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August 12, 2016

Via Electronic Filing

Public Utility Commission of Oregon
Attn: Filing Center
201 High St. SE, Suite 100
Salem OR 97301

Re: In the Matter of PACIFICORP, dba PACIFIC POWER
2017 Transition Adjustment Mechanism
Docket No. UE 307

Dear Filing Center:

Enclosed for filing in the above-captioned proceeding, please find the redacted version of the Rebuttal Testimony of Bradley G. Mullins on behalf of the Industrial Customers of Northwest Utilities ("ICNU").

The confidential portions of ICNU's testimony are being handled in accordance with the general protective order issued in this proceeding and will follow via Federal Express.

Thank you for your assistance. If you have any questions, please do not hesitate to call.

Sincerely,

/s/ Jesse O. Gorsuch
Jesse O. Gorsuch

Enclosures

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the confidential pages of the **Rebuttal Testimony of Bradley G. Mullins** upon the parties shown below by mailing copies via First Class U.S. Mail, postage prepaid, or by hand-delivery.

Dated at Portland, Oregon, this 12th day of August, 2016.

Sincerely,

/s/ Jesse O. Gorsuch
Jesse O. Gorsuch

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BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 307

In the Matter of	)
	)
PACIFICORP, dba PACIFIC POWER	)
COMPANY,	)
	)
2017 Transition Adjustment Mechanism.	)
	)
	)

CONFIDENTIAL REBUTTAL TESTIMONY OF BRADLEY G. MULLINS

ON BEHALF OF THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES

(REDACTED VERSION)

August 12, 2016

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Bradley G. Mullins, and my business address is 333 SW Taylor Street, Suite 400, Portland, Oregon 97204.

Q. ARE YOU THE SAME BRADLEY G. MULLINS THAT FILED OPENING TESTIMONY IN THIS PROCEEDING?

A. Yes. I previously filed Opening Testimony on behalf of the Industrial Customers of Northwest Utilities ("ICNU") concerning the 2017 Transition Adjustment Mechanism ("TAM") filing of PacifiCorp, d.b.a. Pacific Power (the "Company").

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I respond to the Rebuttal Testimony of Messrs. Brian Dickman, Bryce Dalley and Dana Ralston concerning the Day-Ahead and Real-Time ("DART") System Balancing adjustment, the unreasonableness of Bridger Coal Company Costs, and my proposal for a modeling change moratorium until the Company files its next general rate case.

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.

A. In general, the Company's Rebuttal Testimony fails to adequately respond to the issues presented in my Opening Testimony. With respect to the DART adjustment, for example, the Company presents several arguments for why day-ahead integration costs should be included in NPC,[1/] yet does not address the issue raised in my Opening Testimony – that the historical transactions used in the DART adjustment include transactions made to integrate load and wind on a day-ahead basis. Similarly, the Company presents a detailed history of the ratemaking surrounding Bridger Coal Company ("BCC") costs.[2/] Yet, the Company largely

1/ *See* PAC/400, Dickman/39:4-40:7.
2/ *See* PAC/600, Dalley/4:4-17:12.

avoids presenting evidence to indicate that BCC costs are reasonable, or will become reasonable in the future. Finally, the Company devotes a few sentences objecting to my proposal to extend the moratorium on modeling changes until the Company files its next general rate case, which, given the controversial nature of the current proceeding, would likely better serve to limit the issues in future TAM proceedings.

Q. ARE YOU MODIFYING ANY OF YOUR RECOMMENDATIONS IN RESPONSE TO THE COMPANY?

A. I have updated my recommended lower-of-cost-or-market adjustment for BCC to reflect regulatory amortization, which reduces the impact of that adjustment to $7.6 million on an Oregon-allocated basis. In addition, while I continue to support the application of lower-of-cost-or-market ratemaking for the BCC, I urge the Commission to take a close look at the ratemaking treatment associated with the mine. There is no dispute that the BCC mine is uneconomic and, as Staff agrees, there is also no expectation that the mine will become economic in the future.[3/] Thus, while my testimony does not necessarily propose any specific regulatory treatment, the Commission ought to begin thinking of the mine as a stranded investment and adopt policies, perhaps through regulatory accounting, to protect ratepayers against what will likely be an early closure of the mine.

