BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION  DOCKET UE-210402

Complainant,

v.

PACIFICORP d/b/a PACIFIC POWER & LIGHT COMPANY,

Respondent.

OPPOSITION TESTIMONY OF
BRADLEY G. MULLINS
ON BEHALF OF THE
ALLIANCE OF WESTERN ENERGY CONSUMERS
REDACTED VERSION

November 22, 2021
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EXHIBIT LIST

Exhibit BGM-2: Regulatory Appearances of Bradley G. Mullins

Confidential Exhibit BGM-3C: PacifiCorp Washington Hedging Position

Exhibit BGM-4: Bridger Expected Fly Ash Sales Revenues
I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
A. My name is Bradley G. Mullins, and my business address is Vihiluoto 15, Kempele, Finland FI-90410.

Q. PLEASE STATE YOUR OCCUPATION AND ON WHOSE BEHALF YOU ARE TESTIFYING.
A. I am an independent energy and utilities consultant representing large energy consumers before state regulatory commissions, primarily in the Western United States. I am appearing in this matter on behalf of the Alliance of Western Energy Consumers (“AWEC”). AWEC is a non-profit trade association whose members are energy consumers located throughout the Pacific Northwest, including electric and natural gas customers of PacifiCorp in Washington State.

Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE.
A. I have a Master of Accounting degree from the University of Utah. After obtaining my master’s degree, I worked at Deloitte in San Jose, California, where I specialized in performing research and developing tax credit studies. I later worked at PacifiCorp as an analyst involved in power cost forecasting. I currently provide services to utility customers on matters such as revenue requirement, power cost forecasting, and rate spread and design. I have sponsored testimony in several regulatory jurisdictions around the United States, including before the Washington Utilities and Transportation Commission (“Commission”). A list of cases where I have submitted testimony can be found in Mullins, Exh. BGM-2.
Q. WHAT IS THE PURPOSE OF YOUR RESPONSE TESTIMONY?

A. I discuss AWEC’s opposition to the Multi-Party Stipulation filed in this docket on November 5, 2021.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. AWEC does not support the Multi-Party Stipulation. Principally, the Multi-Party Stipulation results in unknown but potentially substantial rate increases to customers and fails to provide customers with any rate certainty. PacifiCorp has estimated that the April 2022 update proposed after the Commission adjudication of this matter may produce upwards of an additional $43 million rate increase to Washington customers. While AWEC appreciates the parties’ efforts towards reaching a settlement, the dramatic uncertainty with respect to the settled outcome is not a reasonable compromise, particularly considering the magnitude of the rate increase that PacifiCorp requested less than six months ago on June 1, 2021. In addition, the Multi-Party Stipulation relies on an entirely new modeling methodology with many problematic assumptions, which I discuss below.

Q. WHAT ARE YOUR PRINCIPAL RECOMMENDATIONS AND CONCLUSIONS WITH RESPECT TO THE MULTI-PARTY STIPULATION?

A. Specifically, I recommend the Commission:

- Reject the proposed April 2022 NPC update;
- Incorporate the benefits of nodal pricing dispatch;
- Incorporate increased fly ash revenues from the Jim Bridger power plant into base rates as an offset to NPC; and,
- Require PacifiCorp to allocate non-firm wheeling transactions based on the System Energy (SE) factor, consistent with the 2020 Protocol.

\[\text{Exh. JT-1CT at 11}\]
II. BACKGROUND

Q. PLEASE PROVIDE SOME BACKGROUND ON THE PCORC FILING.

A. The PCORC was an outcome of PacifiCorp’s 2020 General Rate Case (“GRC”) Docket No. UE-191024. Paragraph 20 of the settlement in that case stated “that revenue requirement in this Settlement Stipulation includes a NPC baseline of approximately $102 million.” Further, Paragraph 17, provided “the NPC baseline will be updated based on a nodal dispatch through a PCORC filed in 2021.” Following the stipulation, however, PacifiCorp performed an update to NPC, where it proposed to increase the forecast NPC to $119.5 million, a projected $17.5 million increase to the amount originally contemplated by the Parties to the 2020 GRC settlement. Given the unexpected impacts of the NPC update, and to preserve the rate reduction that parties had agreed to in the 2020 GRC settlement, the $17.5 million increase was applied as an offset to the Power Cost Adjustment Mechanism (after applying company sharing amounts) through the Deferred NPC Baseline Adjustment (“DNBA”). Thus, the current effective NPC baseline, including the DNBA, is $119.5 million. The Commission, however, admonished the parties with respect to the NPC update and the DNBA, stating “we have concerns about the Parties’ agreement to add this unwieldy additional calculation into the PCAM because it fails to afford the transparency to customers that we expect of a properly functioning PCAM and of regulatory ratesetting.”

