BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

Docket No. UE 420

In the matter of

PACIFICORP, dba PACIFIC POWER,

2024 Transition Adjustment Mechanism

REDACTED REBUTTAL TESTIMONY OF STEVE JOHNSON

August 16, 2023

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ATTACHED EXHIBITS

Exhibit Vitesse/201 – PacifiCorp Data Responses

I. INTRODUCTION

Q. Please state for the record your name, position, and business address.

A. My name is Steve Johnson. I am the Principal of Negative Delta G Consulting located at 2022 32nd Ave South, Seattle, Washington 98144. Negative Delta G Consulting is a sole proprietorship.

Q. On whose behalf are you appearing in this proceeding?

- A. I am testifying on behalf of Vitesse, LLC ("Vitesse").
- Q. Are you the same Steve Johnson that previously filed testimony in this proceeding on behalf of Vitesse?
- A. Yes.

Q. What is the purpose of your testimony?

A. I am testifying on behalf of Vitesse regarding the 2024 Transition Adjustment
 Mechanism ("2024 TAM") for PacifiCorp dba Pacific Power ("PacifiCorp" or the
 "Company"). I continue to recommend modifications to the 2024 TAM calculations.
 My rebuttal testimony primarily addresses the reply testimony from PacifiCorp.

Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring Exhibit Vitesse/201 (PacifiCorp Data Responses).

II. RESPONSE TO OPENING AND REPLY TESTIMONY

Q. Please summarize the issues you will address in your rebuttal testimony.

A. I address the day ahead/real time ("DA/RT") percent price adder, responding to the Company's and Staff's testimony.¹ I comment on the Company's new interpretation of

¹ I use the term "percent price adder" to distinguish the Company's proposal in this instant case from the Company's previous method that added a flat dollar amount.

the application of the EPA's ozone transport rule ("OTR") and the Company's associated modeling changes. I discuss my opposition to the Company's proposal to defer the costs of applying OTR to Wyoming and Utah and the inclusion in rates of the assumed costs of OTR applying to Wyoming. I also discuss the flaws in the Company's argument in opposition to modeling the Chehalis generation plant's ("Chehalis's") emissions and allowance costs on a variable basis for determining the cost of emissions compliance under the Washington Climate Commitment Act ("Washington CCA").² I also discuss the Company's acceptance in their reply testimony of several of my adjustments proposed in my opening testimony.

Q. Are you addressing all of the testimony and recommendations of Staff and other intervenors?

A. No. My testimony is not presenting a total overall net power cost ("NPC") recommendation or addressing the direct access issue raised by Kevin Higgins on behalf of Calpine Solutions. Vitesse may address some or all of these other recommendations in legal briefing.

Q. Please summarize your rebuttal recommendations.

- A. Below are my recommendations, which I have grouped by subject matter:
 - 1. The DA/RT percent price adder. I recommend:
 - a. Non-precedential basis. The Commission should use the DA/RT percent price adder, as modified by my price correction, on a non-precedential basis for setting rates in this instant case due to ongoing concerns with

² The Washington Climate Commitment Act is the legislative title of Washington's cap and invest program.

the Company's DA/RT percent price adder. If the Commission does adopt the DA/RT percentage price adder on a precedential basis it should include my price correction adjustment.

 b. Price correction adjustment. The Commission should reject the Company's use of a backward-looking, historical method for calculating arbitrage revenues in its DA/RT volume component adjustment. Instead, the Commission should adopt my forward-looking, rate year-based price correction adjustment, as presented in my opening testimony.

2. OTR.

- a. The Commission should not include the impact of assuming the OTR will apply to Wyoming resources in 2024 TAM rates.
- I am no longer opposed to the Company's proposal, as revised in their reply testimony, of including the costs of OTR compliance for Utah natural gas and coal plants.
- c. The Commission should not approve the Company's proposal of deferral accounting for the impacts of OTR on Utah and Wyoming resources.
- 3. Chehalis Dispatch and Modeling. The Commission should require the Company to model the cost of Washington CCA allowances for dispatching Chehalis on a variable basis across the range of output levels of the plant instead of the Company's approach that uses a single static emissions factor across the entire range of plant output.

4. EIM GHG benefits. The Company agrees in principle to my Energy Imbalance Market ("EIM") greenhouse gas ("GHG") benefits escalation adjustment³ but proposes an adjustment for the increased NPC associated with its decision to

.⁴ I oppose the

adjustment, as the Company has failed to meet its burden of proof.

III. DA/RT MODELING ADJUSTMENTS

Q. Could you please summarize for the Commission your position regarding PacifiCorp's DA/RT percent price adder adjustment?

- A. I recommend the Commission not approve this new item on a precedential basis. The DA/RT percent price adder and Commission rate setting would benefit from additional review and the development of potential improvements to the adjustment beyond those I have proposed and the Company has adopted in this proceeding prior to being adopted by the Commission on a precedential basis. I recommend the Commission adopt my forward-looking price correction adjustment for the reasons stated in my opening testimony and below, including because it is aligned with the forward rate year used to set rates in TAM proceedings.
 - 1. DA/RT price correction adjustment

Q. What does the Company propose in its reply testimony?

A. The Company argues that its historical arbitrage revenue that is embedded in the DA/RT volume component adjustment addresses my concerns and my proposed price correction

³ PAC/400, Mitchell/116:16-17.

⁴ PAC/400, Mitchell/13:15-17.

adjustment is double counting.⁵ The Company's historical arbitrage revenue that is embedded in the DA/RT volume component adjustment relies on a historical normalized period to measure gains from when the Company was able to make sales above the market price and purchases below the market price.