II. DAY-AHEAD AND REAL-TIME SYSTEM BALANCING

Q. WHAT WAS YOUR PROPOSAL WITH RESPECT TO THE DART ADJUSTMENT?

A. In my Opening Testimony, I recommended that the Commission reject the Company's DART modeling. Alternatively, if the Commission determines to retain the DART modeling, I argued that it should be adjusted to better account for day-ahead integration costs. The historical

[3/] Staff/200, Kaufman/27:18-47:9.

transactions used in the DART adjustment include system balancing transactions made for the purpose of integrating load and wind on a day-ahead basis. Thus, if the Company's DART modeling continues to be used, a separate adjustment for day-ahead integration costs is no longer necessary.

Q. HOW DID THE COMPANY RESPOND?

A. Mr. Dickman initially references a typo in my Opening Testimony, where I mistakenly used the word "intra-hour" to describe the day-ahead integration costs in question, rather than using the word "inter-hour."[4/] I appreciate the Company's clarification of this issue. Next, Mr. Dickman suggests that I raised a similar issue in the 2016 TAM, arguing that the Commission has already rejected this argument.[5/] Finally, Mr. Dickman goes on to describe the day-ahead integration costs in question, and why he believes those costs, absent a modeling adjustment, are not reflected in the GRID model system balancing costs. As a general matter, Mr. Dickman criticizes me and the other parties for recommending that the Commission reject the DART modeling but without proposing a substitute.

Q. DOES THE COMPANY'S RESPONSE ADDRESS THE ISSUE YOU PRESENTED IN OPENING TESTIMONY WITH RESPECT TO THE DART ADJUSTMENT?

A. No. Notwithstanding the fundamental problems with the DART modeling, if it continues to be used, Mr. Dickman does not address the issue I raise with respect to double-counting of day-ahead integration costs. Mr. Dickman states that GRID continues to over-optimize the Company's natural gas plant commitments and, therefore, the forecasts used to establish these commitments do not account for the uncertainty between forecast and actual operations.[6/] The

4/ PAC/400, Dickman/38:12-17.
5/ *Id.* at 38:12-39:3.
6/ *Id.* at 39:16-22.

issue, however, is not a question of whether the *GRID model* accounts for day-ahead integration costs. For purposes of this issue, GRID-modeled costs are irrelevant. Rather, the issue is a question of whether the historical day-ahead and real-time transactions used in the *DART adjustment* reflect the system balancing cost associated with day-ahead integration. Thus, statements made by Mr. Dickman that "the Company's GRID forecast continues to over-optimize the natural gas plant commitment"[7/] are beside the point because the GRID modeled system balancing cost associated with these gas plants is no longer being used to inform the system balancing cost reflected in net power costs.

Q. PLEASE FURTHER DESCRIBE WHY A SEPARATE ADJUSTMENT FOR DAY-AHEAD INTEGRATION COSTS IS NO LONGER NECESSARY.

A. The reasoning behind this adjustment is less conceptual and more mechanical. The mechanics of the volumetric portion the DART adjustment functions by replacing the GRID-modeled system balancing costs with an amount based on historical averages. This final step in the DART adjustment serves as a plug that ties the system balancing costs included in net power costs to a specific $/MWh cost, rather than relying on the average $/MWh cost of system balancing transactions determined by the GRID model. The DART calculation performs this step in a rather complicated way, but the end result is that the $/MWh system balancing costs determined by the GRID model become irrelevant, as the GRID-modeled costs are replaced by the cost determined through the evaluation of historical transactions relative to the monthly market prices. Meanwhile, the Company has historically included day-ahead integration charges in NPC outside of the GRID-modeled system balancing costs. The Company describes its reasoning for historically including these costs outside of the GRID model in its

[7] *Id.* at 39:16-17.

rebuttal testimony.[8/] Notwithstanding, the system balancing costs associated with the day-ahead integration charges are not considered in the final step of the DART adjustment. That is, when the DART modeling calculates the ultimate $/MWh cost of system balancing outside of the GRID model, it does not make any adjustment to remove the transactions that were made for the purpose of day-ahead load and wind integration. Accordingly, it would be more consistent if the system balancing cost calculated pursuant to the DART modeling were to replace both GRID model system balancing cost and the day-ahead, system balancing integration cost.