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3/ Id. ¶ 76.
Q. WHAT LEVEL OF NPC DID PACIFICORP PROPOSE IN ITS JUNE 1, 2021 FILING IN THIS DOCKET?

A. PacifiCorp’s filing in this docket proposed a baseline NPC of $114,802,054, representing an approximate $13.1 million increase to the NPC baseline currently included in rates, but a $7.4 million decrease from the total NPC in rates after considering the DNBA amounts in the PCAM.

Q. WHAT NPC BASELINE IS PROPOSED IN THE MULTI-PARTY SETTLEMENT IN THIS DOCKET?

A. As I discuss below, it is not entirely clear. The Multi-Party Stipulation provides a single adjustment—for a production factor—in the amount of $646,336, resulting in a potential NPC baseline of $114,155,718.\(^4\) Notwithstanding, the Multi-Party Stipulation also contains a requirement for an April 2022 NPC update, which PacifiCorp estimates will potentially increase the NPC baseline to $157,000,000,\(^5\) representing a 31% increase to the NPC established in Docket No. UE-191024, including the DNBA. Thus, significant uncertainty exists with respect to the NPC baseline that is being proposed in the Multi-Party Stipulation. In addition to the NPC production factor adjustment, PacifiCorp agreed not to correct an alleged error in its initial filing related to the nodal pricing model.

Q. WHAT OTHER TERMS ARE INCLUDED IN THE MULTI-PARTY STIPULATION?

A. PacifiCorp also agreed to begin passing back the savings of the production tax credit rate increase to 2.6 cents/kWh expected in 2022, although that savings would otherwise pass through the 2023 PCAM filing.

\(^4\) Exh. JT-1CT at 6.
\(^5\) Id. at 11:17-18.
III. POWER COST UPDATE

Q. WHAT DOES THE STIPULATION REQUIRE WITH RESPECT TO A POWER COST UPDATE?

A. Under Section II Paragraph (A)(4) PacifiCorp would be required to update NPC in a “compliance filing after the Commission issues an Order on this settlement.”\textsuperscript{6} The update would incorporate the latest official forward price curve (“OFPC”), expected to be the March 2022 OFPC. The update would also incorporate PacifiCorp’s latest hedging and contract positions.\textsuperscript{2}

Q. DOES AWEC SUPPORT THIS UPDATE?

A. No. The update provision in the Multi-Party Stipulation is too broad and occurs too late. As was seen in Docket No. UE-191024, this sort of late update undermines the rate certainty and reasonableness of any agreement that is reached in such a stipulation. Ratepayers receive no certainty regarding the rates that they are agreeing to. Absent certainty about what the ultimate rate impacts would be, AWEC was not willing to accept such a term and recommends the Commission not either. AWEC recommends that the NPC baseline be based on the NPC included in PacifiCorp’s filing of $114,802,054, subject to the adjustments in the stipulation and further adjustments discussed below.

Q. IS THE UPDATE CONTEMPLATED BY THE MULTI-PARTY SETTLEMENT CONSISTENT WITH COMMISSION PRECEDENT?

A. No. In its portion of the Joint Testimony, Staff provides block quotes from two Commission orders regarding NPC updates.\textsuperscript{8} First, Staff provided a quote from Order 08 in the 2006 GRC of Puget Sound Energy (“PSE”), Docket No. UE-060266, where the

\textsuperscript{6} Multi-Party Settlement ¶ 12.
\textsuperscript{2} \textit{Id.}
\textsuperscript{8} Exh. JT-1CT at 15:2-23.
Commission agreed with parties’ recommendation to update natural gas prices in the AURORA model. Second, Staff identified a quote from Order 07 on a Motion to Strike in PacifiCorp’s 2014 GRC, Docket No. UE-140762, which did not strike a portion of Rebuttal Testimony in which PacifiCorp had performed a material update to coal costs. The issues in those dockets, however, are distinct and not relevant to the update at issue in this docket, and therefore, do not establish a precedent for the type of update contemplated in the Multi-Party Stipulation.

Q. **HOW IS THE UPDATE PROVISION OF THE MULTI-PARTY STIPULATION DISTINCT FROM THE UPDATE AT ISSUE IN PSE’S 2006 GRC**

A. In Puget Sound Energy’s 2006 GRC, gas prices had declined by approximately $0.48/MMBtu by the time parties filed Reply Testimony and the Commission accepted parties’ recommendation to re-run AURORA with updated gas prices, stating “[t]he method for calculating such costs is now well-established.”\(^9\) The Commission continued, stating “[t]he update should be a straightforward, mechanical and non-controversial process.”\(^10\) Further, while PSE had requested to update all aspects of power costs in the update, the Commission declined PSE’s request, stating that “[a]s to the other costs PSE proposes be updated, costs it does not identify except by reference to brief redirect examination of Company witness David Mills, there simply is no record to support any such update even were we otherwise inclined to authorize it.”\(^11\) In contrast, the update proposed in the Multi-Party Stipulation is distinct from the update required in PSE’s 2006 GRC for several reasons.

