and I think they'll be at the lower end of
8	anybody's range of CO2 price forecast.
9	Q. Do you know whether the Supreme Court's
10	decision in Massachusetts vs. EPA requires the EPA to
11	regulate CO2 as a pollutant if it makes the
12	endangerment finding that it made?
13	A. There's a lot of debate over that. And I
14	know that that lead to the EPA imposing the Clean
15	Power Plan under the last administration for which
16	this administration takes the opposite view and has
17	stated and we're a long ways away from seeing an
18	outcome of that being resolved.
19	Q. When you say there's a lot of debate, is
20	there a lot of debate about the Supreme Court
21	decision and what it requires?
22	A. I haven't heard necessarily debate, but
23	there may be, but I don't think that's necessarily
24	that they are debating the Supreme Court unless
25	there's going to be some efforts to try to, you know,
1	

Page 217 1 legislate something. 2 Q. Other than what you've heard in the media, is your opinion on the likelihood of CO2 regulation 3 4 informed by any particular expertise that you 5 possess? 6 Α. Yes. My expertise is based on working with utilities all over the country, working with 7 intervenors such as yourself all over the country 8 evaluating these kinds of issues for resource 9 planning sort of proceedings, and I do not see that 10 11 the possibility of CO2 costs coming into fruition in 12 the near future. Have you done work -- I don't want to 13 Ο. belabor this, but I'm having trouble understanding 14 what your expertise is to evaluate the likelihood of 15 CO2 regulation or the requirement for CO2 regulation 16 in the future? 17 Yes, I have reviewed the regulations at 18 Α. different times. I don't have them memorized, if 19 20 that's what you're trying to get at, and it comes up 21 in the same sorts of ways as it's come up in this 22 proceeding that --23 Ο. Do you have any legal expertise on the requirements EPA --24 25 Α. No.

1	Page 218 Q is under?
2	MR. MOORE: I am going to object to this point.
3	This is asked and answered.
4	CHAIR LEVAR: Do you want to respond to the
5	objection, Mr. Michel?
6	MR. MICHEL: Well, I have not asked this
7	specific question. I asked if he had legal expertise
8	with respect to the requirements that EPA is under
9	with respect to the Clean Power Plan and some of the
10	decisions that have been issued by the courts.
11	CHAIR LEVAR: I'm going to overrule this
12	specific objection because I do agree you have not
13	asked that specific question. I do think generally
14	the line of questioning is beginning to get
15	repetitive, so probably ought to try to find a
16	path
17	MR. MICHEL: Certainly. Fair enough.
18	Q. Could you please answer that question.
19	A. Could you repeat the question.
20	Q. Yes. Whether you have any legal expertise
21	about the obligations of the EPA under the Clean Air
22	Act and the requirements that EPA is under given
23	recent court decisions?
24	A. No, I'm not an attorney, so I don't have
25	any legal expertise, but it all stems from the work

Page 219 that I do. 1 2 Q. Could you turn to page 38, please. Α. I'm there. 3 4 And here you evaluate the revenue 0. requirements or the present value of revenue 5 requirements under the different scenarios, given 6 sensitivities that reflect either a 5 percent cost 7 overrun in the combined projects or 5 percent reduced 8 9 production from the wind facilities. Is that a fair statement of what --10 11 Α. Yes. 12 Q. Okay. And my question is did you also 13 evaluate the present value of revenue requirements if 14 the project resulted in a -- in costs 5 percent less than projected or production 5 percent higher than 15 16 projected? 17 CHAIR LEVAR: Mr. Hayet, I've been told your 18 responses are not picking up on the streaming, so 19 make sure you're getting in the microphone. 20 Α. Sorry. I only evaluated the risk to 21 No. 22 ratepayers. The benefits would be greater under the 23 circumstances you're describing. Okay. And do you know is it -- would the 24 ο. increase in revenue requirements associated with a 25

Page 220 1 5 percent reduction in cost or a 5 percent higher 2 production rate, would those changes to the present value of revenue requirements be equal to the 3 4 reductions that you show in this table? It would depend if it was done in the exact 5 Α. 6 same way, but it would likely be similar. And could you turn back to page 23, 7 0. Okay. 8 and I'm sorry to jump backwards. We are making good 9 progress. And on that page under the heading Solar Sensitivity, the first question you have here on this 10 page asks about the combined projects as compared to 11 12 the status quo. Do you see that? 13 Α. Yes. 14 0. Okay. And you testified that, even though combined projects show net benefits in, in this case, 15 16 seven of the nine scenarios, that's not sufficiently compelling to warrant a departure from the status 17 18 quo. Because if you look at it, the benefits --19 Α. 20 Could you just answer yes or no and then go Q. ahead and explain your answer. 21 2.2 Α. You better repeat the question. 23 0. Yeah. My question was do you testify that even though the combined projects show net benefits 24 in seven of the nine scenarios, that's not 25

Page 221 1 sufficiently compelling to warrant a departure from 2 the status quo? 3 No, because the solar actually has benefits Α. 4 that are even higher than these. It's sounds like your answer would have 5 0. been "yes but the solar has" -- am I misunderstanding 6 your testimony? 7 No, because in -- for this reason alone, if 8 Α. you look at these results with the terminal value 9 10 removed, the results are not compelling because it --11 you'd have to believe that we're going to exist in a 12 medium gas/high gas/high CO2/medium CO2 environment 13 in order for benefits to be substantial. They are insubstantial in the moderate 14 15 range, and they are actually negative in the low 16 range, and when you then consider the potential risk 17 of cost overruns and other things that ratepayers are on the hook for, or could potentially be on the hook 18 for, then these benefits are -- the risks are too 19 20 great for the ratepayers. 21 And, furthermore, when you consider that 2.2 this is not the least-cost case, the solar cases are 23 even less expensive. So these results aren't 24 compelling. 25 You have testified that this is necessarily Q.

Page 222 an either/or proposition, that developing the 1 2 combined projects doesn't preclude developing the solar PPAs or going forward with the solar PPAs; in 3 4 other words, they are not mutually exclusive. So my question is focused on these combined projects 5 irrespective of the solar PPAs and --6 That's really not what's in front of us. 7 Α. The Company canceled the solar PPA. We're evaluating 8 the benefits of the wind, and the Company concluded 9 that the benefits of the wind exceed solar, and I 10 11 find that they don't. 12 0. But do the benefits of the wind exceed the 13 status quo sufficiently to warrant approval of 14 those --15 No, not sufficiently to warrant that Α. because you've got to take into consideration other 16 risks and you've got to consider the proper modeling. 17 So what I would like you to assume is that 18 0. 19 the Commission has approved the combined projects and the Company's ready to go forward with the combined 20 21 projects. But just before it does so, a buyer comes 22 to PacifiCorp and agrees that it will buy out the 23 Company's interest for both projects for what it has In other words -- and the Company comes 24 spent. before the Commission with a proposal to unwind the 25

1	combined projects that it had previously gotten
2	approval for.
3	In other words, what I'm trying to create
4	is a hypothetical where the combined project is now
5	the status quo and the decision is whether that
6	should be unwound. Did you follow my hypothetical?
7	A. I believe I did.
8	Q. Okay. And would you agree that, if faced
9	with that choice and if you could turn to
10	page 20 of your testimony. If faced with that choice
11	where the status quo was development of the wind
12	project, or the combined project, and the decision
13	was whether to unwind that, the present value of
14	revenue requirements for that proposal would be
15	exactly the opposite of what you show on page 20 in
16	the table?
17	A. Well, I show three different things.
18	Q. Right. But in each of those scenarios, in
19	each of those three scenarios, each of those numbers
20	would simply be reversed. If the decision was
21	reversed, the impacts would be reversed?
22	A. I guess I'm not following that with the
23	reversal of the impacts. Can you
24	Q. If the status quo were the wind project and
25	the question was whether to unwind that and go back

1	Page 224 to the situation prior to those combined projects,
2	then in a low gas/zero CO2 scenario in your cell
3	farthest to the level left, rather than \$156 million
4	additional cost, it would be \$156 million benefit?
5	A. All right. So 156 million represents the
6	disbenefits of going forward with wind, and all you
7	want to do is assume that we actually have a benefit
8	of the wind and a disbenefit of going back. Is that
9	what you're suggesting?
10	Q. Depending on which cell you're in, that
11	in other words, the economics would just be
12	completely reversed from going from today's
13	situation to the combined projects, going from the
14	combined projects to today's situation would reverse
15	all these economics?
16	A. Yes. I would agree that if one were to
17	suggest that the status quo had wind and that was the
18	economic evaluation on an overwhelming basis and you
19	were proposing to go to the status quo, then I I
20	don't want to get this muddled, but I agree that
21	you're asking do we get rid of the wind and go back
22	to the status quo because the status quo case might
23	be even more economic than the wind?
24	Then yes, I think you should go you
25	should likely you have to do a full evaluation, so

Page 225 I make that as a caveat, and I don't know all the 1 2 assumptions that would be made under that, and I 3 think there are a lot more than you can possibly 4 provide in your simple example. 5 But I would agree that it's likely that I would be supportive of a case that was even more 6 economic if the current case were the wind case. 7 8 0. What I'm trying get to -- and I'm not going 9 to belabor this -- is that there seems to be an 10 allegiance to the status quo over doing something and 11 that there is a heightened burden, if you will, to 12 establish that the Company should be permitted to do 13 something different and that, even if the economics lead one way or the other, there is a stickiness to 14 15 the status quo. 16 So what I'm trying to drill down on is, if the status quo were reversed and the wind project 17 18 going forward with combined projects was approved and 19 was the status quo and the question was whether to unwind them to the situation we are in today, 20 21 wouldn't these numbers just be reversed? And the 22 benefits would be costs; and the costs would be 23 benefits? 24 I don't think I can give a simple yes or no Α. 25 in answer to that, but what I can say is that the

1	Page 226 situation today that we have is a case which largely
2	depends on the belief that we're heading into a
3	future or that we need to hedge a future in which gas
4	prices go very go way up at a high growth rate and
5	CO2 costs are and plan for that as if we don't
6	have an alternative, which we do.
7	And we have a case where we believe that
8	there's an enormous supply of gas out there right
9	now. We've seen flat gas prices for ten years
10	correlated to the fact that there's been enormous
11	discoveries of natural gas. That's not to say that
12	gas prices won't go up.
13	Q. Let me just stop you because I don't think
14	this is responsive to the question. The question
15	was, simply, isn't true that the anticipated revenue
16	requirements for customers of not doing the wind
17	project are the opposite of the PVRRs you show here
18	for doing the wind project?
19	MR. MOORE: Objection. Asked and answered.
20	CHAIR LEVAR: I think we had an answer that
21	yes-or-no question that in his opinion a yes-or-no
22	answer wasn't possible, and he gave an explanation to
23	that. So I think I agree to the objection to that
24	one.
25	MR. MICHEL: Could I just explore whether that

1	Page 227 was in fact his answer or if he could answer yes or
2	no?
3	CHAIR LEVAR: I think with the understanding of
4	the answer he gave, if you want to do a follow-up,
5	let's see if there's an objection to your follow-up
6	question.
7	Q. Okay.
8	A. I'm just trying I think it requires more
9	than a yes or no, and I'm trying to explain why I
10	came to the conclusion that the low cases and the low
11	CO2 are more likely and that's how I got to the
12	evaluation that determined that it's not economic.
13	So the circumstances would have to be
14	different for me to be able to say the status quo or
15	the wind. We'd have to be talking about which one is
16	more which one we believe to be more likely.
17	Q. Okay. Then let's look at the
18	medium gas/high CO2 line and the alternative
19	approach, which shows a net benefit of \$141 million.
20	A. Yes.
21	Q. Okay. If the wind project is not does
22	not go forward, isn't it also correct then that
23	ratepayers would be \$141 million worse off than if
24	the projects did go forward in that scenario?
25	A. Yes. Based on the probability of you

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1	Page 228 believing that that's the outcome the future that
2	we're likely to see if that were to occur, yes, but
3	you could also look at the low gas/CO2 case, and if
4	we go forward, which is the scenario we certainly are
5	in today in that we have zero CO2, customers are
6	going to be worse off by 156 million if we were to go
7	forward and build the wind resources.
8	Q. Okay. So just to try and bring this to a
9	close, looking at this final column of this table, if
10	the wind project does not go forward in all but the
11	low gas and zero or medium CO2 cases, ratepayers will
12	be worse off than if the wind projects did go
13	forward; is that correct?
14	A. No, because there are other alternatives
15	that could be done ultimately that should be
16	examined. The solar case presents even lower
17	Q. Just narrowing it down to the choice of
18	doing it or not doing the wind project, would you
19	agree with my
20	A. Repeat that question, please.
21	MR. MOORE: I object. That goes outside the
22	confines of this it's irrelevant because it
23	doesn't reflect the confines of this case and it
24	doesn't reflect the proper statutory analysis that
25	requires a least-cost, least-risk determination which