Q. DID YOU RAISE THIS ISSUE IN THE 2016 TAM?

A. No. Mr. Dickman cites to my testimony in the 2016 TAM, UE 296, suggesting that I raised this issue in that proceeding.[9/] The cited testimony, however, contains no reference to this issue. While I did make a tangential reference to a day-ahead system balancing charge in my direct testimony,[10/] and ICNU also briefly discussed this issue in briefing,[11/] the Commission did not address this issue in its order in the 2016 TAM.

Q. DO YOU AGREE WITH HOW THE COMPANY CHARACTERIZES OTHER ASPECTS OF YOUR TESTIMONY ON THE DART MODELING ADJUSTMENT?

A. No. The Company grossly mischaracterizes my objections to the modeling adjustment. For example, the Company makes statements, citing to my UE 296 testimony, indicating that I agree that "the Company incurs costs to balance its system in real time and … that these real costs are not accounted for in the GRID model."[12/] Nowhere in that testimony, however, did I

8/ *Id.* at 39:4-40-7.
9/ *Id*. at 38:13-15.
10/ Docket No. UE 296, ICNU/100, Mullins/9:22-10:2.
11/ Docket No. UE 296, ICNU Response Brief at 15-16.
12/ PAC/400 at Dickman/19:3-5.

make such a sweeping statement. As discussed in my Opening Testimony, I continue to disagree that the DART modeling represents costs not otherwise accounted for in the GRID model.

Similarly, Mr. Dickman makes statements, such as, "ICNU implies that the adjustment is a bid-ask spread and that modeling market spreads does not address the underlying problem the Company claims to be solving."[13/] Nowhere in my testimony did I imply that the Company was intending to model a "bid-ask spread." By using the words "market spread" I was simply trying to describe the aspect of the Company's modeling where it models a higher price for purchases than for sales. Rather than responding to the argument – that the Company's modeling does not actually address the problem of within-month price variability – however, the Company again resorts to mischaracterization to try to confuse the issue.

In addition, in my Opening Testimony, I noted that the system balancing volumes incorporated in NPC outside of the GRID model are largely irrelevant and have no impact on the model results. Those volumes could be calculated under the Company's methodology to be any value, and the underlying net power costs would not change. The Company's response to this concern was that it was addressed in the 2016 TAM. However, this problem with the Company's analysis was not addressed in the Commission's order in the 2016 TAM, so it could not have been resolved in that proceeding.[14/]

Q. PLEASE SUMMARIZE YOUR RESPONSE REGARDING THE DAY-AHEAD INTEGRATION COSTS IN THE DART ADJUSTMENT.

A. In general, the Company fails to respond to the issues at hand with respect to the DART modeling adjustment. While I continue to believe that the DART modeling does not accurately

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13/ *Id.* at 37:11-15.

14/ Docket No. UE 296, Order No. 15-394 at 4.

address the issues the Company is allegedly trying to resolve, a position shared by Staff in this docket,[15] the discrete issue I raise in this proceeding is that the DART adjustment already includes system balancing transactions made for the purpose of integrating load and wind on a day-ahead basis. Thus, a separate adjustment for day-ahead integration outside of the GRID model is no longer necessary. The Company's attempt to confuse the issue is telling and speaks to the fact that it lacks substantive argument to rebut the issue presented in my Opening Testimony.

III. BRIDGER COAL COMPANY COSTS

Q. WHAT WAS YOUR CONCERN WITH THE COST OF COAL FROM THE BRIDGER COAL COMPANY?

A. I demonstrated that the market cost of coal from the Powder River Basin is substantially less than the cost of coal from BCC. Accordingly, I recommended an $11.6 million, Oregon-allocated adjustment based upon the application of lower-of-cost-or-market ratemaking to the fuel provided by the BCC mine. Based on the data presented in Confidential Table 1R, below, I am now proposing a $7.6 million, Oregon-allocated, adjustment to the Company's filing to reflect my lower-of-cost-or-market proposal. Confidential Table 1R reflects the impacts of regulatory amortization as well as other proposed changes identified by Mr. Ralston.

Q. WHAT WAS THE COMPANY'S RESPONSE TO YOUR RECOMMENDATION?

A. The Company's witness, Mr. Dalley, criticizes my adjustment based on the Company's position on how the Commission historically has treated BCC for regulatory purposes, and by arguing that a comparison with Powder River Basin coal is inappropriate because it is not an

[15] Staff/200, Kaufman/12:20-13:17.