Q. Please state the core problem that creates the need for an adjustment to the DA/RT percent price adder.

A. During times when the sell price is higher than the buy price, Aurora will repeatedly make purchases and sales of imbalance energy to maximize revenues from the price arbitrage opportunity. Price arbitrage opportunities such as these do exist on occasion in the markets the Company trades in, as evidenced by the Company's historical trading data. However, the volume of trades in the real world is limited as the price gap is extinguished by market participants competing to profit from the price arbitrage opportunities that Aurora may take advantage of, it is necessary to flatten the purchase and sales prices to make them equal during conditions when the purchase price is lower than the sale price. This limitation of the Aurora model is not in dispute. The remedy for accurately calculating the DA/RT percent price adder's impact on NPC when price arbitrage conditions are forecast to occur in the Aurora model is in dispute.

⁵ PAC/400, Mitchell/39:2-40:14. The Company includes the net power costs ("NPC") effect of its volume component adjustment in its list of corrections in its reply testimony. PAC/401, Mitchell/1. See correction "C04 - DA/RT Volume Component".

Q. How do flattening prices distort the DA/RT percent price adder's impact on the NPC?

A. Using flattened prices in Aurora has one distorting effect on the calculation of the DA/RT percent price adder. The other distortion from using flattened prices is the result of the Company's choice to use flattened prices in its out-of-model adjustment. The first effect is the lowering of the volume of purchase and sale transactions calculated by Aurora. This is an inherent result of using flattened prices in Aurora that has no current remedy. The second effect is an artificial increase in NPC, due to the use of flattened prices rather than adjusted forecasted market prices in the calculation of the dollar impact on NPC.⁶ The second effect is avoidable without hindering Aurora's functionality because it is an out of model adjustment. It is a problem solely created by the Company's choice. In contrast, my price correction proposal uses the adjusted forecasted market prices times the volume of price arbitrage purchases and sales to determine the impact on NPC.

Q. Why does using flattened prices in Aurora reduce the volume of balancing transactions and how does that affect NPC?

A. Using flattened prices in Aurora lowers the sales prices causing the sale prices to appear less economical and reducing the volume of sales. Using flattened prices in Aurora also increases the purchase prices causing the purchase prices to appear less economical and reducing the volume of purchases. The undercounted volume of purchases and sales results in NPC higher than would otherwise be expected. This is because the purchase

⁶ The adjustment in the adjusted forward market prices is the scaling of the forward market prices to reflect the prices the Company actually sees when it makes balancing purchases and sales in the month and day-ahead time frames. The adjustment of forward market prices to reflect the market price conditions the Company experiences is the core function of the DA/RT adjustment.

and sale transactions made during the price arbitrage opportunity reduce NPC as a whole. Again, there is no current remedy in Aurora for this effect but it is useful to track biases in modeling.

- Q. Can you explain more about the Company's choice to use flattened price rather than the adjusted forecasted market prices to calculate the impact on NPC?
- A. In calculating the dollar impact on NPC, the Company has chosen to multiply the volumes of purchases and sales calculated by Aurora by the flattened prices rather than by the adjusted forecasted market prices. The use of flattened prices in the calculation of the dollar impact on the NPC is not necessary and not related to the need to use flattened prices as a workaround for the price arbitrage problem in Aurora. It is an out of model calculation the company has complete control of. The Company's choice to use flattened prices increases NPC.⁷

Q. Did the Company's direct testimony explain its use of the flattened prices to calculate the impact on NPC?

A. No. The Company did not provide any explanation for why *in its direct testimony* it used the flattened prices times the volume of price arbitrage transactions to determine the impact on NPC instead of the adjusted forecasted market prices.⁸

⁷ The use of flattened price instead of market prices reduces the revenue from the advantageous purchases and sales that would otherwise offset costs in the NPC.

⁸ PacifiCorp Response to Vitesse Data Request No. 28(b) (appended hereto as Exhibit Vitesse/201, Johnson/10) ("With this as context, the Company has not yet advanced any position or arguments concerning the relative merits of using the historical arbitrage revenue embedded in the volume component of the DA/RT adjustment in place of Vitesse's price correction adjustment. The Company has only pointed out that Vitesse's price correction adjustment is double counting revenue.").

Q. Did the Company's reply testimony explain the Company's use of the flattened prices rather than adjusted market prices when multiplying the volume of balancing transactions in its calculation of the impact on NPC?

A. No. In its reply testimony, the Company argues its use of its volume component adjustment corrects for the use of flattened prices in Aurora. The Company argues that the volume adjustment has been part of the DA/RT adjustment since 2016, and that the addition of my price correction would double count arbitrage revenues.⁹

Q. Does the Company use the adjusted forecasted market prices throughout the rest of the DA/RT adjustment?

- A. Yes. For the volumes of purchases and sales that occur when the purchase price is higher than the sell price, the Company uses the adjusted forecast market prices.¹⁰ The construction and use of the *adjusted* forecast market prices is the core purpose of the DA/RT percent price adder adjustment.
- Q. Did the Company's reply testimony disagree with your use of the adjusted forecast market prices in your price adjustment?
- A. No. The Company provided no direct criticisms of the use of the adjusted forecast market prices.

⁹ PAC/400, Mitchell/39:6-15.

¹⁰ PacifiCorp Response to Vitesse Data Request No. 29(a) (appended hereto as Exhibit Vitesse/201, Johnson/11) ("The Company's volume component of the day-ahead / real-time (DA/RT) adjustment does use in its calculation 2024 power prices and volumes from Aurora to determine its impact on net power costs (NPC).").