1	Page 229 requires other consideration of other factors.
2	CHAIR LEVAR: Do you want to respond to the
3	objection, Mr. Michel?
4	MR. MICHEL: The statute is more it's lowest
5	reasonable cost, which imports a whole lot more than
6	just lowest costs, but putting that aside, I think
7	this is a valid hypothetical. He has shown here a
8	table that reflects his alternative approach of the
9	benefits and costs of going forward with the wind
10	project under different scenarios, and I'm simply
11	asking him that in the each of these scenarios, if
12	the project does not go forward, the combined project
13	does not go forward, are ratepayers worse off by the
14	amounts that are shown in parentheses from a
15	situation where they do go forward?
16	MR. MOORE: If I may, Chairman?
17	CHAIR LEVAR: Yes, go ahead and give a final
18	response.
19	MR. MOORE: To the extent that he I have
20	two problems with his approach: One, he won't let
21	him explain his answer; and, two, his answer yes or
22	no has already been given. And he's explained his
23	answer as well. It's the same question.
24	CHAIR LEVAR: I think I'm going to avoid
25	ruling on whether the statute that we're operating

	Page 230
1	under allows the question, whether under that statute
2	the question is relevant, but I am going to rule that
3	with the line of questioning we had, I think both
4	your points, Mr. Michael and Mr. Hayet's position on
5	your point, are fairly well established in the
6	record.
7	MR. MICHEL: Okay. I think that's it.
8	Thank you, Mr.Chairman. I think that's all
9	I have.
10	Thank you, Mr. Hayet.
11	PHILIP HAYET: Thank you.
12	CHAIR LEVAR: Okay. Thank you. Why don't we
13	take a ten-minute break, and then we'll move to
14	Utility's cross-examination.
15	MR. JETTER: Before we go, Mr. Chairman
16	CHAIR LEVAR: Yes.
17	MR. JETTER: May I request at this time to be
18	excused for the remainder of this case? I have
19	another commitment.
20	CHAIR LEVAR: Assuming Ms. Schmid will remain
21	MR. JETTER: Yes, she will.
22	CHAIR LEVAR: Then that's certainly fine.
23	MS. SCHMID: I will and I am happy to do so.
24	CHAIR LEVAR: Thank you.
25	(A break was taken, 3:30 to 3:42.)

1	Page 231 MS. MCDOWELL: Chair LeVar, as a preliminary
2	matter, there's a couple of things I wanted to
3	address. During the break I distributed some
4	cross-examination exhibits. I believe I put the
5	stack at the clerk's desk there for you-all, so let
6	me just make sure you get them.
7	CHAIR LEVAR: Three sets, is that what it is?
8	MS. MCDOWELL: That's correct. And I just want
9	to represent that the second document is a
10	confidential document. It remains a confidential
11	document, and I do have some questions that will be
12	confidential. I have set them up to be at the very
13	beginning of my cross-examination, so we can go
14	through those and then leave the confidential portion
15	of my cross-examination.
16	I have about three or four questions to
17	lead up to those questions, and then three or four
18	confidential questions, so I just wanted to put that
19	out there, and I guess if I need to move for closed
20	session to have that confidential inquiry, I'm so
21	moving.
22	CHAIR LEVAR: That's yeah, that's what we'll
23	have to do, so when you get to that point, make that
24	motion.
25	MS. MCDOWELL: Okay. Thank you.

Page 232 1 CROSS-EXAMINATION 2 BY MS. MCDOWELL: 0. Good afternoon, Mr. Hayet. 3 4 Α. Good afternoon. 5 0. I want you to ask you to turn to your 6 direct testimony at page 14. 7 Α. I'm there. And there on lines 274 to 276, consistent 8 0. 9 with testimony I think you've already provided here 10 today, you indicate that the low-to-medium gas 11 forecast is the most likely projection of future fuel 12 and CO2 prices, and you also refer to your consistent 13 testimony in the repowering docket. Do you see that? 14 Α. Yes. And in that repowering docket, we asked you 15 Q. 16 a data request that basically asked for the evidence behind that conclusion, and that is Cross-examination 17 Exhibit 19, which I provided to you. Do you 18 19 recognize that data request? 20 Α. Yes. 21 And in there you indicated that your 0. 22 opinion was based on your experience over many years 23 working on utility net power cost analyses in different states. Do you see that? 24 25 Α. Yes.

Page 233 1 0. So you did not provide any third-party 2 market data or analysis to support your conclusion that low -- the low price-policy scenario was most 3 4 likely to occur in the future? 5 Α. No, it's just based on my experience 6 working in the market -- in the industry. 7 0. So can you turn to the next page of your 8 testimony. That's page 15, and there on line 294 you 9 indicate that you believe there is high probability 10 that natural gas and CO2 prices would be in the 11 low-to-medium forecast range. Do you see that 12 testimony? 13 Α. Yes. 14 Ο. And there you also cite a footnote, Footnote 19, to support those conclusions. That's 15 actually based on -- the footnote is attached to the 16 first sentence of that statement, that paragraph, 17 lines 284 to 285. Do you see that? 18 19 Α. Yes. 20 And that footnote cites a PIRA report? Q. 21 Α. Yes. 2.2 MS. MCDOWELL: So at this portion I would like to move to confidential, a confidential session. 23 24 CHAIR LEVAR: Okay. To close the hearing, we have to make a Commission finding that it's in the 25

	Page 234
1	public interest to close the proceeding to the
2	public. So let me ask any party if there's any
3	objection to the Commission making that finding and
4	closing the hearing to the public while we do this.
5	If anyone objects, please indicate to me.
6	And then I guess I'll give both of my
7	colleagues a chance to see if we need to deliberate
8	or if you have any questions or any objection to the
9	finding?
10	COMMISSIONER CLARK: No, I don't object. I
11	think it will be in the public interest for us to
12	receive the information.
13	COMMISSIONER WHITE: No objection here. I think
14	it's in the public interest also.
15	CHAIR LEVAR: Okay. Well, we find that it's in
16	the public interest to close the hearing to the
17	public while Ms. McDowell cross-examines Mr. Hayet on
18	these questions, so we'll have the transcript reflect
19	that this next portion is confidential until we
20	finish that. If we'll turn off the streaming and
21	also turn off the hearing loop. Can we turn off the
22	hearing loop system?
23	THE CLERK: Yes.
24	CHAIR LEVAR: Thank you.
25	////

Page 245 (Hearing moved to confidential session, 3:47 p.m to 1 2 4:00 p.m. Transcript pages 235 to 249 are under 3 separate cover.) 4 CHAIR LEVAR: Okay. Ms. McDowell. 5 MS. MCDOWELL: So are we ready to proceed? 6 CHAIR LEVAR: Yes. 7 CROSS-EXAMINATION(Continued) BY MS. MCDOWELL: 8 Thank you. Mr. Hayet, you, in what I 9 ο. believe is a nonconfidential response to one of my 10 11 questions, indicated that part of your opinions are 12 informed by reviewing EIA forecasts; is that correct? 13 Yes, yes. Α. 14 ο. And isn't it a fact that the Company's forecasts are lower than the EIA forecasts? 15 16 Yes. Α. So can you turn your attention, please, to 17 Q. 18 page --One correction, it depends on what you mean 19 Α. by their forecast because you have three forecasts, 20 21 so you should probably clarify. 22 Q. Thank you for the assistance there. The 23 Company's medium forecast is lower --24 Α. Yes. -- than the EIA reference case? 25 Q.

1	Page 246 A. Which assumes zero CO2, I would mention, so
2	you have to probably look at the zero CO2 as well.
3	Q. Thank you. So can you turn to your direct
4	testimony at lines 491, and I'm shifting gears now to
5	ask you some questions about the hard cap that
6	another one of the Office's witnesses has explained
7	to us, and I just want to try to get a little more
8	clarification on exactly what the Office is
9	proposing.
10	So at lines 489 on, there's a sentence that
11	states let me just wait to see that you have that.
12	A. I do.
13	Q. Okay. Great. It states, "Furthermore, the
14	Office recommends that at a minimum the Commission
15	should not preapprove anything more than the lesser
16	of the amount the Company has identified to construct
17	these projects or the actual completion of the
18	projects."
19	So in that case you were just talking about
20	a cap for purposes of preapproval; correct?
21	A. Yes.
22	Q. In that case the Company could come in and
23	make an argument for the collection of additional
24	costs if it could demonstrate that they were prudent?
25	A. Well, our position has been that we prefer

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1	there be a total cap on the project. However, we
2	have we would like a total cap but I'm sorry.
3	Let me correct that. Our preference is that there be
4	understood that there will be a soft cap on the
5	jurisdictional allocated amount. That is our
6	preference. But we have stated that we have both,
7	that a hard cap that we would like to have with a
8	preference definitely to be this cap on the
9	jurisdictional amount.
10	Q. Okay. So let me maybe that is clear in
11	your rebuttal testimony, your April 17 testimony, so
12	perhaps you could turn to that, and I believe your
13	testimony on that is at Line 958.
14	A. Sorry. Okay. I have that.
15	Q. Do you have that?
16	A. Yes.
17	Q. That bullet at 958, that describes your
18	proposal for a hard cap at the Company's current
19	costs estimate; is that right?
20	A. Yes.
21	Q. So on the next page or it's actually on
22	page 46 you indicate that this condition I
23	guess I should direct you to a particular line
24	number. The question beginning on Line 994, do you
25	have that?

Page 248 990-? 1 Α. Yes. 2 Q. 994, so it's page 46. Α. Yes. 3 4 Couple pages forward. There you say that 0. in your opinion the condition including hard cap is 5 consistent with the recommendations that the IEs made 6 7 in their final reports? 8 Α. Yes. 9 ο. So I want to specifically ask you about the Utah IE's recommendation, and you state that the Utah 10 11 IE noted that "The Company expressed confidence in 12 its ability to complete the projects within budget 13 because most of the costs are fixed. This in turn lead the Utah IE to state that this would lead us to 14 believe that PacifiCorp would be willing to stand by 15 these cost estimates." Do you see that? 16 17 Α. Yes. 18 So can you turn to page 41 of the Utah IE Q. 19 report, and I've provided a copy to you. It should be in that stack. Yes, that document. So could you 20 21 please turn to page 41 of that report. 22 Now, that is where you cite -- that is 23 where basically the citation that you just made comes from. Let me just direct you to -- I don't know if 24 you see it on the page, but let me find it for you. 25

Page 249 1 So it's basically the last sentence of the 2 third paragraph, third full paragraph. The paragraph begins "The same is true for O&M costs." 3 4 Α. I see that. And then the citation is to the last 5 0. sentence there. So what I want to ask you is that 6 isn't it true that this part of the report addresses 7 the evaluation and the validation of PacifiCorp's 8 9 benchmark bids? Are you aware of that? In other words, this is not in his conclusions. 10 It's at 11 the -- the heading is, I believe, on page 36 saying 12 "Bid submission and bid evaluation process." 13 Yes, I think that's correct. Α. 14 Ο. So isn't true that, taken into context, the IE was referring to whether PacifiCorp would update 15 16 its benchmark bid in the RFP process, not whether there should be a hard cap for ratemaking purposes? 17 In other words, that PacifiCorp would stand by its 18 19 costs for purposes of the RFP bid but not for purposes of ratemaking? 20 21 Α. I don't think that's correct 2.2 interpretation. I think if you look elsewhere -- and it would take me a minute to find -- more than a 23 24 minute to find it. The IE says other things about 25 the capital costs, that it's concerned about the fact

Page 250 that the capital costs of PacifiCorp developed may 1 2 have been too low. That's a major concern to IEs when they evaluate. 3 4 I think that the IE said elsewhere that the costs require very close scrutiny, so I think that 5 the IE is very concerned consistently throughout the 6 capital cost estimates that the Company used in its 7 8 evaluation, and it comes up in more than just this 9 paragraph. 10 0. So you previously testified on behalf of 11 the Office or -- I think at that time it was the 12 committee in the Chehalis Significant Energy Resource 13 proceeding? 14 Α. Yes. I want to direct your attention to 15 Q. Cross-Exhibit 21, which is a transcript of your 16 testimony. I believe in that case you provided a 17 18 confidential report and your only testimony was the 19 testimony that you provided --20 Α. Yes. 21 -- at the hearing? 0. 22 So just to provide a little background, let 23 me ask you -- in that case the Company proposed to acquire a resource several years in advance of the 24 identified need for a new generation resource. 25 Do