"available" fuel source for the Jim Bridger plant under the Commission's lower-of-cost-or-market rules.

Company witness Mr. Ralston also criticizes certain of my assumptions I used in developing my adjustment.[16] There is no dispute, however, that the BCC mine is not competitive with the market.[17] [redacted][18] While the Company suggests that it could not have known that the BCC mine would become so uncompetitive with the market, Mr. Dalley acknowledges that parties have recommended that the Commission impose a lower-of-cost-or-market standard on BCC at least since the 2010 TAM.[19] [redacted][20] [redacted]

Q. DO YOU AGREE WITH THE NUMBERS PRESENTED BY MR. RALSTON IN CONFIDENTIAL FIGURE 4?

A. Generally, yes. However, I would note that there may be some questions about how to present the data, as well as the amount of time to amortize any potential regulatory asset associated with the mine closure, assuming one were to be approved. Confidential Table 1R, below,

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16 PAC/500, Ralston/32:4-16.

17/ *See id.* at 26, Confidential Figure 4.

18/ *Id.* ([redacted])

19 PAC/600, Dalley/11:4-12:17.

20/ PAC/500, Ralson/10:19-11:14.

represents the data in Mr. Ralston's figure, including a few minor changes to Mr. Ralson's assumptions.

CONFIDENTIAL TABLE 1R
Updated BCC Market Comparison

[redacted]

Q. WHAT CHANGES DID YOU MAKE TO MR. RALSTON'S CALCULATIONS?

A. In addition to presenting the figure based solely on the portion of Jim Bridger fuel supply from the BCC, I made two changes to the market cost of Powder River Basin coal, which was detailed in Mr. Ralston's figure under the column "Mullins / Kaufman Corrected." First, I adjusted the regulatory asset amortization to reflect an amortization period of 13 years. This is in contrast to Mr. Ralston's calculation that amortized the regulatory asset over a four-year period. A 13-year amortization would better align the regulatory asset amortization with the existing life of the mine used for ratemaking purposes in Oregon, extending the amortization through 2029. Second, I adjusted the carrying charge on the regulatory asset to be 3.31%, which was the carrying charge approved for the Deer Creek Mine unrecovered investment based on a blended rate using the Company's currently authorized cost of debt and Treasury bond yields.[21/] While I do not necessarily agree that a regulatory asset of the above nature should be approved, Confidential Table 1R shows that, even if a regulatory asset is approved, ratepayers are still better off if the Company were to acquire coal from the market.

Q. WHAT IMPACTS DO THESE CHANGES HAVE ON THE CALCULATION?

A. As noted above, if these changes are applied, it will reduce the lower-of-cost-or-market calculation to approximately $7.6 million. This value represents my updated recommendation with respect to lower-of-cost-or-market ratemaking.

Q. DO YOU AGREE WITH MR. DALLEY THAT LOWER-OF-COST-OR-MARKET RATEMAKING WOULD BE INAPPROPRIATE, GIVEN THE REGULATORY HISTORY SURROUNDING BCC?

A. No. While the Company has argued in the past that the Commission's lower-of-cost-or-market rule requires that Jim Bridger be actually capable of receiving the market alternative, its suggestion that the Commission has agreed with this argument is misleading. When ICNU raised this issue in the 2014 TAM, it compared BCC costs with costs from the Black Butte mine. My reading of the Commission's order rejecting ICNU's adjustment is that the Commission did not find that ICNU had persuasively determined the market rate to substitute for BCC coal, noting that PacifiCorp had shown that the price for additional coal from Black

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[21/] Docket No. UM 1712, Order No. 15-161 at 7 (May 27, 2015).

Butte would exceed BCC prices.[22/] Here, however, Confidential Table 1R above demonstrates that Powder River Basin coal is cheaper than BCC coal, even factoring in capital improvements and undepreciated investment in the mine.