Q. What criticism of your price correction adjustment as a whole did the Company provide?

- **A.** The Company considered my price correction to be a double counting of its historical arbitrage revenue embedded in the volume component adjustment.
- Q. Would it be double counting if both the Company's historical arbitrage revenue embedded in the volume component adjustment proposed in its reply testimony and your price correction adjustment are used?
- A. Yes. The two approaches are competing means of capturing the beneficial revenues from the price arbitrage opportunities. I am not proposing that both approaches be used, and instead I am proposing that my recommendation be used. Therefore, I am not proposing any double counting.

Q. How does the Company's historical arbitrage revenue embedded in the volume component adjustment work?

A. PacifiCorp uses a historical normalized period to measure gains from conditions when the Company was able to make sales above the market price and purchases below the market price.¹¹ It uses actual results from 2016-2020 to calculate an average annual benefit that it adds to 2024 NPC.

PacifiCorp Response to Vitesse Date Request No. 29 (appended hereto as Exhibit Vitesse/201, Johnson/11-12). As the Company states in the response, its "historical arbitrage revenues embedded in the Company's volume component of the DA/RT adjustment uses historical normalized revenues to measure the impact on NPC under all conditions." Here I am focused on the portion when sale prices are higher than purchase prices.

Q. Do you agree with the Company's alternative adjustment?

A. No. The Company's proposal could be a stop gap adjustment, if a better forward-looking option, such as my price correction adjustment, was not available.

Q. What are your criticisms of the Company's adjustment?

A. Rather than using forward rate year information and conditions used to determine the NPC of the TAM, the Company's method relies on historical prices, loads, and constraints that do not reflect conditions in 2024. The dependency on historical data and conditions is out of step with the forward rate year used by the Commission in the TAM to determine the most accurate rates possible. For example, the Company's historical normalized period does not reflect the effects of the Washington CCA program, the OTR allowance program, future loads, or contingency reserves. These are all items the Company is testifying in this instant case to include in the future rate year for the calculation of 2024 TAM rates.

Q. Can you contrast your approach with that of the Company's?

A. Yes. My price correction adjustment uses adjusted forward market prices that reflect future market conditions--both regulatory requirements and fuel and power price conditions. The use of the adjusted forward market prices in my price correction adjustment is in step with the market prices used in determining the Company's resource dispatch in the 2024 forward rate year. My use of adjusted forward market prices is also consistent with their use of forward market price in the rest of the DA/RT adjustment.

- 2. Volume Weighted Averaging Adjustment of Percent Price Adders
- Q. How did the Company respond to your Volume Weighted averaging adjustment in its reply testimony?
- A. The Company adopted my adjustment. It appears that the failure to use a volume weighted average was an oversight. Be that as it may, it is an example of why it is in the interest of the Commission to allow parties to perform additional review of the DA/RT percent price adder in future TAMs, as discussed more below.
 - 3. Remaining concerns with the DA/RT percent price adder and refinement of the adjustment in future proceedings
- Q. You raised concerns about the DA/RT percent price adder in your response testimony. How did the Company respond?
- A. As a reminder, I am concerned with: 1) the use of monthly data from trading hubs with very small volumes of transactions in those months; and 2) how future rates are embedded with

. I also note that the Company itself made a correction to its DA/RT adjustment in its reply testimony in this instant case.¹² The Company has three main responses. First, the Company argues that "the total *annual* dollars transacted at individual trading hubs range from \$2.42 million to \$75.7 million total-company."¹³ Second, the Company also points out that I did not identify or quantify the trading hubs or volumes. Third, the Company argues that my concern with the accuracy of the Company's historical load forecasts during operations "has no immediate

¹² PAC/401, Mitchell/1 at line "C04 - DA/RT Volume Component".

¹³ PAC/400, Mitchell/39:20-21 (emphasis added).

relevance to the merit of the DA/RT price component."¹⁴ The Company testifies that: "Within the power cost forecasting mechanism itself, Vitesse is essentially arguing that the volatility in prices and other system conditions are increasing and then Vitesse uses that argument to have a discussion on holding the utility accountable for its forecasts in actual operations."¹⁵

Q. How do you respond?

A. My concern with the small number and/or volume of transactions at a trading hub was based on the monthly volumes in MWhs at each trading hub. The Company does not respond to this point in its reply stating instead an annual dollar figure for the trading hubs.

Q. Why is it important to examine the volumes and number of transactions at trading hub *by month*?

A. The DA/RT adjustment calculates the percent price adder for each hub *on a monthly basis*, creating a percent price adder for each month of the calendar year.¹⁶ It does this by using each of the four months (for example, the four Augusts) of the four years in the historical period. Therefore, the issue is not whether the total volume at a hub for January through December is significant but rather whether each month has sufficient trading volumes to be valid for use in calculating the monthly percent price adder.

¹⁴ PAC/400, Mitchell/41:4-5.

¹⁵ PAC/400, Mitchell/40:21-41:4.

¹⁶ The percent price adder is a scalar, a percentage that increases or decreases the forward market prices used to calculate the cost/revenues from imbalance energy purchases and sales made over a month. Because each month of the year sees different market conditions the scalar needs to be representative of that month of the year.

Q. Why does the validity of a single month's volumes matter?

A. If there is a single small transaction in a month at a trading hub then the market prices at that trading hub for that month are used in the calculation of the percent price adder.

Q. Please summarize your concern with the transaction volumes.

A. The Company has not demonstrated that the use of months with very small transaction volumes improves the accuracy of the DA/RT percent price adder.