Page 251 1 you recall that? 2 Α. Yes. And I'd like to direct your attention to 3 0. 4 the exhibit page 48 of the transcript, and just to refresh your recollection, this is a brief excerpt 5 of --6 7 MR. MOORE: Excuse me. I'm going to object. Ι 8 may be terribly confused here, but I don't know that 9 this is Mr. Hayet's testimony. It begins on 47, 10 "Mr. Duval, could you please state your name for the 11 record." I haven't had time to read through it close 12 enough to determine if this has several different 13 witnesses available, but it appears to me this is not 14 his testimony. 15 Let me represent to you this is MS. MCDOWELL: 16 an excerpt of testimony both from Mr. Hayet and from another witness from the Office and just two pages of 17 the Company testimony to provide a little background 18 to refresh the witness's recollection. So I'm not 19 20 going to ask him to verify anything that is from a 21 different witness. I just am putting it in here to 2.2 refresh his recollection. 23 CHAIR LEVAR: Just so I understand what you're 24 saying, we have an excerpt from Mr. Duval's testimony 25 and then on the part that starts page 78 is when we

Page 252 1 start into the Committee's testimony. 2 MS. MCDOWELL: That's correct. CHAIR LEVAR: And the Duval is just for context. 3 4 So, Mr. Moore, does that satisfy your 5 objection? Well, if she just wants my witness 6 MR. MOORE: to read the transcript to him to refresh his 7 recollection, that's certainly fine. I don't know if 8 he should read it into the record. 9 10 MS. MCDOWELL: I'm not asking for that. So maybe I could -- it's really just by way of providing 11 12 a little background. I just have one question on 13 that. 14 0. So do you recall that the Company testified that its SO model showed that Chehalis allowed the 15 avoidance of front office transactions in the 16 17 short-term and the avoidance of a new resource in the 18 long-term? This was in 2008 so --19 Α. 20 So just to refresh your recollection, can Q. 21 you turn to page 48 lines 12 through 17, and this 22 I'll represent to you is the testimony of Mr. Duval 23 who did the economic analysis in that case, and he states "I used the system optimizer model, which is 24 IRP model, to modify the business plan portfolio" --25

Page 253 Objection. I believe she said she 1 MR. MOORE: 2 wasn't going to read this into the record. 3 MS. MCDOWELL: That's fine. Mr. Hayet can read 4 it to himself. If you could take a look at lines 12 5 0. 6 through 17. 7 Α. Okay. 8 Have you reviewed that? Q. 9 Α. Yes. 10 So does that refresh your recollection then 0. 11 that in that case the Company testified that its SO 12 model showed that Chehalis allowed the avoidance of 13 front office transactions in the short-term and avoidance of a basically a CCCT in the long term? 14 15 Right. Chehalis was a combined-cycle Α. 16 project that the Company was acquiring and it had the effect, when run through the optimization analysis, 17 that affected the front office transactions and 18 the -- a later combined-cycle that had been in the 19 20 expansion plan, yes. 21 0. So that's similar to this case in the sense 22 that the combined projects would displace front office transactions in the short-term and a new 23 generation resource in the long-term? 24 25 Well, effectively, the front office Α.

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1	transactions are being avoided, but I think we've got
2	a little different situation here. We have
3	1000 megawatts we have an expansion plan that has
4	already been designed, and if there were no
5	transmission and the Company was simply saying, "Hey,
6	we want to add 1000 megawatts of wind for the benefit
7	of displacing 182 megawatts of front office
8	transactions," that becomes a "and we're doing it
9	because for no other reason but we're doing it for
10	this need issue," which is basically how that's been
11	built up, one would have to seriously consider
12	whether that's a reasonable thing to do.
13	And when you consider all the risks that we
14	have identified, we do not believe that you can
15	establish that this is being done for a critical need
16	of replacing capacity, replacing front office
17	capacity. That is the distinction between the
18	Chehalis situation and the situation here where we're
19	attempting to add this much capacity of wind.
20	Q. So I want to turn your attention to your
21	testimony which is at page the particular part of
22	this that I want to ask you about is on page 100, and
23	just to represent let me just just so you're
24	clear and the record is clear, your testimony begins
25	at line 92 and the part of your testimony I wanted to

1	Page 255 ask you about is on page 100, lines 17 through 20.
2	And the question I wanted to ask you is do
3	you recall in that case you supported or the
4	Committee supported the Office. At this time the
5	Committee at that time supported the acquisition but
6	still included a hard cap recommendation at the
7	Company's current costs estimate on which the
8	economic evaluation was based?
9	A. Would you provide the reference.
10	Q. Yes. So it's page 100, lines 16 through
11	20.
12	A. I see that.
13	Q. So do you recall that in that case the
14	Office did recommend a hard cap on the resource at
15	the Company's estimated cost?
16	A. Yes.
17	Q. And can I direct your attention now to
18	Cross-Exhibit 11, which is the Chehalis order of the
19	Commission, and I'd like to direct your attention to
20	page 14 of that order.
21	And do you recall that the Commission
22	rejected the Committee's proposal for a hard cap in
23	that case?
24	A. I'd have to read this to help refresh my
25	memory, if that's what you're asking me.
1	

Page 256 1 0. I am asking to you to do that. I believe 2 the pertinent paragraph is "As noted." 3 Α. Yes, I see that. 4 And so can you -- does this refresh your 0. recollection that the Commission rejected the 5 Committee's proposal for a hard cap --6 7 Α. Yeah. -- in the Chehalis case and that the 8 0. 9 Commission found that amounts over the Company's 10 estimate could be addressed in a future proceeding, 11 if necessary? 12 Α. Yes. However, I would not suggest that 13 adding a combined-cycle through the system is consistent with adding wind resources to the system, 14 so there is a difference. 15 16 So can you turn to your rebuttal testimony 0. at page 24. Again, this is your April 17th 17 18 testimony. 19 Α. Yes. 20 And there you on -- beginning on Line 501, 0. you refer to Mr. Link's table 4SS. Do you see that 21 22 reference? 23 Α. Yes. And you indicate there that the Company's 24 Ο. results showed in the 2036 view, using the stochastic 25

	Page 257
1	mean to-2036 analysis in the medium case that the
2	combined projects would be 129 million more economic
3	than the solar-only case, that that's what Mr. Link's
4	analysis showed. Do you see that?
5	A. Yes.
6	Q. And isn't it true that if you review
7	Mr. Link's analysis and using the risk-adjusted PaR
8	model, the combined projects are actually
9	\$149 million more economic than the solar projects?
10	A. And I would mention that's using the
11	Mr. Link's table 4SS has a flaw also that I had
12	discussed, so those results would be invalid.
13	Q. I'm going to ask you about that. You
14	dispute those results and provide alternative
15	<pre>modeling approaches; correct?</pre>
16	A. Yes.
17	Q. And isn't it true, though, in Table 4SS,
18	the Company used the exact same modeling approach to
19	compare the relative benefits of solar and wind
20	portfolios that it used in the evaluation and
21	selection process in the renewable RFP for wind and
22	in the renewal RFP for solar?
23	A. I believe that that was partially true. I
24	think that the Company changed between when it did
25	the initial shortlist in the RFP to when it did the

Page 258 final, so I don't think I could say that's absolutely 1 2 true because I think that at some part they were 3 using PTCs that were levelized and then it got 4 changed to being used as nominal. So isn't it true that the Utah IE is 5 0. required to review and validate the Company's RFP bid 6 evaluation and selection methodology. Is that -- are 7 you aware of that? 8 9 Α. That's my understanding. And isn't it also true that the Utah IE 10 0. 11 reviewed the Company's approach and validated it 12 through various sensitivities and concluded it 13 allowed for a consistent review of resources? My understanding of the conclusion they 14 Α. reached was based on the resources that were 15 16 permissible in the queue that the build-transfer 17 agreement bids versus the PPA bids, as between those, that the PPA bids actually had a slight advantage, 18 19 however, based on the sensitivity analyses, however, 20 based on the fact that they were limited to the queue 21 positions, the results were so close that the IE said 2.2 that for purposes of the evaluation that it reviewed, 23 it didn't have a problem with the results. 24 However, it said that this is an issue that 25 it -- and it made a recommendation that this be

r	
1	Page 259 evaluated further in the future. So as between
2	looking at what it looked at in the IE that the IE
3	evaluated, it concluded that it was not unreasonable.
4	However, it didn't evaluate solar, for example, and
5	when it would evaluate solar, it would it could
6	have reached a different conclusion.
7	Q. What I really want to focus on here is just
8	the modeling and the model that was used and the
9	efforts that the IE made to validate it. So can you
10	turn to page 81 of the IE report, and there are on
11	page 81 the IE states, "The price evaluation
12	methodologies were designed to evaluate bids using
13	the same or consistent set of input parameters,
14	assumptions, and modeling methodologies. This served
15	to ensure consistent evaluation of bids."
16	A. Yes.
17	Q. So that reference is to the SO model;
18	correct? The 20-year SO model; correct?
19	A. Yes.
20	Q. And I just to be clear, no bidder in
21	this case has intervened in the docket to complain
22	that the RFP evaluation and selection methodology or
23	any other aspect of this process was biased; correct?
24	A. Right. They didn't complain that wind
25	resources, for example, were chosen over solar; no,
1	

Page 260 1 they didn't do that. 2 Q. And isn't it true that the wind bids were tested against thousands of megawatts of competing 3 4 resources before they were selected to the short 5 list? 6 Α. They were. And isn't it also true that the bidders 7 0. 8 included some of the largest wind developers in the 9 country? 10 That's my understanding. Α. 11 Now, if the goal is to analyze how solar Q. 12 bids would have compared to the wind bids if time had 13 permitted an integrated IRP -- excuse me -- an integrated RFP, isn't it as important to use the same 14 evaluation methodology here that the company actually 15 applied in its RFP? 16 17 Α. It would. 18 So your testimony proposes to replace the 0. 19 analysis that was used and validated in the RFP process with different evaluation methodologies; 20 21 correct? 2.2 Α. My methodology or my recommendation is, 23 first of all, to reject because we found that there 24 are too many risks associated with the Company's proposal that could lead to higher costs to 25

	Page 261
1	ratepayers; therefore, status quo is our preferred
2	alternative.
3	However, as a second matter, we found that
4	if you were to evaluate results that the Company
5	itself developed, which is the solar, the solar
6	results appear to be even more economic than the
7	wind. The Company has not made a proposal to do
8	both. I realize the Company did an analysis of both,
9	but that's not what we have in front of us to
10	evaluate.
11	Q. Well, when you use the modeling that was
12	used in the RFPs, which the IE validated, and you use
13	it consistently as the Utah law requires, in that
14	analysis the solar projects are less economic than
15	the combined projects; isn't that correct?
16	A. I don't I can't agree with that because
17	I think that if presented with a solar analysis, the
18	IE would have said to you and I'm positive from
19	reading everything that I've read in the Utah IE's
20	report and the Oregon IE's report, everything I have
21	read leads me to believe that both of them brought
22	out to your attention the problems with the PTC
23	modeling.
24	They were very concerned about it. They
25	were concerned that probably a PPA portfolio was more

	Page 262
1	economic than the BTA portfolios that you're
2	supporting, and if they were to evaluate the solar
3	and find the same troubling issues that they found
4	with the difference between the PPA options and the
5	BTA options, they would have had a problem with the
6	solar as well.
7	Q. So isn't it true that IE in his testimony
8	yesterday indicated that the selection portfolio
9	ultimately selected was the lowest cost?
10	A. Let's not forget that the IE yesterday said
11	and in his report says that he cannot say that the
12	solar versus the wind, that the Company has
13	determined the least-cost resource because he
14	didn't conduct that evaluation. He said he was able
15	to evaluate and found reasonable the decision based
16	on the choices that the Company compared against
17	in based on the design of the RFP.
18	Given that, he concluded that the results
19	that the Company evaluated were reasonable. He also
20	said and let's not forget that if he were aware
21	that the Company believed that this had a capacity
22	need, that this would have been designed entirely
23	differently, and he said that it would likely have
24	been an all-source he would have supported the
25	notion of doing an all-source bid and that would have