My understanding of the purpose behind lower-of-cost-or-market ratemaking is to ensure customers are not subsidizing affiliated utility operations. Application of that standard would further this purpose here. Because the Company earns a return on the mine in rate base, it means that the Company has an incentive to keep the mine operating even if it is not in the best interest of ratepayers. As the mine nears depletion, it is very important that the right steps are taken to ensure that ratepayers are not harmed through the Company's action, or inaction, with respect to the mine. In my opinion, application of the lower-of-cost-or-market ratemaking detailed in Confidential Table 1R above, which includes a provision that provides the Company with a *return of* its investment, will better serve to align the Company's interest with that of ratepayers. Absent such treatment, the Company can simply "drag its feet" and continue to earn substantial returns, even though it may be in ratepayers' best interest to take quick and decisive action with respect to the facility.

Q. STAFF RECOMMENDS A PRUDENCE DISALLOWANCE FOR THE COSTS OF BCC. HOW DO YOU RESPOND?

A. If the Commission does not accept my lower-of-cost-or-market adjustment, then I believe Staff witness Mr. Kaufman has made a compelling case for a prudence disallowance. As Mr. Kaufman notes, PacifiCorp has not prudently evaluated market alternatives to BCC coal,[23/] despite being repeatedly challenged on this issue at least since the 2010 TAM.[24/] The

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[22/] Docket No. UE 264, Order No. 13-387 at 7 (Oct. 28, 2013).

[23/] Staff/200, Kaufman/57:11-67:15.

[24/] PAC/600, Dalley/11:4-12:17.

Company's decision to continue to rely on BCC to supply Jim Bridger has not been in the best interest of customers, and will cost customers substantially in 2017 and, likely, beyond. As an alternative to lower-of-cost-or-market ratemaking, ICNU supports Staff's proposal for a prudence disallowance associated with BCC.

Q. ARE THERE OTHER ACTIONS THAT THE COMMISSION COULD TAKE TO PROTECT RATEPAYERS AGAINST THE IMPACTS OF THE UNCOMPETITIVE MINE?

A. Firstly, I appreciate that the Company will be taking a close look at the future operation of the mine. Notwithstanding, the mine is not economic and there is no expectation that the mine will become economic in the future. Thus, if the lower-of-cost-or-market ratemaking discussed above, or Staff's proposed prudence disallowance, are not approved, I recommend that Oregon begin treating the BCC mine as a stranded investment and adopt regulatory policies that will protect ratepayers against unnecessary costs associated with the early closure of the mine. One such policy may be to immediately remove the mine assets from rate base and to transfer those assets to an unrecovered investment account. If the only reason that it makes sense to continue to operate the mine is the avoidance of the regulatory amortization that will provide the Company with a *return of* its unrecovered investment that Mr. Dalley cites in testimony,[25/] then the Commission ought to think hard about whether it makes sense for the Company to continue to earn a full *return on* its investment.

[25/] *Id.* at 19:1-17.

IV. MORATORIUM ON MODELING CHANGES

Q. WHAT WAS YOUR RECOMMENDATION RELATED TO FUTURE MODELING ADJUSTMENTS?

A. In Order No. 15-353, the Commission imposed “a one-year moratorium on PacifiCorp changing the GRID model to allow parties adequate time to understand, review, and evaluate recent changes to the model.”[26/] I recommended that the Commission extend this moratorium until the Company files its next general rate case. I noted that the sort of major modeling changes that were approved in the 2016 TAM would be better reviewed in a holistic rate review, rather than an annual power cost filing.

Q. HOW DID THE COMPANY RESPOND?

A. The Company suggests that such a recommendation is unreasonable, stating,“[t]he rapidly changing circumstances in the energy industry and the power markets require modeling flexibility to ensure the forecast accuracy.”[27/]

Q. DO YOU AGREE?

A. No. While I agree that the rapidity of change in the energy industry is great, I don’t agree that the rapidity of change is a reason not to extend the modeling moratorium until the next general rate case. To the extent that any future transformative changes occur in western energy markets, such changes will likely require the Company to file a general rate case. For example, the next major change in western energy markets may be related to regionalization of the California Independent System Operator. If such a change were to occur, however, the impacts would be so substantial as to necessitate a rate case, at which point the Company could propose

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26/ Docket UE 296, Order 15-353 at 2.
27/ PAC/400, Dickman/17:10-11.

new potential modeling. Thus, I disagree that waiting until the next rate case will limit the Company's ability to respond to changing circumstances in the energy industry.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.