Q. The Company testifies that its actual load forecasting error in its operations is not relevant to the DA/RT percent price adder. How do you respond?

A. I disagree as I raised this issue as another concern related to the DA/RT adjustment. The DA/RT percent price adder reflects actual historic load forecasting error and includes its effect on NPC in future test year rates. In contrast, setting rates with Aurora in a forward test year does not otherwise embed the past performance of the utility's load forecasting into rates. The use of a future test year provides an incentive for the utility to improve its load forecasting.

The DA/RT percent price adder introduces the impact of the accuracy of the Company's load forecasting into the future test year ratemaking. The impact of the accuracy is introduced by the Company's use of the level of historical balancing purchases and sales in calculating the percent price adder. To understand how, it is important to know that the level of historical balancing purchases and sales used for the DA/RT percent price adder is affected in part by the accuracy of the Company's load forecast. The volume of balancing purchases and sales increases when the load forecast is less accurate, which then increases the price adder and NPC. To the extent the load forecast is more accurate, the balancing purchases and sales decrease, which decreases the price adder and NPC. My concern therefore, is that the adoption of the DA/RT percent price adder without the Company demonstrating its load forecasting is reasonable skips over one of the very reasons the Company is seeking the adjustment: the contribution to increased NPC that is caused by forecast error. Volatility in market prices and uncertainty in forecasting generation are also factors in the volume of balancing transactions, but my argument for better load forecasting does not rest on them as the Company asserts.

Q. How was the DA/RT percent price adder received in the most recent TAM proceeding?

A. The Company introduced the DA/RT percent price adder in the preceding TAM.¹⁷ In that proceeding the proposal did not receive support from intervenors and was used in setting rates only as part of a non-precedential settlement.¹⁸

Q. What supporting evidence for the DA/RT percent price adder did the Company present in its initial filing in this instant case?

A. The Company's direct testimony presented no new testimony or evidence supporting the DA/RT percent price adder, relying instead on a single citation to its testimony in the 2023 TAM.

¹⁷ In re PacifiCorp 2023 Transition Adjustment Mechanism, Docket No. UE 400, PAC/100, Wilding/35:16-36:20 (Mar. 1, 2022).

¹⁸ Docket No. UE 400, Order No. 22-389, Appendix A at **P** 27 (Oct. 25, 2022).

- Q. What supporting evidence did the Company present in its reply testimony for not modifying the DA/RT with the price correction adjustment as recommended by Vitesse?
- A. Very little. While the Company presented some evidence for the need for a percent price adder rather than a flat, constant nominal dollar adder, it presented little argument for why the DA/RT percent price adder should not be modified as I recommend. The extent of the Company's argument is that the Company's volume component adjustment, makes the price adder correction redundant.

Q. Did the Company propose changes to the DA/RT adjustment in its reply testimony?

A. Yes. It listed the correction in PAC/401, Mitchell/1 under C04 DA/RT Volume Component. This change to the DA/RT appears to be purely the result of the Company recognizing its own error and independent from my recommendation for a price correction adjustment.¹⁹

Q. Can the Company present more argument on surrebuttal?

A. They should not be allowed to do so. Surrebuttal is not the procedural step designed for the Company to submit its primary evidence for meeting its burden of proof. The initial filing and direct testimony provide the Company the opportunity to put forth its case to meet its burden of proof. The reply testimony provides the Company an opportunity to fully respond to the arguments of the parties. The Company passed on both opportunities, and so any additional opportunity would procedurally defeat the

¹⁹ PacifiCorp Response to Vitesse Date Request No. 28 (appended hereto as Exhibit Vitesse/201, Johnson/9-10) ("As an initial matter, the Company does not argue that Vitesse's adjustment is double counting due to the Company's volume component of the day-ahead / real-time (DA/RT) adjustment shown as a correction in its reply testimony.").

intervenor's opportunity to respond on the record. Evidence the Company may provide on surrebuttal is due only four business days before the hearing, and that provides almost no opportunity for intervenors to analyze the argument, and no ability to provide written responses and proposals for improving the methodology.

Q. Why do you recommend that the Commission not adopt the use of the DA/RT percent price adder on a precedential basis?

A. The Commission's rate setting will benefit from more scrutiny and potential improvement to the DA/RT percent price adder. The Company has not met its burden of proof to support a Commission determination that the DA/RT percent price adder should be adopted on a precedential basis.

In this proceeding the Company has already agreed to a correction to its DA/RT percent price adder, the volume weighting adjustment I proposed. Whether or not the Commission adopts my price correction adjustment, its introduction demonstrates that there are still other valid approaches for the Commission to consider before approving the DA/RT percent adder on a precedential basis. Finally, by not approving the use of the DA/RT percent price adder on a precedential basis in this instant case, the Commission can benefit from further examination and, hopefully, eventual resolution of this question.

- Q. If the Commission adopts a DA/RT adjustment on a precedential basis, then what do you recommend?
- A. The Commission should adopt my recommended price correction adjustment.

IV. OTHER MODELING ADJUSTMENTS

1. EIM GHG Benefits Growth Factor Adjustment

- Q. Could you please summarize for the Commission your position regarding the EIM GHG benefit amount the Company proposes for 2024 NPC?
- A. I address two of the changes PacifiCorp has made to its EIM GHG benefits. First, the Company has decided _______.²⁰ This decision leads to an approximate ______ in Company-wide NPC on an isolated basis.²¹ Second, PacifiCorp has adopted in principle my proposed method for projecting EIM benefits using CARB allowance auction prices to scale historical EIM benefits to the 2024 test year resulting in an approximate decrease to NPC of ______ on Company-wide basis.²² The reduction to NPC will change with changes in the CARB allowance auction prices and the historical EIM benefits period used in the calculations of benefits.