Page 263 1 opened it up to having comparisons of other resources 2 including CCs and CTs and solar. So that's actually 3 what he said. 4 And didn't he also say that an all-source 0. bidding process would require up to a year and would 5 be much more complicated than this particular RFP 6 7 was? He noted that it would be more complicated. 8 Α. So just to be clear, the Company's 2036 9 ο. analysis shows that the combined projects were more 10 11 economic than solar, and that is the analysis that 12 was actually used in the RFPs; correct? 13 Α. And it used, in my view, the improper 14 modeling. 15 And your alternative analysis is not -- is Q. 16 based on modeling that was never used in the RFP process; correct? 17 And that's correct. And I am certain that 18 Α. 19 the IE, if they had evaluated both solar together 20 based on all the comments that are in both the 21 Utah -- the comments in the Utah report and taken 22 together with the comments in the Oregon report, I am 23 certain that they would have been troubled by using the modeling that the Company did and would have 24 25 had -- required considerable additional analysis of

Page 264 1 that. 2 Q. So let me direct your attention to a 3 different issue but a similar issue that was raised 4 in the RFP process, and that's the issue of terminal value. Now, on page eight of your testimony --5 actually, it's page nine of your testimony. 6 I'm sorry that I have you directed to the wrong page. 7 It's page nine, lines 182 to 184. 8 9 And there you indicate that the concept of using terminal value benefit is a deviation from the 10 11 initial filing in this proceeding as well the IRP. 12 Do you see that? 13 Α. Yes. 14 Ο. Now, isn't it true that the use of terminal values was included in the RFP documents? 15 I understand that it was, and I understand 16 Α. that that was another troubling feature to both the 17 18 Utah IE and the Oregon IE. 19 ο. Well, let me just say you were involved in the process where the Commission reviewed the RFP. 20 21 It was, I believe, a September hearing, and you 22 testified in that hearing? 23 Α. Yes. 24 0. And I just want to represent to you at page 23 of the RFP it states in discussing the 25

1	Page 265 modeling and the price evaluation: "The delivered
2	revenue requirement costs will be netted against
3	energy capacity and terminal value benefits as
4	applicable to calculate the net costs of each
5	benchmark resource and market bid."
6	Now, to your recollection, did any party,
7	including the Office, ever make an objection to the
8	inclusion of terminal value in the RFP in the
9	September hearing where the Commission reviewed the
10	RFP?
11	A. I don't know. So I don't think I can
12	answer that question.
13	Q. So you just indicated that the IEs had
14	concerns about terminal value, but isn't it true that
15	the Utah IE specifically found that including
16	terminal value for the utility owned project did not
17	create biased result?
18	A. Well, that could be the case in the RFP,
19	but let me draw your attention to my testimony at
20	page 33, Table 6 and 7 where in fact, this is out
21	of analysis that was conducted at the request of the
22	IEs, and it actually removed the terminal value as
23	being removed at Table 7.
24	And what I'm trying to draw your attention
25	to is that you can see that at the request of the IE,
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	Page 266
1	that in the 2036 analysis at the request of the IE,
2	their sensitivity, the PPA portfolio achieved a
3	greater benefit than the Company's BTA. In the 2050
4	analysis, the results were a wash, but when you
5	remove the terminal value, you can see that there's
6	clearly a benefit to the PPA portfolio over the BTA
7	portfolio.
8	Q. So can you turn your attention to page 86
9	of the Utah IE report, please, and this is the one,
10	two, three fourth bullet down. Do you have that?
11	And isn't it true that the Utah IE stated
12	that the "application of a terminal value benefit for
13	utility ownership options was a small factor overall
14	and did not influence the final results." Wasn't
15	that the conclusion of the Utah IE?
16	A. And he goes on I've got two points to
17	that. He goes on to say, "The IE feels the
18	application of a terminal value at or in the
19	methodology to apply terminal value should be
20	considered in more detail in future solicitations,"
21	meaning that he's troubled by it. That's a clear
22	signal of that.
23	And the second point I'll remind you of is
24	that the IE was aware that by this point that there
25	was really little alternative to compare to in the

1	Page 267 evaluation because by this point when he he sort
2	of described his report is sort of written
3	sequentially, and by this point where that
4	recommendation derived from, he was already well
5	aware that there was very few choices of resources
6	that were available to be selected because of the
7	queue issue.
8	So, therefore, when he writes this
9	sentence, he's basically writing it with the
10	knowledge that there was basically the BTAs, and it
11	had little impact on the results, and that's the
12	driver for him making that comment.
13	Q. So that's your opinion, but that's
14	certainly not anything that the Utah IE said
15	yesterday?
16	A. I don't know that he was asked.
17	Q. But the words here state that "it did not
18	influence the final results."
19	A. Because the final results were based on a
20	very limited set of alternatives, and he knew and
21	it's covered in here. He talks about the frustration
22	that he experienced in the fact that such limited
23	options were available to evaluate in the RFP as a
24	result of the queue issue.
25	And so by the time he they were working
1	

1	Page 268 on that, it was a point in January where a lot was
2	happening. The IEs were under extreme pressure to
3	try to complete their independent evaluation, get
4	their reports done, to meet the schedule PacifiCorp
5	was pushing for, and all these different things were
6	happening including their concern about the review of
7	the PTAs, salvage value, the fact that the queue
8	issue was coming about.
9	So in the end they had to make a
10	determination of, given the limited set of resources
11	that could be evaluated, the final results were
12	hardly impacted because of the limited set of results
13	that could be evaluated between, and it led to this
14	kind of a conclusion.
15	Q. So let me direct your attention to a
16	Cross-Exhibit, another one that's in front of you,
17	which is Cross-Exhibit 15 and
18	A. Cross-Exhibit
19	Q. This is I'll represent to you it is the
20	Commission's decision in the Currant Creek
21	Significant Energy Resource decision case.
22	Do you have that?
23	A. Yes.
24	Q. Just before I move on to that, you've
25	opined about what you believe the Utah IE was

Page 269 1 thinking. You were not on any of the calls between 2 the Utah IE and the Oregon IE and the DPU and the Company; correct? 3 4 I've quoted from the report. Α. I've 5 attempted to portray -- that's correct. And I've 6 attempted to portray my understanding based on the words, and I've used their words such as frus- --7 8 I've already answered but --9 ο. Your interpretation. So based on that, let me just move on to the decision of the Commission in 10 a previous Significant Energy Resource decision case, 11 12 the Currant Creek case. And I understand that you 13 were not a witness in that case, but I also saw that 14 you had actually signed the protective order in that case, so you at least have some familiarity with this 15 decision, I take it? 16 17 From 2004, I would note, yes. Α. 18 Q. Yeah. I --19 Α. 20 So in that case there was a bidder. Unlike Q. 21 this case, there was a bidder that intervened to 22 complain about the results of the RFP process, and 23 I'll direct your attention to -- unfortunately, this is not paginated for whatever reason, but if you 24 25 go -- toward the back there is an appendix, and if

Page 270 1 you -- the end of the order and if you are with me on 2 that, and it's --3 I'm not with you. I'm sorry. Α. 4 ο. I know. It's a little tricky without page 5 numbers. 6 Α. Maybe we can do this. I'm at Terms of Stipulation. Am I forward or back? 7 8 Q. I am trying to take you to the last page 9 where it says Order. 10 Α. Sure. 11 Unfortunately, there's an appendix. So you Q. 12 have to go through the appendix to the page --13 Wait. You said the last page. Α. 14 0. There's an appendix to the Order, and I want you to move through that appendix to the actual 15 16 Order, last page of the Order. 17 I think I've got it. Α. 18 Q. Are you with me? It says, "Item V. Order." 19 Α. 20 And them I'm going to do one more thing. Q. 21 I'm going to ask you to go to the previous page, to 22 turn the page from there. So I'll represent to you 23 that the words at the top of the page are "Company. Spring Canyon Energy's." 24 25 I see that. Α.

1	Q. Do you have that?
2	A. Yes.
3	Q. So we have the same page. Okay. I'll
4	represent to you then in that case a bidder
5	challenged the RFP results, and among other things,
6	if you go down the page and, unfortunately, I'm
7	going to have to do some reading to you because I
8	can't give you line numbers.
9	But, basically, "Spring Canyon" and let
10	me just basically summarize that. Spring Canyon
11	Energy contested this on the basis that it did not
12	include its bid was rejected because it did not
13	include a terminal value among other things in its
14	final bid. And you can see that where it says
15	"PacifiCorp testifies that Spring Canyon Energy's
16	bids reflected an unwillingness to accept the risk of
17	law changes, interest rates, or terminal value, which
18	together with other aspects of the bid made it not
19	competitive." And Spring Canyon challenged that.
20	Do you recall that at all?
21	A. I you know, it's a long time back. I
22	actually have a recollection that there were other
23	issues in this case that related to modeling, but I
24	can't remember from 2004, but I'll you know,
25	subject to check, I see "terminal value," but I don't

Page 272 know what -- you know, it says "interest rates or 1 2 terminal value." I don't know exactly what's being 3 implied there. 4 Right. And then it states that the 0. Division testified "that the value of the bids must 5 be taken into account from the ratepayers' 6 7 perspective. This means that any power purchase agreement with a term less than the useful life of 8 9 the associated plant, to be competitive, must be priced to account for this difference." 10 11 And that's a reference to the terminal 12 value issue; correct? 13 Well, I don't know about that because, you Α. 14 know, it could be many things including the difference in life of the plant versus the life of 15 16 the PPA, so I don't know -- you're linking two things together just because the word "terminal value" is 17 18 there. 19 MS. MCDOWELL: All right. Fair enough. That's all I have. And I quess before I end, I'd like to 20 21 offer the various cross-exhibits I discussed today, 2.2 which I believe are Cross-Exhibit 19. I've already 23 offered 20. Cross-Exhibit -- I'm sorry these are out of order. Cross-Exhibit 21, Cross-Exhibit 11, and 24 25 Cross-Exhibit 15.

Page 273 MR. MOORE: I object to Cross-Exhibit 15. 1 I 2 don't see the relevance of it. MS. MCDOWELL: That's fine. It's a case I can 3 4 just ask the Commission to take notice of it. 5 CHAIR LEVAR: Okay. So you're withdrawing your motion for 15? 6 MS. MCDOWELL: That's fine. 7 CHAIR LEVAR: Okay. So the motion is to enter 8 into evidence RMP Cross-Exhibits 11, 19, and 21. 9 Ιf any objection to that motion, please indicate to me. 10 11 I'm not seeing any objection, so that 12 notion is granted. Thank you. 13 (RMP Cross-Exhibits 19, 21, 11 were received.) CHAIR LEVAR: Mr. Moore, any redirect? 14 MR. MOORE: If I could have a short moment to 15 confer with my witness, I might be able to avoid 16 closing the hearing again. 17 CHAIR LEVAR: Okay. By "short moment," are you 18 19 meaning a minute or two or five or ten? 20 MR. MOORE: A minute or two or we can take five, 21 if you think that's preferable. 2.2 CHAIR LEVAR: Why don't we just all sit here for 23 a minute or two, and if it turns out you need more, 24 let us know. 25 MR. MOORE: I don't believe we need to close the

Page 274 1 hearing. 2 CHAIR LEVAR: Okay. 3 REDIRECT EXAMINATION 4 BY MR. MOORE: 5 0. Mr. Hayet, you were asked several questions 6 about the Utah IE report and how it dealt with the 7 solar RFP. Do you remember those questions? Α. 8 Yes. I only have a version of the Utah redacted 9 ο. 10 IRP. Maybe I can just hand him a page of it? I just 11 want one quick page. 12 CHAIR LEVAR: Sure. I might want to point out that you've got a 13 Α. 14 page that's a little different because of the 15 redacted and --16 Yes. Could you see what page of the 0. redacted, which I handed you, it's on and what page 17 of the confidential it's on? 18 19 Α. It would be easy to do a search, but I should be able to find it right away. Should be 20 21 close. 22 Q. Well, why don't we just go with the 23 redacted version page 81. Okay. It's probably -- I think it's 24 Α. page 83 probably, but go ahead with the redacted 25