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\(^10\) **Id.** ¶ 104

\(^11\) **Id.** ¶ 105.
First, the closed-system modeling methodology that PacifiCorp uses is not the same out-of-the-box AURORA modeling methodology that PSE uses. The NPC calculations of PacifiCorp rely on both forward gas and electric prices (not just gas prices) from numerous market points, which produce rate impacts that are unpredictable. Thus, the modeling approach PacifiCorp uses is inherently more complicated and not well-established enough to be modified through a compliance filing. It is by no means straightforward, nor mechanical.

Second, in PSE’s 2006 GRC, the impacts of the market price update were relatively known: it was known that the update would produce a slight reduction to NPC based on the record in that proceeding. In this case, however, PacifiCorp acknowledges that the price impacts of the update are unknown and that the impacts are highly volatile. Unlike the forward prices updated in the PSE 2006 GRC, the March 2022 OFPC that Settling Parties propose be used in the update in this case has not yet been issued.

Third, to accommodate the timing of the update, PacifiCorp proposes dramatic changes to the modeling methodology submitted in its initial filing by using a hybrid of actual and forecast data, discussed further below. This will undoubtedly raise modeling controversy that was not present in the 2006 GRC of PSE.

Fourth, in the PSE case, the Commission found “it appropriate for PSE to rerun AURORA with updated gas costs, [but did] not find support in the record for updating

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Exh. JT-1CT at 12:15-13:3.
Id. at 11:6-12.
other costs.”14/ In this Docket the Settling Parties propose to update all contracts, including settled Short-Term Firm transactions and other aspects of NPC. Thus, the scope of the update proposed in the Multi-Party Stipulation is also broader than the update approved in the PSE 2006 GRC.

Given these distinctions, the 2006 GRC of PSE cannot be considered valid precedent for the update contemplated by the Multi-Party Stipulation.

Q. HOW IS THE UPDATE PROVISION OF THE MULTI-PARTY STIPULATION DISTINCT FROM THE UPDATE AT ISSUE IN PACIFICORP’S 2014 GRC?

A. Similarly, the update at issue in the 2014 GRC is distinct from the update contemplated in this docket. In the 2014 GRC, the issue was whether an update to coal costs was permissible in Rebuttal Testimony.15/ The update contemplated by the Multi-Party Settlement is distinct because it will involve all prices and contracts and will include controversial new modeling assumptions. It is also distinct because it will occur at the compliance stage, with no opportunity for review. Staff did not mention that the Commission specifically conditioned its Order 07 in PacifiCorp’s 2014 GRC on “affording the parties opportunities for discovery and the preparation of supplemental testimony.”16/ During the contemplated two-week review period in the Multi-Party Settlement, no such opportunity for discovery, supplemental testimony, nor hearing will be available.

Further, the block quote from PacifiCorp’s 2014 GRC identifies updates that have occurred in the compliance stage. As discussed above with respect to the PSE 2006

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14/ Docket Nos. UE-060266 (Cons.), Order 08 ¶ 105.
16/ Id. ¶ 5.
GRC, however, such updates were noncontroversial and were for known rate impacts, excluding new contracts and other cost items.

Q. WERE EITHER OF THE CASES STAFF CITED A PROCEEDING SPECIFICALLY INITIATED TO UPDATE NPC?
A. No. The PCORC was intended specifically as an update to NPC based on PacifiCorp’s migration to nodal dispatch. Since it was unknown what impact this change would have on NPC, the parties, including AWEC, agreed to a PCORC to ensure that the benefits of nodal pricing were captured in the baseline. PacifiCorp’s initial filing establishes that baseline using AURORA (instead of GRID) and captures the impacts of nodal dispatch (though as discussed below, it does not do so completely). Thus, an update is outside of the scope of this proceeding. Additionally, PacifiCorp is in the middle of a rate stay-out. Under the rate case settlement, it cannot file a new rate case (or otherwise update its power costs) until 2023, for rates effective in 2024. This means that power costs set in this PCORC will be in effect for a minimum of nearly two years. Given the dynamic nature of power costs, there is no reason to believe that an update performed at any period during the pendency of this case will be any more or less accurate than the NPC baseline PacifiCorp identified in its initial filing over the entire period that this baseline will be in effect.

Q. DID PACIFICORP PROPOSE AN UPDATE IN ITS INITIAL FILING?
A. No. Neither PacifiCorp’s Direct Testimony, nor its application, mentions or requests an NPC update in this proceeding. An NPC update also was not incorporated into the procedural schedule in Order 03 issued in this docket, nor was there any mention of the

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The footnote to the right is: Docket UE-191024, Stipulation ¶ 11.
possibility of an update occurring nearly three months following the hearing in this

docket.