Q. Do you have concerns with the Company's decision to

?

A. Yes. First, the Company made this change in its reply testimony and it should have been identified in its direct testimony. Second, the vague reasoning for doing so provided by the Company in its reply testimony raises concerns. Third, its continued lack of response when prompted by Vitesse data requests demonstrates the Company's resistance to providing the Commission with its demonstration of the need for the adjustment and the

²⁰ PAC/400, Mitchell/13:15-17.

²¹ PacifiCorp Response to Vitesse Data Request 25(e) (appended hereto as Exhibit Vitesse/201, Johnson/2-3).

²² PacifiCorp Response to Vitesse Data Request 28 (appended hereto as Exhibit Vitesse/201, Johnson/9-10).

intervenors with a meaningful opportunity to review the Company's evidence supporting the adjustment.

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The Company first states in its reply	y testimony that it intends to
without identifying	or presenting evidence that such
is a least cost choice.	
With respect to the least cost approa	ach, the
. Due to the	
	. The Company
does not discuss the option of	
	. To

be clear, I support the least cost decision, but it is not clear from the limited information provided whether PacifiCorp is making least cost decisions or whether those decisions will benefit all ratepayers, only some ratepayers or only PacifiCorp's own shareholders.

While all of my concerns can be examined after the fact in the relevant PCAM filing, the Company is proposing the Commission set rates on its for the decision in this instant case. The Company has not provided evidence to support its decision. Without a sufficient demonstration that its approach is the least cost means of

, the Company may abandon its approach, leaving ratepayers to pay unnecessarily higher rates based on an unsupported decision. That is, PacifiCorp has forecasted higher NPC due to this new decision, and ratepayers will have little recourse even if in a PCAM or other future proceeding the Commission determines it was an unreasonable decision. In this situation, the Company should have provided more information to support its decision, but it has failed to do so.

- Q. Through data requests made by Vitesse, has the Company identified additional information regarding its decision?
- **A.** Yes.²³
- Q. Was that information sufficient to demonstrate the need for the Company's adjustment that increases rates?
- A. No, quite the opposite. The limited information the Company provides is additional evidence illustrating how the Company has failed its burden to demonstrate the need for the adjustment it requests.

?

Q. Did the Company explain

A. No. The Company's response demonstrates the very basic information and analysis that is lacking in the presentation of its case to meet its burden of proof. The Company identifies _______ but does not describe, quantitatively or qualitatively, why
 _______. For example, the Company does not provide evidence that the _______. The Company does not provide any

²³ PacifiCorp Response to Vitesse Confidential Data Request 25 (appended hereto as Exhibit Vitesse/201, Johnson/1-3).

	quantification of its compliance needs for
	any of the
Q.	. Does
	the Company explain why Oregon ratepayers should bear the burden of those
	costs?
А.	No. Oregon ratepayers have paid for their share of the costs of the
	but the Company is arguing that the benefits, in the form of
	should flow to
	without any showing that the benefits or costs are proportionately shared or spread to
	Oregon ratepayers.
Q.	Does the Company provide a cost
А.	Yes, in response to my data request. Presumably this cost
	. The Company does not present its methodology.
Q.	Does the Company present information demonstrating that, based on the
	, its decision to
	is the least cost approach
А.	No. When asked about the marginal costs of meeting its
	, the Company states that it must
	without providing

any quantitative or qualitative justification. The Company provides no explanation of how or why there are no alternatives in the market or why it could not aid its compliance

, especially in light of the increase in its

coal contract costs and exposure to natural gas prices.

- Q.
- A. No. The Company states that it has *already decided*

The prudence of that decision should be judged on the information and reasoning the Company engaged in at the time of its decision making. Yet, the Company has chosen not to provide that information– that is in its possession– to the Commission in its direct testimony, reply testimony or in response to several data requests issued after its reply testimony that ask directly about its decision.

- Q. What is your specific recommendation, if any, in this proceeding regarding the Company's decision to ?
- A. The Company has passed up its opportunity to show the savings it could make from its

decision

the Commission should include the impact of the

Company's

calculation for setting rates in this TAM. My recommendation would restore

ree

reduction in Company-wide NPC.

Q. When should the Company be allowed to explain and show the savings (if any)

?

A. In the 2025 TAM. The Company elected to make this change in its reply testimony and to not provide a sufficient justification in its reply testimony, which should have been made in its initial filing. As explained above, there is limited time and opportunity to review new evidence presented in surrebuttal testimony. Therefore, the Commission should reject PacifiCorp's change now on a non-precedential basis and, if the Company wishes to make a change, then it should justify the change in its initial filing in next year's TAM.

V. ASSUMED COSTS FROM EPA's OTR

- Q. Could you please summarize for the Commission your position regarding the EPA's OTR.
- A. The Commission should include the impact of OTR on Utah in rates. Absent EPA publishing a ruling on OTR's application to Wyoming, the speculative application of OTR on Wyoming should not be included in TAM rates.²⁴ The Commission should reject the Company's proposal, presented in reply, to include the OTR impact of both Utah and Wyoming in the NPC of TAM rates and defer the actual OTR impact of both for later recovery.