Page 275 1 version. 2 Q. There's a -- I marked a sentence there. 3 Could you read that sentence into the record. A. Starting with the words "Since 4 5 PacifiCorp's"? 6 O. Yes. 7 A. Okay. "Since PacifiCorp's solicitation is 8 based solely on the solicitation for system wind resources, it is not passable to determine if other 9 10 resources would have been included in a final least-cost, least-risk system portfolio, potentially 11 12 displacing one or more wind resources." Q. Is that consistent with your testimony 13 14 today? 15 A. It is. 16 0. Is that consistent with what you remember of the IE's testimony yesterday? 17 A. Yes. 18 19 You were asked several questions about an **Q**. 20 RFP where a bidder objected to the RFP. That was Exhibit 15. 21 A. Might be the one that was withdrawn. 22 Q. It was withdrawn. Maybe I'll introduce it. 23 24 I just want to see --A. I recall. 25 1 Q. Are you aware that in this case a party has 2 challenged and appealed the RFP decision? A. Yes, I am aware. 3 Q. Are you aware that there was litigation 4 5 stemming from the exclusion of the bidder in the case 6 that deals with Exhibit 15? 7 A. Yes. 8 Q. Do you know how that -- do you know how 9 that litigation was concluded? 10 A. You know, I think I may -- I hate to 11 venture a guess because I'm not certain, but I think I may. I think it was resolved out of court, but I 12 don't remember. I do not recall. 13 14 MR. MOORE: All right. I will leave it at that. 15 I have no further redirect. CHAIR LEVAR: Okay. Any recross, Mr. Michel? 16 MR. MICHEL: Just one question very quickly. 17 18 RECROSS-EXAMINATION 19 BY MR. MICHEL: 20 Q. Mr. Hayet, do you know what remedy is being 21 sought in the court case that your counsel just asked 22 you about? 23 A. I believe that it's an appeal of the RFP by UIEC. 24 25 Q. No, I understand that. Do you know what

1	Page 277 remedy is being sought? Is it financial remedy or
2	A. I'm not aware of the details.
3	MR. MICHEL: Okay. That's all I have. Thank
4	you.
5	CHAIR LEVAR: Ms. McDowell, any recross?
6	MS. MCDOWELL: Nothing further. Thank you.
7	CHAIR LEVAR: Okay. Do any parties object to
8	taking a brief recess and continuing today for
9	another hour or so? I think we'll have some
10	commissioner questions for Mr. Hayet but that I'm
11	not sure considering the progress we've made, I
12	see much need to go much farther than that, but I
13	think another hour or so today puts us in better
14	shape tomorrow. Okay. Why don't we recess until
15	around 5:00, few minutes after 5:00, and then we'll
16	move to commissioner questions. Thank you.
17	(A break was taken, 4:51 to 5:01.)
18	CHAIR LEVAR: Okay. We're back on the record.
19	Ms. Schmid has indicated a desire to ask a
20	clarification question of Mr. Hayet. If any party
21	objects to that, please indicate to me.
22	Okay. Go ahead.
23	CROSS-EXAMINATION
24	BY MS. SCHMID:
25	Q. Mr. Hayet, I think that you and Mr. Michel

1	Page 278 were discussing different cases when he asked you
2	about the appeal. Is it true that the appeal you
3	were discussing prior to the question from Mr. Michel
4	was the U.S. Power/Spring Canyon case that resulted
5	in an "over a million dollar" jury verdict against
6	PacifiCorp?
7	A. Yes.
8	MS. SCHMID: Thank you.
9	CHAIR LEVAR: Okay. Thank you.
10	MR. MICHEL: Mr.Chairman, may could I just
11	follow up very quickly.
12	CHAIR LEVAR: Sure. I think a follow-up from
13	you would be appropriate.
14	RECROSS-EXAMINATION
15	BY MR. MICHEL:
16	Q. Mr. Hayet, I also I think the question
17	you responded to when you responded that you were not
18	aware of the remedy being sought was the UIEC appeal;
19	is that correct?
20	A. Yeah, I think we need to be clear it's
21	getting mixed up at this point, but yes, I do agree
22	with that. And so when I was thinking in terms of in
23	this case is there an appeal, I was thinking about
24	that. So I apologize.
25	Q. That being the UIEC

Page 279 1 Α. Yes. 2 Q. -- case? 3 Α. Yes, yes. Right. 4 MR. MICHEL: Thank you. 5 CHAIR LEVAR: Okay. Thank you. 6 Commissioner White, do you have any 7 questions for Mr. Hayet? COMMISSIONER WHITE: Yes, if you -- I've got a 8 9 lot of things -- 5:05 -- swirling in my head right now, but let me start with this assumption: 10 I mean 11 we've had a lot of discussion about FOTs. Is there 12 any question in your mind there's a capacity need 13 that is being fulfilled right now by FOTs? 14 Α. Yes, there's no question in my mind that that's how things are planned, that when they do 15 their IRP, front office transactions are --16 essentially fill a certain amount of their 17 requirements, and that is true. 18 19 But the question is when they had an 20 expansion plan developed, a reasonable expansion 21 plan, they presented this as a unique opportunity, 22 and they may say -- you know, and it's more from when 23 parties said that this is an energy resource that 24 you're looking for. And I don't think anybody would really debate that most people view wind as being an 25

1 energy related resource.

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It has capacity value, capacity equivalence value, so you can't deny that too, but when they planned it, they didn't plan this RFP such they could go out and get capacity, and if they really did believe it was a capacity RFP, they would have likely needed to have opened it up.

So when they told the IE in the questions 8 9 and the answers, the 40 questions and answers that the IE sent -- "What kind of an RFP is this going to 10 11 be?" -- the IE walked away with the impression that 12 this was being done for the unique economic 13 opportunities. To come along and then say, "No, we shouldn't have the Commission establish conditions," 14 15 which is what, you know, essentially parties are saying if you don't reject outright because this is 16 different than some other type RFP is problematic. 17 This is different, and isn't just a typical RFP 18 19 process leading to a resource acquisition.

20 COMMISSIONER WHITE: Let me ask you this: So, 21 you know, it sounds like the capacity values wind 22 might be able to fulfill 180 megawatts of capacity --23 PHILIP HAYET: True, yes.

24 COMMISSIONER WHITE: Let's take one variable out25 just for argument's sake. Let's just assume the

1	Page 281 Company needs this transmission. Is there any other
2	resource in an all-source scenario that would provide
3	a benefit that would potentially offset a \$700
4	million asset that was that necessary?
5	PHILIP HAYET: So if you assume that the
6	transmission is built there, then likely you would
7	the IRP would show it's economic to do the wind if
8	you were building that in that, but you also have to
9	take into consideration all the risks that we talked
10	about, the costs.
11	But if that transmission if indeed you
12	believe that that transmission were built in 2024
13	now this is just an acceleration by four years
14	that's a different story, but, again, just like I
15	testified and other parties have testified, we don't
16	believe that that's the case, that this is a project
17	that was, no matter what, going to be built in 2024.
18	COMMISSIONER WHITE: Okay. Let me ask you this:
19	If you were to assume that and you utilized this
20	project to fulfill 180 megawatts of what was being
21	filled with FOTs, I mean moving on solar in a
22	scenario where ITCs are at place, could that also
23	fill additional capacity that's currently being
24	fulfilled by FOTs at some point?
25	PHILIP HAYET: It could, but, you know, it's
1	

Page 282 highly -- it's like saying do you want to really go 1 2 out and spend billions of dollars when at this moment 3 you could adequately serve your customers, invest 4 2 billion to get that 180 megawatts of the wind or to get some little portion of the solar? 5 I don't think that that -- given the risks that we have low gas 6 prices and given the risks that are being placed on 7 ratepayers with the capital costs and potential for 8 9 capital cost overruns, do you really want to place that burden of going out and doing the solar now and 10 11 the -- or doing the wind and the solar when it's 12 really that it's not necessary given the results that 13 have been presented as an alternative status quo 14 expansion plan.

15 COMMISSIONER WHITE: Let me ask you this then -again, I'm trying to determine whether there's an 16 actual need for the transmission in '24 or now, et 17 18 cetera, but I mean under any pricing scenario, under 19 any, you know, carbon price and under any gas price 20 scenario, at least that the Company submitted, is 21 there any scenario if you were to use that offset 22 concept that it's not -- it shows a benefit? 23 In other words, if you were to take the potential offset to the transmission, is there a 24 scenario by which there's not an offside if you have 25

Page 283 1 to buy that transmission? 2 PHILIP HAYET: Under the higher gas scenarios 3 and the higher CO2 cases, yes. Those cases would 4 clearly say that it's economic. COMMISSIONER WHITE: What about the low gas and 5 zero carbon? Is that --6 PHILIP HAYET: Under the low gas/zero carbon I 7 don't think you find this is economic. 8 9 COMMISSIONER WHITE: Even with a \$300 million offset, I guess? That's my question, I guess. 10 Is 11 there any scenario --12 PHILIP HAYET: Well, but the 300 million offset 13 is if you're assume that the transmission would have 14 been built no matter what. 15 COMMISSIONER WHITE: That's my assumption. PHILIP HAYET: Okay. Then under that 16 assumption, yes. I look at in a different light 17 because if this truly is an acceleration of that 18 19 transmission by four years, then there could 20 potentially be that offset. 21 But I don't think the case has been made 2.2 that this transmission will be no matter what. By 23 that logic, they are going to be coming here pretty soon and saying, "Hey, the Gateway South Project has 24 to be built and completed, and the Gateway West --25

	Page 284
1	other components of the Gateway West because that's
2	in our transmission plan, you know, and those are
3	going to be even you think this is expensive?
4	Those transmission costs are going to be even higher,
5	significantly higher.
6	COMMISSIONER WHITE: I appreciate it. That's
7	all the questions I have. Thanks.
8	CHAIR LEVAR: Commissioner Clark, do you have
9	any questions for Mr. Hayet?
10	COMMISSIONER CLARK: I do have one maybe. I'm
11	probably going to disappoint you, though, because I
12	think my questions to Mr. Vastag suggested that I
13	was I had some questions for you on your solar PPA
14	sensitivity analysis, but I don't any longer, having
15	listened to your summary.
16	You did you offered a number of I'll
17	call them characterizations or interpretations of the
18	IE's conclusions and recommendations, but one of them
19	I wanted to come back to with you, and that is I
20	think you said the IEs had trouble with the PTC
21	model.
22	PHILIP HAYET: Yes.
23	COMMISSIONER CLARK: So could you just indicate
24	to me the parts of their report that you have in mind
25	as you made that statement.
1	

1	Page 285 PHILIP HAYET: Do you want me to find it,
2	because it would take time, and I would absolutely be
3	happy to find it because it's in here. There are
4	sections in the report where they go through "We were
5	concerned about the modeling. We didn't think that
6	it was consistent treatment between the modeling, the
7	nominal, capital revenue requirements and the" oh,
8	sorry "nominal PTCs and the levelized capital
9	revenue requirements. We were concerned that it
10	might bias the results. It would bias the results
11	against the PPAs in favor of the projects that the
12	Company wanted to do."
13	COMMISSIONER CLARK: At the risk of being
14	tedious, I think it's just a couple there's four
15	or five pages, you know, of conclusions or
16	recommendations, would you mind just
17	PHILIP HAYET: I'd be happy to do it. I don't
18	know if I could do it right this are you asking me
19	to do it this
20	COMMISSIONER CLARK: Well, that's what I was
21	PHILIP HAYET: I might need to open my computer,
22	do a search. I may even have a document in which
23	I've highlighted the comments, specific lines, of the
24	IE where they said these things, so I would be more
25	than happy, but I might have to do that.
1	

1	Page 286 COMMISSIONER CLARK: Well, I just wonder maybe
2	then tomorrow morning or something we could you
3	could just provide the references for the record, if
4	there's no objection.
5	CHAIR LEVAR: Sure. If you want to bring them
6	back to the stand in the morning.
7	COMMISSIONER CLARK: Or even if counsel could
8	provide the references, I would be fine with that.
9	PHILIP HAYET: Would you like that from just the
10	Utah
11	COMMISSIONER CLARK: Just the Utah.
12	PHILIP HAYET: IE or the Oregon IE as well.
13	Just the Utah?
14	COMMISSIONER CLARK: Yeah.
15	Is that acceptable?
16	CHAIR LEVAR: Are you asking me?
17	COMMISSIONER CLARK: Is that acceptable to you,
18	Chair LeVar?
19	CHAIR LEVAR: I thought you would be asking
20	COMMISSIONER CLARK: Is that okay?
21	MR. MOORE: That's fine.
22	COMMISSIONER CLARK: That concludes my
23	questions.
24	CHAIR LEVAR: Okay. And I don't have any
25	further questions. Thank you for your testimony