Q. IS AN UPDATE APPROPRIATE, GIVEN THAT IT WAS NOT IDENTIFIED AT
THE ONSET OF THIS CASE?

A. No. To the extent that an NPC update, such as the one contemplated in the Multi-Party
Settlement, is to occur, it is important from AWEC’s perspective that it be identified at
the time of setting the procedure for a docket. Otherwise, parties may be faced with the
difficult situation of responding to a rate proposal with the expectation of a particular
proposed rate increase, only to be subject to a dramatically different rate proposal
resulting from the unexpected update. In the context of this case, PacifiCorp proposed a
3.73% overall rate increase, yet now in the Multi-Party Stipulation, PacifiCorp states
that ratepayers may be faced with a rate increase of 15.42%, over four-times the
original rate request, and a level that could result in rate shock. From a ratepayer
perspective, a 15.42% rate request is an entirely different case than the one they were
confronted with when PacifiCorp made its initial filing in June, and at the time the
procedure was set for this docket.

Q. IS A COMPLIANCE FILING ADEQUATE PROCEDURE FOR THE UPDATE
PROPOSED IN THE MULTI-PARTY STIPULATION?

A. No. Given the potential issues at stake in such an update, which are discussed below, a
compliance filing is by no means an adequate procedure to adjudicate a 15.42% rate
increase to customers. In the two-week review period contemplated by the Settling

Parties, there will be little time to get access to the new modeling, let alone conduct

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18/ Meredith, Exh. RMM-2.
19/ Exh. JT-1CT at 11:20.
substantive discovery and review. Further, there is no process established for contesting
issues that are likely to arise in the compliance filing. Unlike the PSE 2006 GRC, the
updates at issue will be controversial, involving many new costs and not limited to
incorporating a known change to forward gas prices. If any update is to be performed in
a case, there needs to be sufficient procedure to review and evaluate the filing, consisting
of several rounds of discovery; the potential for responsive testimony or comments from
intervenors; and, the opportunity for hearing—similar to the procedure adopted to review
the NPC update that was contemplated in this docket.

Q. CAN THE RATES IN THE MULTI-PARTY STIPULATION BE CONSIDERED
JUST AND REASONABLE IN LIGHT OF THE UPDATE PROVISION?

A. No. Given the uncertainty surrounding the rates that it would otherwise be approving, the
Commission will have no ability to evaluate whether the rates resulting from the Multi-
Party Stipulation are just and reasonable. If the Multi-Party Stipulation is approved, the
Commission will not know the rates it has actually authorized until April 2022 when
PacifiCorp makes its compliance filing, well after it issues its Final Order. Unlike the
PSE 2006 GRC, the impact of the OFPC update in this case is unknown and the update
will also include new contracts and other cost items, the impact of which is also
unknown.

It is true that a complex mathematical formula is used to forecast NPC.

Notwithstanding, it is the responsibility of the Commission to evaluate whether the rates,
themselves, are just and reasonable, not the underlying mathematical formula. In the
context of Hope, it is “the result reached and not the method employed” which is
controlling in determining “just and reasonable.”\(^{20}\) Thus, if the Commission does not know the result reached, it cannot determine whether the rates are just and reasonable.

Q. WHAT COST ITEMS WILL BE INCLUDED IN THE UPDATE?

A. That is not entirely clear. In addition to the March 2022 OFPC, the Multi-Party Stipulation states that the update will include the “latest electric and gas hedging and contract positions at the time.” PacifiCorp states that this may include 1) wholesale electric sale and purchase contracts that are for long-term firm sales and purchases; 2) short-term firm sales and purchases; and 3) natural gas sales and purchase contracts.\(^{21}\)

Q. DOES AWEC SUPPORT UPDATING THESE ITEMS?

A. No. Consistent with the precedent in the PSE 2006 GRC, new contracts and other cost items are not appropriate to be considered in a compliance filing.

Q. WAS THE LIST PROVIDED BY PACIFICORP AN EXHAUSTIVE LIST OF UPDATE ITEMS?

A. PacifiCorp seems to imply that this list is exhaustive, although that is not entirely clear. If the list PacifiCorp provided is not exhaustive, the term “contract positions” is so broad that it could be interpreted to include any cost item included in NPC, as every such cost results from some sort of contract. For example, PacifiCorp might request to update its coal costs for Jim Bridger or Colstrip, which are the byproduct of a “contract position.” Further, it is possible PacifiCorp may request other corrections and updates to other cost items, such as wheeling, as those items may relate to a contract position. Such updates, however, have the potential to be one-sided, as PacifiCorp is given extra time to identify modeling updates that will increase NPC, while potentially ignoring updates or


\(^{21}\) Exh. JT-1CT at 11:1-5.
corrections that will reduce NPC. Intervenors would not have the same right to propose
adjustments and corrections that reduce net power costs, nor would intervenors have any
venue to review and propose such changes.