²⁴ Air Plan Approval; Wyoming; Interstate Transport of Air Pollution for the 2015 8-Hour Ozone National Ambient Air Quality Standards, 88 Fed. Reg. 54,998, at 55,004 (Aug. 14, 2023), available at https://www.govinfo.gov/content/pkg/FR-2023-08-14/pdf/2023-16441.pdf. The EPA withdrew its May 24, 2022 proposed disapproval of the 110(a)(2)(D)(i)(I) portion of Wyoming's January 3, 2019 SIP submission.

Q. Please summarize the Company's proposal for the treatment of OTR costs presented in its reply testimony.

A. The Company proposes to include OTR costs for Utah and Wyoming in TAM rates and requests the Commission approve a deferral of the actual OTR impact for later recovery or refund, in a manner similar to that used in the 2023 TAM.²⁵

Q. How has the Company changed its modeling due to changes in its understanding of the OTR?

A. The Company is now modeling its state allowances as one large basket of allowances usable by all generators in the state covered by the OTR. The Company testifies that it changed how it models the use of allowances after the finalization and publication of the OTR in the Federal Register.²⁶

Q. With this change in the Company's assumption about the operation of OTR, do you oppose including Utah in 2024 TAM rates?

A. No, but with the caveat that the industry's adaptation to the OTR program is in its infancy. For instance, the Company testifies that it believes there will be essentially no market for trading OTR allowances in 2024. I suspect that one will evolve in 2024.²⁷ Operational experience under the OTR allowance program will lead to a better understanding of how to minimize operational cost and to model its costs in the NPC forecasts used in rate setting. Consequently, the utility's performance in 2023 and 2024

²⁵ PAC/400, Mitchell/79:3-6.

²⁶ PAC/400, Mitchell/77:1-6.

²⁷ For example, the Washington CCA began its use of GHG allowances to regulate GHG emissions in 2023. There is already a bi-lateral market for allowances (in addition to the quarterly auction conducted by the Washington Department of Ecology).

and its modeling of the impacts of the OTR on NPC in the next TAM should be scrutinized closely.

Q. Why do you oppose the inclusion in rates of the costs of an assumed application of the OTR to Wyoming?

A. As I stated in my response testimony, the EPA published a rule that includes Wyoming as the first in a series of threshold events for including the direct impact of a government regulation in projected rate year rates. In its reply, the Company did not take issue with this principle.

Even if the EPA applies emission constraints to Wyoming under the Clean Air Act, the details of what those constraints will be are not known at this time. As can be observed from the Company's direct and reply testimonies, the projected rate impacts the Company modeled changed by \$156 million between the EPA's issuance of its proposed rule and the publication of the final rule in the Federal Register.²⁸

Q. Has EPA issued any new proposed rulemakings or withdrawn a proposed action under the Federal Clean Air Act?

A. Yes. The EPA withdrew its proposal to disapprove Wyoming's State Implementation Plan (SIP) submission. The EPA simultaneously published a proposal to approve the Wyoming SIP. This makes it far less likely that the EPA will apply the OTR to Wyoming.

²⁸ PAC/400, Mitchell/77:6-8.

Q. Did the Company submit testimony proposing any rate change as a result of EPA approving the Wyoming SIP?

A. No, not that I am aware of. The Company pursued the inclusion of hundreds of millions of dollars in additional costs to ratepayers for a rule that was not in place while choosing to forgo its opportunity to propose any costs for the Wyoming SIP if it is approved in the future. The Commission should not approve of any last minute efforts by the Company to propose costs based on Wyoming SIP- rule that is also not in place.

Q. Why do you oppose the Company's deferral request for the possible impacts of OTR on Wyoming?

A. There is no need to approve a deferral at this time. The event that is the subject of the deferral has not occurred yet and may still not. If it does, then subject to the relevant statutory and Commission standards, PacifiCorp could request a deferral at that time similar to how it could seek a deferral for other changes that could impact NPC. Doing so after the publication of an EPA rule that includes Wyoming will provide the Commission and interested parties with additional information to evaluate such a request and determine what costs will be subject to deferral.

Q. Are you supporting or recommending that the Company file a deferral if the EPA's rule includes Wyoming?

A. No, I have no position on the merits of such a filing, and the application would need to be reviewed at that time. What I am saying is that the Commission should not preemptively approve such a filing, as PacifiCorp appears to be suggesting. There is no need to do so.

Q. Has the Company explained how the deferral would operate?

A. No, it does not explain how the "actual OTR impact" would be determined and how at the time EPA actually publishes a rule, changes to the deferral based on the published rule would be made or even if such changes would be required under its proposal.

Q. Are there other concerns with agreeing to a deferral now?

A. Yes, providing, in advance, a means for the Company to pass through costs of future regulations removes the incentive for the Company to reduce its exposure to the risk of future regulations and the incentive for the Company to prudently pursue compliance options in a least cost manner. The Company's proposal to have a deferral account created for the purpose of passing through costs to ratepayers does not include any actions or commitment to any effort to examine ways to reduce the cost impact of the application of OTR to Wyoming.

VI. Chehalis Emission Modeling

Q. Please summarize the Company's reply testimony to your recommendation to model emission allowance costs on a variable basis.

- A. The Company testifies that I have ignored the fact that the EIM only accepts bids in flat \$/MWh amounts. The Company also states that the EIM controls the final economic dispatch of Chehalis. The Company testifies that due to the EIM bid structure implementing my variable cost approach in its internal operational optimization models would create a discrepancy between the least cost dispatch in its model in the day-ahead and other forward timeframes and the results of the actual least cost dispatch, creating inefficiency and an expected increase in NPC.²⁹
- ²⁹ PAC/400, Mitchell/94:21-95:5.

Q. How do you respond?

A. The Company's argument is based on a number of underlying assumptions that I disagree with. I will unpack them one at a time.