Page 287 1 today. 2 PHILIP HAYET: Thank you. MR. MOORE: The Office calls Donna Ramas. 3 4 CHAIR LEVAR: Ms. Ramas, do you swear to tell the truth? 5 6 DONNA RAMAS: I do. 7 CHAIR LEVAR: Thank you. 8 DONNA RAMAS, 9 called as a witness on behalf of the Office, being duly sworn, was examined and testified as follows: 10 11 DIRECT EXAMINATION 12 BY MR. MOORE: 13 Could you please state your name for the 0. 14 record and spell it. State whom you are employed for and who you are testifying for today. 15 16 My name is Donna, D-o-n-n-a, Ramas, Α. R-a-m-a-s. I'm self-employed as a regulatory 17 consultant, and I'm representing the Office of 18 Consumer Services in this case. 19 20 Have you reviewed the testimony and Q. 21 discovery in this document? 2.2 Α. Yes, I have. 23 0. Have you prepared December 5, 2008 testimony, direct testimony; and January 16 rebuttal 24 testimony; and April 17 second rebuttal testimony? 25

Page 288 Yes, I did. 1 Α. 2 Q. Are there any changes to this testimony you 3 would like to make at this time? 4 Α. No, there are not. If I asked you those same questions, would 5 0. 6 your answers be the same? Yes, they would. 7 Α. MR. MOORE: At this point I would like to move 8 for the admission of the prefiled testimony and 9 exhibits of Ms. Ramas. 10 11 CHAIR LEVAR: If anyone objects to that motion, 12 please indicate to me. 13 I'm not seeing any objections, so the motion is granted. Thank you. 14 (Prefiled Testimony and Exhibits of D. Ramas 15 16 were received.) 17 Have you prepared a summary of your Q. 18 testimony? 19 Α. Yes, a brief summary. 20 Please proceed. Q. Good afternoon, Chairman, Commissioners. 21 Α. 2.2 In this case, and then my testimony is I recommend 23 that the new Resource Tracking Mechanism proposed by the Company be rejected. There is no need to 24 25 establish a new recovery mechanism that adds

Page 289 1 substantial complexity to the regulatory process. Ι 2 apologize if this a bit of a repeat from a few weeks 3 ago in the repowering case, but it's a similar issue. 4 CHAIR LEVAR: I'm sorry. I'm distracted by his 5 chair breaking. I apologize for that. 6 COMMISSIONER WHITE: I'll just put this over 7 here. CHAIR LEVAR: I apologize for the distraction. 8 9 Α. Oh, no problem. I'll continue. It's my testimony that if the Company does go forward with 10 11 the projects in this case, that adequate means 12 already exist to address the revenue requirements 13 associated without projects without needing to 14 establish a new cost recovery mechanism. In fact, the Commission's order issued last 15 16 week in the wind repowering docket found that adequate means exist to allow the company to seek 17 recovery of the wind repowering project costs without 18 the implementation of a renewable tracking mechanism. 19 20 The same holds true for the new wind and new 21 transmission projects at issue in this proceeding. 2.2 As indicated in my direct testimony, the 23 Company's last rate case filing was submitted in 24 January 2014 that used a historic base year ended 25 June 30, 2013 and future test year ending June 30,

Page 290 1 2015. The Company's requesting in this case that a 2 substantial amount of investments associated with the 3 new wind and new transmission facilities be recovered 4 through its proposed Resource Tracking Mechanism until the next rate case. 5 The amount of capital investment at issue 6 in this proceeding -- well, the latest version of it 7 was identified as confidential -- is a substantial 8 amount. Given the amount of time that's passed since 9 10 a detailed and rigorous review of Rocky Mountain 11 Power's overall revenue requirements was performed in 12 a prior rate case, coupled with the substantial 13 amounts of investments at issue in this proceeding, it's my opinion that it's not reasonable to allow the 14 15 recovery of these significant investments, if 16 approved, through a recovery mechanism outside of base rates. 17 18 The proposed investments at issue in this 19 case are anticipated to be placed into service over 20 seven years after the historic base year used in the 21 last rate case, and that's a considerable amount of 2.2 time since there's been a thorough, detailed review. 23 As explained in my direct testimony, if the 24 Company does forecast that the projects will cause it 25 to be unable to earn its Commission-authorized rate

Page 291 of return when taking into consideration all aspects of its revenue requirements, it has the ability to file a rate case. It also has the ability to seek a future test year in a rate case that would include the period the projects are anticipated to be placed in service.

And, in fact, the Company has indicated 7 that in anticipates filing its next rate case 8 9 sometime in 2020 using a 2021 test year. That test year would fall within one and a half months of the 10 11 projected in-service dates for the projects at issue 12 in this case. The Company has not submitted evidence 13 demonstrating the projects at issue in this case are anticipated -- that are anticipated to be in service 14 for less than two months in 2020 would cause it to be 15 unable to earn its authorized rate of return in 2020. 16

Additionally, I'm not aware of anything that would bar the Company from changing the timing of its next rate case filing or barring the Company from more closely aligning the test year it uses to the projected in-service date for the projects at issue in this case.

It's the Company that chooses when to file a rate case, not the ratepayers. As explained in my direct testimony, if the Company determines that the

2

1	Page 292 wind repowering projects at issue I'm sorry
2	that the wind repowering projects at issue in the
3	prior docket, Docket 17-035-39, will cause it to be
4	unable to earn its authorized rate of return, it can
5	file a rate case.

The subsequent addition of the projects at 6 7 issue in this case wouldn't necessarily result in back-to-back rate cases. It could, but that's not 8 9 necessarily what would occur. This is because the Company can file an application for alternative cost 10 11 recovery for major plan additions associated with the 12 new wind and new transmission projects so long as the 13 projects are projected to be placed into service within 18 months of the final order in that rate case 14 proceeding, if in fact there is a more closer-in-time 15 16 rate case.

17 The opportunity under the statutes to request alternative cost recovery for major plant 18 additions would alleviate the potential need for 19 20 back-to-back rate cases should the Company's internal 21 forecast determine that both the wind repowering 22 projects and the projects at issue in this case would cause it not to turn its authorized rate of return. 23 24 Additionally, with regard to the renewable energy credit sales and revenues, Mr. Link's direct 25

Page 293 testimony indicated that the Company's economic 1 2 analysis did not include the potential revenues 3 associated with the sales of the renewal energy 4 credits that will be generated from the new wind projects if these do go forward. 5 6 I agree that those potential revenues should be excluded from the analysis. The amount of 7 potential revenues is unknown, and it is also not 8 9 known if the increases in the renewable energy credits available for sale as a result of these new 10 11 wind projects at issue in this case will actually result in additional REC sales. 12 13 The Company has acknowledged that the market is not consistently active and is illiquid and 14 that there is little price transparency in the 15 The confidential portion of my direct 16 markets. 17 testimony provides additional information regarding reasons that I do not recommend that the Commission 18 factor the possibility of the future REC revenues in 19 20 its evaluation in this case. 21 Again, that doesn't mean if they go forward 2.2 that there may not be additional REC revenues as a 23 result just they are too uncertain, the market's 24 illiquid, and there's not enough evidence that 25 they'll actually result in additional sales to put a

Page 294 lot of weight in the economic analysis in this case. 1 2 Thank you. MR. MOORE: Ms. Ramas is available for cross and 3 4 questions from the Commission. CHAIR LEVAR: Okay. Ms. Schmid, do you have any 5 6 questions for Ms. Ramas? MS. SCHMID: The Division has no questions. 7 CHAIR LEVAR: Mr. Russell? 8 MR. RUSSELL: No questions. Thank you. 9 10 CHAIR LEVAR: Mr. Baker? 11 MR. BAKER: No questions. Thank you. 12 CHAIR LEVAR: Thank you. 13 Ms. Hickey? MS. HICKEY: No, thank you. 14 15 CHAIR LEVAR: Mr. Holman? 16 MR. HOLMAN: No questions. Thank you. 17 CHAIR LEVAR: Mr. Michel? 18 MR. MICHEL: No questions. CHAIR LEVAR: Okay. Thank you. 19 20 Mr. Lowney? 21 MR. LOWNEY: The company has no questions for 22 Ms. Ramas. Thank you. CHAIR LEVAR: Okay. Thank you. 23 Commissioner White? 24 25 COMMISSIONER WHITE: Other than can you fix my

1	Page 295 chair, no questions.
2	DONNA RAMAS: Unfortunately, that's beyond my
3	skill set.
4	CHAIR LEVAR: Commissioner Clark.
5	COMMISSIONER CLARK: No thank you.
6	CHAIR LEVAR: Okay. I don't have any others, so
7	thank you for your testimony today. We appreciate
8	it.
9	DONNA RAMAS: You're welcome. Thank you.
10	CHAIR LEVAR: Mr. Moore, anything else?
11	MR. MOORE: The Office has no further witnesses
12	and would rest.
13	CHAIR LEVAR: I think your client is trying to
14	get your attention behind you.
15	MR. SNARR: Client has advised that if we could
16	have even ten more minutes we might have the answers
17	from Mr. Hayet that Commissioner Clark was seeking.
18	I know it's getting to the end of the day, but I
19	wanted to give you an update on that follow-up that
20	we were planning to have.
21	CHAIR LEVAR: Okay.
22	MR. SNARR: So I'll defer to you whether you
23	want to close the hearing or just wait a few more
24	minutes. We might have something to provide.
25	CHAIR LEVAR: I think we're probably not ready

Page 296 1 to completely close today. I think we were going to 2 go on with the next witness, but if at the end of that when we get ready close -- does that work for 3 4 vou? 5 COMMISSIONER CLARK: Thank you. 6 MR. SNARR: Just wanted to keep you advised. 7 CHAIR LEVAR: Okay. So Mr. Russell and 8 Mr. Baker, I don't know that we can finish with 9 Mr. Mullins today, it might make sense to get started and at least get his summary unless you feel 10 11 differently. 12 MR. RUSSELL: I do actually. With your 13 permission, I would like to propose we let one of the 14 witnesses from either UCE or WRA go. I know that 15 Ms. Kelly has a time constraint tomorrow. My concern 16 is splitting up Mr. Mullins's testimony. I prefer not to --17 18 CHAIR LEVAR: You prefer not to do that. 19 MR. RUSSELL: Yeah. 20 CHAIR LEVAR: Mr. Michel, if Ms. Kelly has a 21 conflict tomorrow, should we start with her tomorrow? 2.2 MS. MCDOWELL: Actually, it's not her conflict. 23 It's her attorney's conflict. 24 CHAIR LEVAR: Oh, my apologies. 25 MR. MICHEL: But we can put Ms. Kelly on, but we

Page 297 would also like, if we put her on, to have her finish 1 2 today if possible. 3 CHAIR LEVAR: Okay. I'm not sure how much 4 MR. MICHEL: cross-examination folks are anticipating for her. 5 6 CHAIR LEVAR: Okay. 7 MR. MICHEL: The constraint we have is simply 8 that both Ms. Hayes and myself may not be available 9 after, say, 2:00. 10 CHAIR LEVAR: Tomorrow. 11 MR. MICHEL: So there is time tomorrow but --12 CHAIR LEVAR: I don't know that I can guarantee we will finish Ms. Kelly today, depending how 13 cross-examination goes, but I think it makes sense to 14 start and see what we can get through. I think 15 16 there's at least -- I think we have some flexibility 17 on how late we go. Is there any objection to moving forward 18 19 that way then or would you prefer --20 MR. MICHEL: Let me check with Ms. Kelly. 21 CHAIR LEVAR: Okay. 2.2 MR. MICHEL: We can go today. The only issue is 23 her summary is electronic, and we would need to print it out so that she could read it. 24 25 CHAIR LEVAR: Okay. She's not ready to do that

Page 298 1 vet. 2 MR. MICHEL: She is ready to print it. 3 NANCY KELLY: Five-minute break for printing. MS. SCHMID: The Division has volunteered to 4 assist in the printing process. 5 CHAIR LEVAR: Okay. Why don't we take a 6 five-minute recess then. Thank you. 7 (A break was taken, 5:26 to 5:32.) 8 CHAIR LEVAR: Back on the record. 9 Mr. Michel. 10 11 MR. MICHEL: Thank you, Mr. Chairman, 12 Commissioners. Western Resource Advocates calls 13 Nancy Kelly. 14 Ms. Kelly, could you please state your name for the --15 CHAIR LEVAR: Let me swear her in first. 16 17 MR. MICHEL: Ms. Kelly, do you swear to tell the 18 truth? NANCY KELLY: I do. 19 20 CHAIR LEVAR: Thank you. 21 NANCY L. KELLY, 2.2 called as a witness on behalf of the WRA, being duly 23 sworn, was examined and testified as follows: 24 111 25 111

1	Page 299 DIRECT EXAMINATION
2	BY MR. MICHEL:
3	Q. Could you state your full name for the
4	record.
5	A. Nancy L. Kelly.
6	Q. And by whom are you employed?
7	A. Western Resource Advocates.
8	Q. And have you prepared testimony that's been
9	filed in this docket?
10	A. I have.
11	Q. And is that testimony the direct testimony
12	of Nancy Kelly on December 5, 2017 with two exhibits,
13	A and B, surrebuttal testimony of Nancy Kelly filed
14	March 16, 2018; response testimony of Nancy Kelly
15	filed April 17th, 2018, and second surrebuttal
16	testimony of Nancy Kelly with six exhibits, C through
17	Н?
18	A. Yes.
19	Q. And do you have any changes or corrections
20	to make to that testimony?
21	A. Yes, I do. So beginning with my direct
22	testimony well, throughout all sets of my
23	testimony, I mis-numbered Utah Code Sections
24	54-17-302 and 402 is 301 and 401, so that is a
25	correction that needs to be made throughout.