Q. **DID PACIFICORP PROPOSE TO UPDATE EIM BENEFITS IN CONNECTION**
   **WITH THE UPDATED OFPC?**

A. It is not clear. An update to Energy Imbalance Market ("EIM") benefits calculation for
the OFPC was not specifically identified by the Settling Parties. In Oregon, however,
updating the EIM benefits calculation to more a more recent OFPC resulted in a
$63,856,616 reduction to total-Company NPC. Absent updating the EIM benefits
calculation, the Settling Parties’ proposal has the potential to be one-sided because it
would consider the increased costs associated with the OFPC update, but not the
offsetting benefits associated with the impact of changing market prices on forecast EIM
benefit levels. Accordingly, any update to forward prices must also consider the impacts
of the updated prices on EIM benefits, which tend to increase as market prices increase.

Q. **CAN THE COMMISSION EVALUATE WHETHER THE NEW CONTRACTS**
   **PROPOSED IN THE UPDATE ARE PRUDENT?**

A. No. Those contracts will not be identified until the April 2022 compliance filing, after
the Final Order in this case. As contemplated by the Settling Parties, the compliance
filing process will last only two weeks, so there would be virtually no opportunity to
review such items. Under RCW 80.04.150, rates in Washington must be subject to
“complaint and inquiry.” If the final rates at issue are not presented until the utility
makes its compliance filing, no such complaint or inquiry could possibly occur. Further,

\[22\] In re PacifiCorp, dba Pacific Power, 2022 Transition Adjustment Mechanism, Or.PUC Docket No. UE 390,
Net Power Cost Indicative Update for 2022, Exhibit A (Nov. 8, 2021).

\[23\] Exh. JT-1CT at 10:8-9.
under RCW 80.04.130, the Commission can only approve a rate increase “upon a hearing
concerning such proposed change and the reasonableness and justness thereof.” No such
opportunity for hearing would exist with respect to the potential increase proposed in the
update provision.

Q. ARE THERE REASONS TO QUESTION THE PRUDENCE OF THE IMPACT
OF THE PROPOSED NPC UPDATE?

A. Yes. Considering the volatile market conditions that PacifiCorp identified in Settlement
Testimony and the potential for large impacts to NPC in connection with the OFPC
update, it is evident that, from Washington’s perspective, PacifiCorp’s hedging policies
and practices are not prudent. In Exh. BGM-3C, I present an analysis of the hedges that
were included in NPC in PacifiCorp’s initial filing in this matter. As can be seen,
Washington NPC is only _____, or _____ percent, hedged. There is no need for
any extensive discussion to establish that this is unreasonable and imprudent. One
expects PacifiCorp to manage its price risk exposure through hedging such that it will not
incur significant unexpected losses as a result of volatile market prices, such as those that
have occurred in recent months. While Washington has a unique jurisdictional allocation
methodology, PacifiCorp is still required to manage risk in a prudent manner for
Washington customers and it has failed to do so.

Q. PLEASE PROVIDE AN OVERVIEW OF EXHIBIT BGM-3C.

A. Exh. BGM-3C details the net position and the hedging contracts allocated to Washington
in connection with the WIJAM based on PacifiCorp’s initial filing. The amounts are
detailed for both net power purchases and natural gas purchases.
With respect to power purchases, approximately MWh of net purchases are included in Washington-allocated NPC. In contrast, only MWh of those purchases have been hedged with fixed price hedging contracts. Thus, only % of Washington-allocated purchases are hedged in PacifiCorp’s NPC study. In fact, in the months of January through March 2022, Washington’s net purchase hedging position is , indicating that ratepayers are .

With respect to gas purchases, a similar degree of hedging can be observed. The NPC study forecasts that Chehalis and Hermiston will consume MMBtu of natural gas on a Washington-allocated basis in 2022. Notwithstanding, only of those consumption volumes had been hedged through the purchase of natural gas swaps. In fact, the gas hedging for Washington’s benefit was limited to just .

If a weighting is applied based on the cost of market purchases and natural gas purchases included in Washington-allocated NPC, the resultant hedging percentage is %. Considering recent market volatility, that is not prudent hedging practice.

Q. WOULD AN UPDATE BE NECESSARY IF PACIFICORP HAD HEDGED?

A. No. If PacifiCorp were hedged from a Washington perspective, the recent change in market prices would not have resulted in such a significant change to NPC. Therefore, the need to perform any update would have been diminished. This is another reason why an update is not equitable, as any potential increase to NPC is the result of imprudent hedging practices from Washington’s perspective.
Q. **HOW WILL THE UPDATE BE PERFORMED, GIVEN THAT IT IS EXPECTED TO OCCUR PART WAY THROUGH THE TEST PERIOD?**

A. This is another incurable complication associated with the update provision of the Multi-Party Stipulation. The Multi-Party Stipulation anticipates an update sometime in mid- to late-April 2022. The test period, however, is the 12 months ending December 2022. Therefore, at least three months of the forecast (January 2022 through March 2022) will be based on actual data, including actual market prices, actual short-term firm contracts, actual fuel contracts, and potentially, actual coal costs at Jim Bridger and Colstrip. Thus, the proposed update is not a mechanical, straightforward process. Rather, it will rely on an entirely new hybrid modeling methodology, using a blend of actual and forecast cost data.