First, I very much doubt, and indeed hope, the Company does not start up the Chehalis plant and run it at or above minimum generation levels solely for the revenue from making EIM sales from incremental changes in the plant's output.³⁰ It seems very unlikely that such a practice is economical. Consequently, the decision to have Chehalis running is not controlled by the EIM but is an economic choice the Company makes. My proposal is to include in that economic decision making the variable emissions rate of the plant as the least cost means of considering the Washington CCA compliance costs.

Second, the higher emissions rate during start up and between generation minimum and generation maximum will result in additional allowance costs. This is because the allowances owed at the end of a year of the operation of Chehalis are based on the measured emissions from the plant. Consideration of additional costs for additional allowances can only be determined by modeling the allowances needed as a variable cost over the range of the plant's operation, a least cost dispatch optimization needs to include modeling the allowance cost on a variable basis.

Third, my recommendation is consistent with . The practice of modeling emission allowance costs on a variable basis is so common in the power industry that . I presented . I presented .

³⁰ Minimum generation is the lowest level of flat continuous operation that a plant can sustain.

opening testimony.³¹ The Company provides no explanation for why it could not

Fourth, the Company argues that because the EIM only takes bids on a \$/MWh basis it cannot consider the variable cost of allowance in Chehalis's participation in the EIM. This is incorrect. The variable cost of allowances over each interval of the plant's output can be calculated and converted to a dollar amount. This dollar amount can then be added to other operational costs the Company includes in its \$/MWh EIM bid.³²

Q. How would your proposal affect the TAM rates and actual power costs the Company incurs?

A. Adopting my proposal to model variable emissions costs is expected to increase total NPC for TAM rates. It would do so because to the extent Chehalis runs at a higher emission rate than the static rate used in Aurora by the Company in this instant case, emissions would increase, increasing the number of allowances required. However, and critically, the Company should adopt this modeling method for its dispatch decisions. Doing so would more accurately reflect the operational cost of Chehalis allowing the Company to better manage its dispatch decisions and reduce its power costs compared to dispatch decisions that ignore the additional compliance costs that the Company will incur from modeling a static emissions rate.

³¹ Vitesse/100, Johnson/24-25.

³² Individual and different EIM \$/MWh bids can be submitted for small segments of a plant's output. As an illustrative example, a gas plant that is operating at 200 MW for load service can bid a 200-220 ramp segment into the EIM at a different price than a ramp segment from 300 to 320.

VII. CONCLUSION

Q. Does that conclude your testimony?

A. Yes.

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

Docket No. UE 420

In the matter of

PACIFICORP, dba PACIFIC POWER,

2024 Transition Adjustment Mechanism

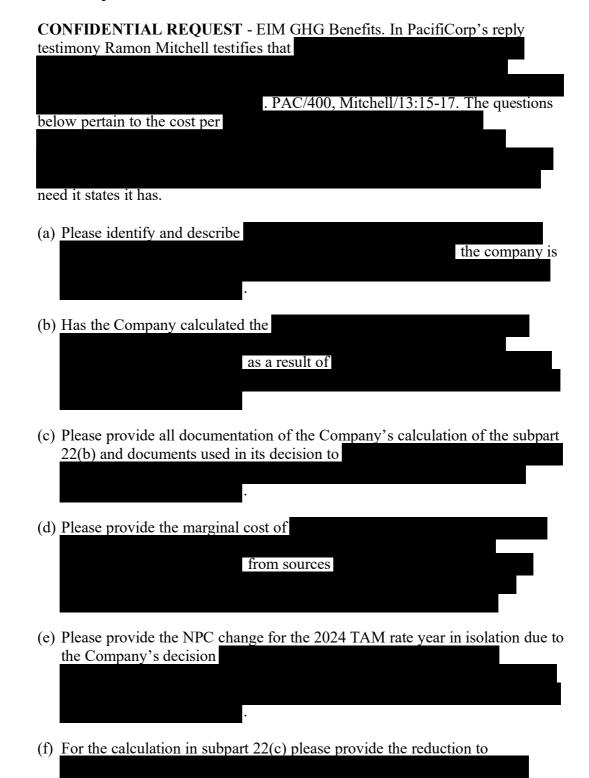
EXHIBIT VITESSE/201

PACIFICORP REDACTED DATA RESPONSES TO VITESSE

August 16, 2023

UE 420 / PacifiCorp August 9, 2023 Vitesse Data Request 25

Vitesse Data Request 25



Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 420 / PacifiCorp August 9, 2023 Vitesse Data Request 25

Vitesse/201 Johnson/2



Confidential Response to Vitesse Data Request 25

(c) The Company assumes that the reference to "subpart 22(b)" is intended to be a reference to subpart (b) of this data request, Vitesse Data Request 25. Based on the foregoing assumption, the Company responds as follows:

Please refer to Confidential Attachment Vitesse 25, tab "HR", cell "B20" which provides the calculation of the value that is

. Please refer

- to the Company's response to subpart (a) for the remainder of the decision.
- (d) Please refer to the Company's response to subpart (a) wherein the Company notes that it
- (e) on a total-company basis for the net power costs (NPC) change in isolation. Additionally,

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(f) The Company assumes that the reference to "subpart 22(c)" is intended to be a reference to subpart (c) of this data request, Vitesse Data Request 25. Based on the foregoing assumption, the Company responds as follows:

Please refer to the Company's response to subpart (e) above.

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Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

Vitesse/201 Johnson/4

PacifiCorp Response to DR 25 Attachment is only available in electronic format.