1	Page 300 And if you would like specific line
2	numbers, I can put them all together for you later.
3	CHAIR LEVAR: I think your statement on the
4	record is probably sufficient for that unless there's
5	a need to address it more as we move through
6	cross-examination.
7	NANCY KELLY: Okay.
8	CHAIR LEVAR: If anyone feels differently,
9	please let me know.
10	A. Okay. Thank you. On page 11 of my direct
11	at Line 192, I have two corrections. On line 192 the
12	number 18 should be 28. And the footnote,
13	Footnote 3, at the bottom of the page should read
14	"437 million minus 409 million equals 28 million."
15	And then I have several corrections to my
16	second surrebuttal testimony filed May 15. On page
17	10, line 144, the word "certain" should be
18	"certainly." On page 6 sorry to take you
19	backwards on line 77, it should read "The deficit
20	has grown to more than 1500 megawatts," so strike
21	"1,384" and replace with "more than 1500."
22	At line 78, strike "1600" and replace with
23	"3400." On page 25, line 407, add the word
24	"forecast" to the end of that line after "price."
25	Page 28, line 464, strike the word "correctly" after
1	

1	"mechanism." Page 301
2	On page 31, line 521 the "5 percent" should
3	be replaced with "95 percent," and on line 525, the
4	number "82" should be replaced with "88."
5	And those complete my corrections oh,
6	and do I introduce the exhibits?
7	Q. Yeah, Ms. Kelly, did you also have a
8	correction to your Exhibit E?
9	A. Yes. I have updated my Exhibit E to remove
10	all planned resources from this exhibit. I had
11	previously only removed front office transactions and
12	the generation from the new wind that was in the IRP
13	update, and I have now removed all planned resources
14	to show the actual capacity needs in each year, and
15	so those capacity shortages have been updated.
16	Q. Okay. Ms. Kelly, with those changes and
17	corrections, is the testimony that I listed and
18	associated exhibits true and correct?
19	A. It is.
20	MR. MICHEL: I would move the admission of the
21	direct testimony, surrebuttal testimony, response
22	testimony, and second surrebuttal testimony of
23	Nancy Kelly and the associated exhibits into the
24	record.
25	CHAIR LEVAR: Okay. If any party objects to

Page 302 that motion, please indicate to me. 1 2 I am not seeing any objection, so the motion is granted. 3 4 (Prefiled Testimony and Exhibits of N. Kelly were received, and WRA Exhibit E was received.) 5 6 Q. Thank you. Ms. Kelly, have you prepared a 7 summary of your testimonies? I have. 8 Α. 9 ο. Could you present that, please. Yes, thank you. 10 Α. 11 Good afternoon, Commissioners. I am here Q. 12 to testify in support of your approving PacifiCorp's 13 request for approval of the combined projects under Utah Code 54-17-302 and 54-17-402. In my opinion, 14 their approval is in the public interest and meets 15 the statutory requirements. Their acquisition will 16 most likely result in the acquisition, production, 17 and delivery of utility services at the lowest 18 19 reasonable cost to retail customers, will reduce market risk and uncertainty, will result in known and 20 21 reasonable short-term and long-term impacts, will 22 enhance reliability, and will provide PacifiCorp an 23 opportunity to earn a return on a new resource investment. 24 Finally, their acquisition is 25

1	Page 303 environmentally responsible and will promote the
2	safety, health, comfort, and convenience of the
3	public consistent with Utah Code 54-3-1.
4	I believe three issues are central to your
5	decision. First, are the combined projects needed?
6	Do the resources reduce PacifiCorp's capacity
7	shortage and lower system costs and risks?
8	Second, what is the strength of the
9	economic case supporting approval of the combined
10	projects? And, third, are the combined projects well
11	positioned to meet the risks and challenges of the
12	future?
13	With regard to the first issue of need,
14	there can be little doubt that PacifiCorp has a
15	resource need. PacifiCorp has a capacity shortage
16	today, and this capacity need grows substantially
17	over the 20-year planning period. Irrespective of
18	capacity need, however, the strong potential for a
19	substantial cost and risk reductions should be
20	sufficient to support approval.
21	Therefore, the issue for you to determine
22	is not whether the projects are needed, but whether
23	their acquisition reduces PacifiCorp's cost and risk
24	relative to purchasing its requirements in the
25	short-term market at future prices. With regard to

1	Page 304 the question of whether solar PPAs are a better
2	option, the economic analysis demonstrates that wind
3	and solar lower cost and risk over either alone.
4	Wind and solar resources together are cost
5	effective in displacing short-term market purchases
6	and existing fossil fuel generation. The analysis
7	demonstrates that it is cheaper to replace
8	transactions in the wholesale market and energy from
9	existing resources with clean renewable energy than
10	it is to continue to operate the existing system
11	without the addition of renewable resources.
12	Finally, acquiring a combination of wind
13	and solar geographically separated is sensible. Both
14	are needed, and in combination they provide a
15	production profile that neither can provide alone.
16	With regard to the second issue, the
17	strength of the economic case, it is my opinion that
18	the economic case presented by PacifiCorp is
19	conservative, and despite its conservative nature,
20	the results demonstrate significant customer
21	benefits.
22	I characterize PacifiCorp economic case as
23	conservative for the following reasons: First, as
24	compared with other vendor forecasts, PacifiCorp's
25	natural gas price forecasts are conservative for the
1	

1	Page 305 dates they were forecast, and I believe that the
2	argument made by other parties that because natural
3	gas prices have been trending downward since 2008,
4	they are likely to continue downward erroneous and
5	backward looking at time when we need to be
6	forward-looking.

7 Natural gas prices are near historic lows, 8 and my analysis, using more recent historic Henry Hub 9 prices, shows an upward trend. The notion that 10 natural gas prices will remain near historic lows 11 over the 20 to 30 years of the projects, ignores the 12 volatile history of natural gas prices and is, I 13 believe, naive.

14 My second reason for characterizing the Company's economic case as conservative is due to the 15 16 overly conservative CO2 cost assumptions. A scenario of no action taken to regulate CO2 over the next 17 30 years is remote, and would more properly 18 19 characterize even the medium and high CO2 cost scenarios used for this analysis as low when compared 20 21 with other estimates of carbon costs available in the 22 industry. And this notion of conservative -- I can't 23 say the word -- conservatism is further bolstered by PacifiCorp's use of deflated 2012 dollars. 24 25 Third, revenues from REC sales were not

1	Page 306 included as a benefit. While prices in the REC
2	market are currently low, neighboring states are
3	considering increasing renewable portfolio standards.
4	Higher standards could lead to tightening in the REC
5	market, and REC revenues could increase the projects'
6	benefits by tens of millions of dollars.
7	Fourth, the supplemental analysis was
8	undertaken using O&M costs that are overstated.
9	Finally, and perhaps most significantly,
10	the potential hedging value of the projects is not
11	fully captured by either PacifiCorp's stochastic
12	analysis nor by its scenario analysis. In my opinion
13	this hedging value, particularly against the
14	potential for the wholesale market to become
15	disrupted is a key benefit of the projects that could
16	dwarf the other net benefit results established in
17	the record.
18	I believe my analysis of this issue is a
19	unique contribution of my testimony, and I would
20	refer you specifically to my direct, rebuttal, and
21	second surrebuttal testimony. For all these reasons,
22	I believe the economic case is conservative and does
23	not fully capture the likely benefits. On the other
24	hand, the costs are, for the most part, known, and
25	what cannot be known today can be mitigated through

Page 307

1 ratepayer protections.

2 With regard to the third issue, whether the combined projects are well positioned to meet the 3 4 challenge of the future, in my opinion, they are. The combined projects represent a robust resource 5 selection that is well suited to the current 6 transition the electric industry is undergoing. 7 Even if not least-cost across every 8 9 planning scenario, robust resources avoid unexpected 10 high-priced events in the shock of changing planning 11 environments. Because the combined projects hedge 12 against the potential for tightening wholesale power 13 markets, fluctuating and volatile prices in the natural gas market, and the likely imposition of 14 carbon regulation, I believe they represent a robust 15 resource selection and are well suited to mitigate 16 the impacts of the type of disruptive change that the 17 18 current industry transition may bring.

19 Other parties have argued that you should 20 reject these projects as overly risky and at least as 21 likely to result in costs as in benefits and they 22 urge you to deny PacifiCorp's approval requests. My 23 testimony in this case underscores that a decision to 24 forego the combined projects comes with its own set 25 of risks and costs which in my opinion are greater.

	Page 308
1	Foregoing action today means that customers
2	will most likely be worse off. The system will be
3	riskier and investors will be deprived of an earnings
4	opportunity. In addition, a decision to forego the
5	projects foregoes the opportunity to strengthen the
6	transmission system in eastern Wyoming while
7	supporting the cost of this investment with
8	Production Tax Credits, an opportunity that is time
9	limited.
10	In arguing against approval of these
11	projects, other witnesses have identified factors
12	they believe could result in customer harm. These
13	included low natural gas prices, little or no action
14	to climate change, capital cost overruns, delays in
15	operation, and underproduction. As I have already
16	stated in my opinion, 30 years of low natural gas
17	prices is highly unlikely and to presume no future
18	cost for CO2 is unrealistic.
19	However, other identified risks capital
20	cost overruns, delays in operation, and
21	underproduction may have merit. If you determine
22	that components of the combined projects pose
23	disproportionate risk to customers, rather than
24	declining to approve the combined projects, I
25	recommend that you instead consider adopting the

	- 200
1	Page 309 protections identified by other witnesses reject
2	the RTM, cap recovery of capital investment and
3	future O&M consistent with the removal of the Uinta
4	project, guarantee PTCs and energy benefits at no
5	less than 95 percent of those assumed in PacifiCorp's
6	May 17 surrebuttal filing for the first ten years of
7	the life of the facilities, limit the allocation of
8	transmission costs to Utah customers to its
9	jurisdictional share of no more than 88 percent of
10	the new transmission costs, and make clear in your
11	order that Utah will pay for no more than its
12	jurisdictional share of the combined projects as
13	calculated using the 2017 protocol.
14	This concludes my summary. Thank you for
15	the opportunity to address you.
16	MR. MICHEL: Thank you, Ms. Kelly.
17	Ms. Kelly is available for
18	cross-examination by parties and the Commission.
19	CHAIR LEVAR: Okay. Thank you.
20	Mr. Holman, do you have any questions for
21	Ms. Kelly?
22	MR. HOLMAN: No. Thank you.
23	CHAIR LEVAR: Ms. Hickey, do you have any
24	questions for Ms. Kelly?
25	MS. HICKEY: No thank you, sir.

Page 310 CHAIR LEVAR: I think I will go next to 1 2 Ms. McDowell or Mr. Lowney. 3 MS. MCDOWELL: One moment. 4 MR. LOWNEY: The Company has no questions for 5 Ms. Kelly. 6 CHAIR LEVAR: Thank you. Mr. Russell, do you have any questions for 7 her? 8 9 MR. RUSSELL: I do not. Thank you. CHAIR LEVAR: Mr. Baker? 10 11 MR. BAKER: Yes, thank you. 12 CROSS-EXAMINATION 13 BY MR. BAKER: Good afternoon, Ms. Kelly. I just wanted 14 ο. some clarification on the current status of the Clean 15 Power Plan. You're familiar with the Clean Power 16 17 Plan, are you not? 18 Yes, I am. Α. 19 Q. Are you aware that on October 16, 2017, the 20 EPA proposed a rule to appeal the Clean Power Plan? 21 Α. Yes, and I'm also aware that is not repealed. 2.2 23 0. Are you aware that is currently stayed by Supreme Court? 24 25 I am aware of that, yes. Α.