Q. **WHAT ARE SOME COMPLICATIONS OF SETTING THE NPC BASELINE USING A HYBRID FORECAST AND ACTUAL DATA?**

A. Many unforeseen consequences may arise from this new methodology. For example, the new short-term firm transactions that PacifiCorp would seek to include in its update will include actual, settled transactions over the three months January 2022 through March 2022. This would include not just monthly short-term firm transactions, but also day-ahead and real-time transactions (i.e., system balancing transactions), which are also considered short-term firm transactions subject to the update provision. Including actual costs in the NPC baseline, however, is not reasonable. The baseline is supposed to represent a normalized forecast, not actual costs. The actual costs of short-term firm and system balancing transactions in the three months January 2022 through March 2022 will otherwise be recovered in the PCAM. The actual costs in that period would therefore be
irrelevant to the rate effective period, since they will have already occurred prior to the
date rates go into effect in this docket.

The use of actual gas purchase contracts would also result in actual costs being
included in the model and would skew the results of the model dispatch. The actual gas
purchases contracts would be based on actual dispatch, not the dispatch forecast in the
AURORA model.

Similarly, the Settling Parties state that they intend to use actual settled market
prices over that period. The actual market prices, however, are not normalized prices.
They are reflective of the actual market and weather conditions in that period. To the
extent that the weather is abnormal, for example, the result of such a hybrid modeling
will be to incorporate the costs of non-normalized load and market conditions into the
forward-looking NPC baseline. The baseline will need to be in effect for multiple years,
however, so considering non-normalized costs in the forecast is inconsistent with
normalized ratemaking.

Further, many of the modeling assumptions included in NPC, such as the Day-
ahead / Real-time (“DA/RT”) adjustment, are premised on the use of forward-looking
modeling estimates. PacifiCorp’s update to short-term firm transactions would include
both the incremental term and balancing transactions that are being forecast through the
DA/RT adjustment. Therefore, the DA/RT adjustment would not be applicable if applied
to historical actual market data and actual short-term firm transactions. The AURORA
model is not designed to take actual system balancing transactions as an input to develop

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24 Exh. JT-1CT at 11:6-12.
a forecast of system dispatch surrounding the actual transactions; it is unknown how the model will respond to such a modeling change.

There are likely many more unanticipated issues that will need to be considered when using a hybrid actual/forecast modeling methodology, and those issues cannot reasonably be dealt with in a two-week compliance filing.

**Q. GIVEN THESE ISSUES IS THERE A WAY TO PERFORM AN UPDATE THAT IS REASONABLE?**

**A.** No. The Commission could, for example, require PacifiCorp to update NPC based on the January 1, 2022 OFPC, which will be the latest available OFPC at the time of the hearing in this docket. The Commission could also limit the update to gas and electric market prices, consistent with decision in the PSE 2006 GRC. Further, the Commission could also require an update to the level of EIM benefits based on the January 1, 2022 OFPC. To the extent, however, that update resulted in an increase in rates relative to the filed case, that increase would still be due to imprudent hedging practices. In addition, with such an update, there would still be no "opportunities for discovery and the preparation of supplemental testimony." Thus, any increase resulting from such an update would still not be reasonable to consider in this docket, even if some of the impacts are knowable at the time of the hearing.

**Q. WHAT DO YOU RECOMMEND?**

**A.** This docket was intended to be a limited proceeding to update the NPC baseline that was approved in Docket No. UE-191024. Yet, now the Multi-Party Stipulation is contemplating even further updates to the update. At some point, however, there needs to

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be certainty, recognizing that the baseline is a normalized forecast meant to be in effect for several years and that variances between actual net power cost and the forecast are recovered in conjunction with the PCAM. Stakeholders will have no venue to review and contest the proposed update, which will undoubtedly raise controversial issues. Any potential increase to baseline NPC relative to PacifiCorp’s initial filing, for example, can only be attributed to an imprudent hedging policy, which has not considered the unique Washington load and resource balance position. Further, PacifiCorp proposes to use an entirely new hybrid modeling methodology incorporating both actual and forecast transactions into the NPC baseline, which also has the potential to result in material disputes with the proposed update. The Commission will have no way to evaluate whether the update produces just and reasonable rates and will have no way to evaluate the prudence of new cost items included in the update. For these reasons, AWEC recommends that the Commission reject the proposed NPC update altogether, and approve rates based on the NPC analysis PacifiCorp submitted in its initial filing in this docket, subject to the production factor adjustments in the Multi-Party Stipulation and the additional adjustments discussed below.