1	Page 311 MR. BAKER: Okay. Thank you. No further
2	questions.
3	CHAIR LEVAR: Thank you.
4	Mr. Moore, do you have any questions for
5	Ms. Kelly?
6	MR. MOORE: No questions. Thank you.
7	CHAIR LEVAR: Ms. Schmid?
8	MS. SCHMID: Just a few.
9	CROSS-EXAMINATION
10	BY MS. SCHMID:
11	Q. Good afternoon.
12	A. Good afternoon, Ms. Schmid.
13	Q. During the break, I passed out a paper.
14	The title reads "2017 IRP Update, Henry Hub Forecast
15	versus Inflation." If we could mark this for
16	identification as DPU Cross-Exhibit 9, and I will
17	give the court reporter a copy marked with that in
18	just a moment.
19	I'll take a minute just to describe this
20	cross-exhibit. The top is a graph with prices on one
21	side and years on the other. The black line is from
22	Rocky Mountain Power's 2017 IRP update,
23	December 2017, and that was in the May filed one at
24	page four as well.
25	The blue line is the spot price at the

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1	Page 312 Henry Hub inflated at 2 percent, and that date for
2	the price was May 31, 2018. The green line is the
3	Henry Hub spot price, May 31st, inflated at
4	3 percent, and finally the red line is the May 31,
5	2018 spot price inflated at 4 percent. Down below is
6	a series of numbers that correspond with the graph.
7	Do you see that?
8	A. I see that.
9	Q. So do you see that from 2018 to 2023
10	PacifiCorp or Rocky Mountain Power's gas forecast is
11	below the May 31st spot price, inflated at either 2,
12	3, or 4 percent?
13	MR. MICHEL: Ms. Schmid, I am sorry to interrupt
14	you, but could you provide the record with the source
15	of this document and who made these calculations and
16	how they were who prepared them.
17	MS. SCHMID: Certainly. Mr. Jetter, who had to
18	leave, prepared the exhibit, but he informed me of
19	what he did and where the numbers came from. He took
20	the prices for the IRP from the sources indicated.
21	At the bottom it says first column
22	represents numbers from the 2017 IRP, October 2016;
23	the second column is the 2017 IRP, update in
24	December. He pulled the May spot prices from the
25	Henry Hub site. Unfortunately, I can't give you any

Page 313 1 more detail than that, and then he just added generic 2 inflator of 2, 3, and 4 percent. Thank you. My question was just 3 MR. MICHEL: 4 whether this came from some document or if this was a 5 DPU prepared exhibit. 6 MS. SCHMID: Oh, I'm sorry. It was a DPU 7 prepared exhibit. The black line represents the 8 Rocky Mountain Power price projections, and then the 9 blue, green, and red line represent the DPU's inflation numbers. 10 11 MR. MICHEL: Okay. Thank you. 12 MS. SCHMID: Thank you. Thanks for helping me 13 do that. 14 Ο. Anyway, so you see that from 2018 to 2023, the Rocky Mountain Power forecast is below the 15 16 Division's illustrative examples of inflation at 2, 3, and 4 percent. 17 18 Α. I see that. 19 Q. And then do you see that in approximately 2023 Rocky Mountain Power's gas price forecast 20 21 inclines upwards, and in approximately 2025 crosses the Division's 2, 3, and 4 percent inflation lines? 22 23 Α. I see that. 24 Ο. Would it surprise you that Rocky Mountain Power believes the gas price will increase at greater 25

Page 314 1 than a 4 percent inflation rate beginning in maybe 2 2024 just after the first of the year and then, as 3 shown on this sheet, continuing through 2037? And, 4 again, the black line is from Rocky Mountain Power's 5 own numbers.

6 Α. So my response would be that I have evaluated how PacifiCorp develops their natural gas 7 8 price forecasts, looking at the spot price for the 9 short-term part and then going to market price fundamentals for the longer term, and what we're 10 11 seeing there is that -- as I would understand it, is 12 that transition from the short-term where there is 13 expected to be a glut. Right now there is a glut of gas that is creating a flood in the short-term, but 14 that's not expected to last for a number of reasons 15 16 that I think Mr. Link put on the record when he was on the stand two days ago. 17

18 What I can tell you about their natural gas 19 price forecast is that, compared to the IEA and to 20 the other vendors, their natural gas price forecasts 21 are conservative, that their official forward price 22 curve is lower than the vendors whose base they blend 23 it with. It's lower than Vendor 1's base, and it's 24 lower than EIA's low;

25 That PacifiCorp's adopted low is the lowest

Page 315 of all the natural gas price forecasts in the -- and 1 2 I use the word "vintage" to describe the time period 3 in which the natural gas price forecast is derived, 4 because obviously as prices are trending downward, 5 gas price forecasts are going to be off and probably 6 too high. And if actual natural gas prices are 7 8 trending upward, then forecasts are probably going to 9 be too low and take some time to catch up, and so PacifiCorp's adopted low is the lowest of all the 10 11 natural gas price forecasts that were provided in the 12 case, and their adopted high is lower than the vendor 13 high from which is it is derived. It's lower than Vendor 1's high, and it's significantly lower than 14 15 the EIA high. 16 And so I actually find PacifiCorp's natural gas price forecast to be conservative in this case 17 because, if they wanted to benefit the combined 18 projects, they would be, I think, biased in the 19 20 opposite direction; and so what I found is they are 21 actually low compared to other vendors for their time 22 period so --23 0. I think -- if I can interrupt --24 Α. Okay. I think you've answered the question. 25 Q.

1	Page 316 A. Okay.
2	Q. So were you here when you heard the comment
3	made by one of the witnesses and I can't recall
4	which one unfortunately that the EIA forecast
5	lagged behind?
6	A. Yes, I did hear that.
7	Q. And were you here when you heard the
8	Division challenge Rocky Mountain Power's gas
9	forecast prices?
10	A. When I heard who challenge?
11	Q. I believe the Division in its testimony and
12	through its witnesses has challenged Rocky Mountain
13	Power's forecast prices.
14	A. The issue that they have pointed to isn't
15	that they are too high for their vintage compared to
16	other vendors. What they've challenged
17	Q. That wasn't my question.
18	A. No. What they've challenged is that they
19	say that natural gas prices have been trending
20	downward, and so if you look at the historical trend
21	and as you trend downward, then the forecasts are
22	probably going to be off and lagging behind, and so
23	they are probably going to be higher than where
24	things are moving.
25	So I think the real question is where is

Page 317 1 the -- where are fundamentals moving? When are we 2 going to hit the trough? Natural gas prices are pretty low right now. We're close to historic lows. 3 4 But have we been lower? 0. We have, I think, been lower for a short 5 Α. 6 time, yeah, but it doesn't last and --But we have been lower? 7 0. -- if I could draw -- yeah, if I could draw 8 Α. 9 your attention to -- I have a graphic that shows the 10 history. 11 And I think you've answered my question, so Q. 12 I'll let your counsel do that on a redirect. 13 Sounds good. Α. As we discussed this exhibit and we 14 0. 15 discussed that the Division has challenged Rocky Mountain Power's gas forecasts, among other things, 16 as being uncertainty, the Division would like to move 17 for the admission of DPU Cross-Exhibit 9. 18 19 CHAIR LEVAR: If any party objects to that 20 motion, please indicate to me. 21 MR. MICHEL: No objection. 2.2 CHAIR LEVAR: Okay. Motion is granted. (DPU Cross-Exhibit 9 was received.) 23 24 MS. SCHMID: Those are all my questions. 25 CHAIR LEVAR: Okay. Any redirect, Mr. Michel?

Page 318 MR. MICHEL: May I have one second with the 1 2 witness? 3 CHAIR LEVAR: Yes. 4 MR. MICHEL: Thank you, Mr.Chairman. WRA has no redirect. 5 6 CHAIR LEVAR: No re- -- okay. 7 Commissioner White, do you have any 8 questions for Ms. Kelly? Thank you. 9 COMMISSIONER WHITE: No questions. 10 CHAIR LEVAR: Mr. Clark. 11 COMMISSIONER CLARK: I just --12 CHAIR LEVAR: If you refer to that, we have to 13 close the hearing. 14 COMMISSIONER CLARK: Yeah, well, I think I can 15 do it without --16 CHAIR LEVAR: Sorry. I didn't mean to 17 interject --COMMISSIONER CLARK: That's all right. 18 I'm just 19 thinking they are both in the record, so let me just 20 ask this: Ms. Kelly, were you in the hearing room 21 when the PIRA document was distributed and examined? 2.2 NANCY KELLY: Yes. I was in the room. Т 23 haven't seen it myself. 24 COMMISSIONER CLARK: Okay. I just -- I wondered 25 whether you had noted -- it's a February 2017

	210
1	Page 319 document, but I wondered whether you had noted the
2	graph that's a scenario summary of U.S. natural gas
3	prices that includes forecast to 2035 a high, medium,
4	or low case and how those related to your testimony
5	about the conservative nature of the Company's
6	forecast and how those related to
7	DPU Cross-Exhibit 9.
8	A. If I understand correctly, subject to
9	check, that vendor is one of the vendors that
10	provides information to PacifiCorp.
11	COMMISSIONER CLARK: Okay. Thank you. That's
12	all I have.
13	CHAIR LEVAR: I don't have any questions,
14	Ms. Kelly, so thank you. I appreciate your testimony
15	today.
16	NANCY KELLY: Thank you.
17	CHAIR LEVAR: Mr. Michel, anything else from
18	Western Resource Advocates?
19	MR. MICHEL: No, Mr. Chairman, that concludes
20	our case.
21	CHAIR LEVAR: Okay. Thank you. Did we have
22	some information to give Commissioner Clark
23	MR. MOORE: Unfortunately, we don't have it at
24	hand right now. I will provide it tomorrow morning.
25	CHAIR LEVAR: Okay. I don't want to speak for
1	

1	Page 320 you, but I don't know if having it first thing is
2	that crucial for you or sometime during the day
3	tomorrow.
4	COMMISSIONER CLARK: Any time before we close
5	the hearing. I'm just curious.
6	MR. MOORE: Thank you, Commissioner.
7	CHAIR LEVAR: Any other matters before
8	Ms. McDowell, do you have an issue to address?
9	MS. MCDOWELL: It's just a question for those of
10	us who are going to spend our evening drafting our
11	closing arguments, I just wondered if you could give
12	us some insight as to whether you would expect to
13	have questions for us as we present our arguments or
14	whether we should expect to just plan the arguments
15	for the time allotted? And I don't know if you can
16	predict that, but if you can, it would be helpful for
17	me in terms of how I develop my argument.
18	CHAIR LEVAR: That's a good question. I
19	anticipate we would question. We hadn't contemplated
20	whether we would count questions against your time.
21	Typically some appellate courts try to work things so
22	they don't. And, again, I don't know how strict
23	we're going to need to be on time tomorrow, depending
24	on how things go in the morning.
25	Obviously, we want to be mindful of
1	

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1	Page 321 fairness and give everyone reasonably fair amounts of
2	time. Short answer is I think I would anticipate
3	questions from the three of us, but I think we will
4	attempt to not let those prejudice the times that
5	we've promised to each of you.
6	MS. MCDOWELL: I think we would all welcome your
7	questions and it's just helpful in planning our
8	arguments around that expectation. Thank you.
9	CHAIR LEVAR: Thank you.
10	Any other questions or issues before we
11	adjourn for the day or recess for the day? Okay.
12	We're in recess until 9:00 a.m. tomorrow morning.
13	Thank you.
14	(Whereupon Day 3 was concluded at 6:06 p.m.)
15	* * *
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1	Page 322 CERTIFICATE
2	STATE OF UTAH)
3) COUNTY OF SALT LAKE)
4	THIS IS TO CERTIFY that the foregoing hearing
5	was taken before me, Letitia L. Meredith, Registered
6	Professional Reporter and Notary Public for the State
7	of Utah and Certified Shorthand Reporter for the
8	State of California.
9	That the hearing was reported by me in
10	Stenotype, and thereafter transcribed by computer
11	under my supervision, and that a full, true, and
12	correct transcription is set forth in the foregoing
13	pages.
14	I further certify that I am not of kin or
15	otherwise associated with any of the parties to
16	said cause of action and that I am not interested in
17	the event thereof.
18	WITNESS MY HAND and official seal at
19	Spanish Fork, Utah, this 6th day of June 2018
20	utte ult
21	Letitia L. Meredith, CSR, RPR
22	
23	
24	
25	

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