IV. NODAL PRICING MODEL

Q. WHAT IS THE NODAL PRICING MODEL?

A. The nodal pricing model (“NPM”) is a day-ahead dispatch model developed by the California Independent System Operator (“CAISO”) that allows PacifiCorp to dispatch its generation fleet based on the marginal price of each pricing node. To model nodal dispatch for purposes of setting power costs, PacifiCorp transitioned from its in-house GRID model to the AURORA model, though PacifiCorp simplified the model by
grouping all nodes together in areas where there is no transmission congestion.

PacifiCorp represents that this accurately captures nodal pricing without the complexity of modeling individual nodes. PacifiCorp discusses the NPM and AURORA in its Supplemental Testimony in this proceeding, Exhibit No. DRS-3T.

Q. WHY DID PACIFICORP ADOPT THE NPM?

A. The NPM has been discussed for several years in the Multi-State Process (“MSP”) as a means of allocating power costs to each state if those states transition to a fixed generation portfolio. Currently, power costs are dynamically allocated based primarily on each state’s load forecast when power costs are set; however, the MSP (and now Framework Issues) workgroup has discussed the possibility of fixing each state’s generation portfolio to help address differing state generation policies. In theory, nodal pricing helps identify the costs and benefits of each state’s generation portfolio for allocation to the state. Accordingly, as part of the 2020 MSP Protocol, the parties “affirm[ed] support for PacifiCorp’s reasonable and prudent investment of related capital funds, related operations and maintenance expenses, and the related ongoing grid management charges to develop and implement an NPM.”

Q. HOW DOES THE MULTI-PARTY STIPULATION TREAT THE COSTS ASSOCIATED WITH THE NPM?

A. The Multi-Party Stipulation includes approximately $300,000 in Washington-allocated costs associated with the NPM. It also notes that this amount is an error; PacifiCorp included only $4 million of the total $8.3 million in NPM costs, which would have

resulted in an additional $312,000 allocated to Washington.\footnote{Multi-Party Stipulation ¶ 11.} Under the Multi-Party Stipulation, PacifiCorp has agreed not to recover those additional costs in this case, but the full costs would flow through the Power Cost Adjustment Mechanism (“PCAM”), meaning that they could still be recovered through the PCAM’s deferral at a later date.\footnote{Id. n. 12.}

Q. **WHAT IS YOUR CONCERN WITH HOW THE MULTI-PARTY STIPULATION ADDRESSES NPM COSTS?**

A. While the Multi-Party Stipulation prevents full recovery of NPM costs in this case, it still makes no provision for the benefits of the NPM and allows PacifiCorp to, at least in theory, recover the additional costs through the PCAM. When the parties to the MSP agreed to allow PacifiCorp to move forward with the NPM and represented that this decision was prudent based on information known at that time, that agreement was based in part on an understanding that the NPM would result in cost savings for customers. The 2020 Protocol explicitly identifies “more granular dispatch information resulting in anticipated operational cost savings” as a benefit from the NPM.\footnote{2020 Protocol, Appendix D, Exh. B.}

Q. **DOES PACIFICORP AGREE IN THIS CASE THAT THE NPM RESULTS IN COST SAVINGS?**

A. Yes. In Mr. Staples’ Supplemental Testimony in this proceeding, he testified that “the benefits from nodal dispatch and NPM come from having more efficient day-ahead setup …. [A] more efficient day ahead set-up results in fewer changes between the day-ahead setup and real-time dispatch, which lowers actual NPC by avoiding those changes.”\footnote{Exh. No.DRS-3T at 3:18-4:1.}

Mr. Staples also testified, however, that “this benefit is impossible to track because it is
impossible to know what the day-ahead setup would be without NPM.” Consequently, PacifiCorp admits that there are NPC benefits from the NPM, but retains all of these benefits for shareholders.

Q. **IS PACIFICORP’S POSITION REASONABLE?**

A. No. As Staff notes in its portion of the Joint Testimony supporting the Stipulation, customers should pay as close to actual power costs as possible. Withholding benefits from the NPM may result in an inaccurate power cost forecast. There is also no justification for NPM benefits to flow to shareholders if customers pay for the NPM. PacifiCorp bears the burden of proof in this case. Whether it is “impossible” to quantify NPM benefits or not, that is an insufficient rationale for withholding those benefits from customers. If PacifiCorp cannot quantify the benefits, then it has failed to carry its burden on this issue and the Commission should identify a reasonable approximation of those benefits, or otherwise disallow the costs of the NPM.

Q. **HAVE OTHER STATES FOUND THAT BENEFITS EXIST FROM THE NPM?**

A. Yes. In a recent order, the Oregon Public Utility Commission (“Oregon Commission”) determined that PacifiCorp had failed to carry its burden to demonstrate that the benefits of the NPM are already captured in its power cost model. It determined that “PacifiCorp’s approach to forecasting no incremental benefit from its NPM is not well-supported by the record in this case ….” In that case, due to the lack of additional information provided by PacifiCorp, the Oregon Commission imputed savings from the NPM equal to one-half of its costs. The Oregon Commission justified this decision by

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1/ Id. at 4:2-3.
2/ Exh. JT-1CT at 15:2-23.
noting that “over time [the NPM’s] benefits would more than offset its costs. At the same time, we recognize that the benefits of a new system may not necessarily, in 2022, produce benefits that fully offset the program’s initial costs.”

Q. WHAT DO YOU RECOMMEND IN THIS PROCEEDING?

A. I recommend that the Commission either: (1) disallow the NPM costs, for this proceeding only, on the basis that PacifiCorp has failed to demonstrate the benefits of this investment (PacifiCorp can attempt to justify these costs again the next time power costs are at issue); or (2) impute a level of benefits from the NPM equivalent to the $312,000 PacifiCorp failed to include in its initial filing in this proceeding. If the Commission adopted the latter recommendation, this would mean that PacifiCorp could not flow the full costs of the NPM through its PCAM.

V. BRIDGER FLY ASH REVENUES

Q. WHAT IS FLY ASH?

A. Fly ash is a byproduct of the combustion of coal. It is used in construction to develop concrete, bricks and other building supply products. Given reduced supply resulting from coal plant closures and increased construction demand, prices for fly ash have been increasing at a rapid pace in recent years.

Q. WHAT AMOUNT OF FLY ASH REVENUES ARE INCLUDED IN BASE RATES?

A. In base rates in the 2020 GRC, PacifiCorp assumed fly ash revenues from the Jim Bridger power plant of $2,324,917 total-Company, or $501,652 Washington-allocated.

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34/ Id. at 33.
Q. ARE THOSE AMOUNTS INDICATIVE OF WHAT PACIFICORP ACTUALLY EXPECTS TO RECOGNIZE IN 2022?

A. No. In October 2020, PacifiCorp entered into a new sales agreement to sell fly ash from the Jim Bridger power plant. In Docket No. UE 390 before the Oregon Public Utility Commission, PacifiCorp identified the incremental revenues that it expected to receive as a result of the new contract. In response to AWEC Data Request 39 in that proceeding, PacifiCorp indicated that, due to the new agreement, it expected increased fly ash revenues from Jim Bridger of $13,895,142 on a total-Company basis, or $2,998,182 on a Washington-allocated basis.

Q. DO YOU RECOMMEND THAT THESE INCREMENTAL REVENUES BE CONSIDERED IN THIS DOCKET?

A. Yes. AWEC has sought a deferral of the incremental revenues associated with this contract, but also recommends that the $2,998,182 be incorporated into base rates in this proceeding, similar to the provision in the Multi-Party Stipulation to increase the production tax credit rate.

VI. WHEELING ALLOCATION

Q. HOW ARE WHEELING EXPENSES ALLOCATED UNDER THE 2020 PROTOCOL?

A. Under the 2020 Protocol, wheeling expenses are allocated using the System Generation (“SG”) and System Energy (“SE”) factors. Firm wheeling transactions are allocated using the SG Factor. Non-Firm wheeling is allocated using the SE.

\[\text{Mullins, Exh. BGM-4 at 2 (see the Jim Bridger amount on the fifth row of the table).}\]
\[\text{Based on a 21.58% Control Area Generation West ("CAGW") allocation factor.}\]
Q. WHAT ISSUE HAVE YOU IDENTIFIED WITH RESPECT TO PACIFICORP’S ALLOCATION OF WHEELING COSTS TO WASHINGTON?

A. When performing the jurisdictional allocation to Washington, PacifiCorp incorrectly assumed that all of its wheeling expenses were firm wheeling transactions and used the SG factor for all wheeling costs.

Q. ARE ALL OF PACIFICORP’S WHEELING TRANSACTIONS FIRM?

A. No. Approximately $ of the wheeling expense included in this case represents non-firm wheeling transactions, which are supposed to be allocated using the SE factor, not the SG factor. Since Washington has a slightly lower SE factor, PacifiCorp’s treatment resulted in over-allocating wheeling costs to Washington.

Q. WHAT IS THE IMPACT OF USING THE SE FACTOR FOR THE NON-FIRM WHEELING COSTS?

A. Using the SE factor for the non-firm wheeling costs results in a $45,104 reduction to Washington-allocated NPC.

Q. DOES THIS CONCLUDE YOUR OPPOSITION TESTIMONY?

A. Yes.