Vitesse Data Request 26

DA/RT. This question pertains to changes between the workbook "_OR UE-420 ORTAM24_Mitchell Direct Mar 2023 CONF.xlsm" presented in the Company's initial testimony and the workbook "_OR UE-420 ORTAM24_Mitchell Reply July 2023 CONF.xlsm" presented by the Company in its reply filing. The tab "STF DA-RT" in the reply workbook has a section in the spreadsheet (rows 222-234) labeled "historic gain". However, in the initial filed workbook there is no comparable "historic gain" section in either tab "STF DA-RT" or "STF DA-RT Leap".

- (a) Please confirm that the Company added the "historic gain" to the reply workbook and that no "historic gain" was included in the initial filed workbook or specify where it may be found.
- (b) Please confirm that the calculation found under the "historic gain" portion of the Reply workbook was not included anywhere in the Company's initial filing or specify where it may be found.
- (c) Please confirm that the impact on the calculation found under the "historic gain" portion of the reply workbook was not included in the net power costs (NPC) of the Company's initial filing or specify where it may be found.
- (d) The Company states that "[t]he NPC increase from the DA/RT price component's adder resulting from an adjustment to reduce artificial arbitrage is remedied in the DA/RT volume component, which re-introduces revenue into the NPC forecast to offset that price component's decrease to revenues. In this case, the volume component added in historically supported arbitrage revenue of \$7.4 million, total-company". PAC/400, Mitchell/34:14-18 (final emphasis added).
 - i. Please confirm that the volume component that added in "historically supported arbitrage revenue" that the Company references was not included the Company's initial filing or specify where it may be found.
- (e) The Company cites to the 2017 and 2018 TAM to support its claim that the DA/RT included a volume component that added in historical arbitrage revenues. PAC/400, Mitchell/35:5-18.
 - i. Please provide an unaltered version of the Company's initial filed testimony, exhibits or workbooks showing where and how the DA/RT included a volume component that added in "historically supported arbitrage revenue" to the DA/RT's impact on NPC.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

Response to Vitesse Data Request 26

(a) Not confirmed. The Company added these informational summary rows (rows 222-234, tab "STF DA-RT", confidential file "_OR UE-420 ORTAM24_Mitchell Reply July 2023 CONF.xlsm") as a more detailed breakdown of the pre-existing informational summary column present in the "Aurora GN Market Prices CONF.xlsb" file which is a file provided with the initial testimony and the reply filing.

From this perspective, Vitesse is correct that rows 222-234 were not present in the above referenced reply workbook. However, the "historic gain" has been present in the Company's supporting work papers since the 2016 transition adjustment mechanism (TAM). In the initial filing, the informational summary of historic gain is provided in the 5-day confidential work papers supporting the direct testimony of Company witness, Ramon J. Mitchell, provided with the Company's response to the TAM Support Set 2 (5-business day), specifically confidential folder "All_DataSeriesFiles CONF", confidential file "Aurora GN Market Prices CONF.xlsb", tab "Adders Source", column "AF".

Note: for confidential file "Aurora GN Market Prices CONF.xlsb" in the initial filing, in the above referenced column "AF", there is a formulaic error in rows 156-203 which has the informational summary historic gain calculation offset by six rows. The formula in cell "AF156" reads "=SUMIF(\$C150:\$Z150,"<0")". It should read "=SUMIF(\$C156:\$Z156,"<0")". All other formulas in that column from rows 157-203 should be similarly corrected for that offset.

Please refer to Confidential Attachment Vitesse 26-1 for the corrected formulas.

- (b) Not confirmed. Please refer to the Company's response to subpart (a) above which details where, in the initial filing after application of formulaic error correction the historic gain calculation is provided.
- (c) Not confirmed. In the initial filing, the historic gain is embedded within the historical day-ahead / real-time (DA/RT) dollar impact calculation provided in tab "Adders Source" referenced in the Company's response to subpart (a) above, specifically cell range "C156:Z203". Those DA/RT dollar impacts, containing the historic gain (no formulaic error in this non-informational section), are aggregated in row 218 of the same "Adders Source" tab and directly flows into the net power costs (NPC) report of the initial filing, confidential file "_OR UE-420 ORTAM24_Mitchell Direct Mar 2023 CONF.xlsm" as referenced by Vitesse in the preamble of this question. Specifically, tabs "STF DA-RT", "STF DA-RT Leap, "STF DA-RT Hourly" and "STF DA-RT Hourly Leap", specifically row 65 in all four tabs. This row 65 includes that historic gain and for every dollar of historic gain, the total dollars associated with the DA/RT volume component are

decreased to reintroduce this historic gain into the NPC forecast. This historic gain is referred to as historical arbitrage revenue in the reply testimony of Company witness Ramon J. Mitchell.

- (d) Please refer to the Company's response to subpart i. below:
 - i. Not confirmed. The historically supported arbitrage revenue was included in the Company's initial filing. Please refer to the Company's response to subpart (c) above for the details of where and how that historically supported arbitrage revenue impacted the NPC forecast in the initial filing.
- (e) Please refer to the Company's response to subpart i. below:
 - i. For the 2017 TAM, please refer to Confidential Attachment Vitesse 26-2 which contain: (1) one of the predecessor files to "Aurora GN Market Prices CONF.xlsb", titled "NovFin ORTAM17w_DA-RT Price Adder (161108) CONF.xlsx" which on the "Adders" tab (renamed to "Adders Source" in this docket) demonstrates the same informational summary historic gain data (in the same rows and columns) along with the DA/RT dollar impacts that aggregate into row 218; (2) the NPC report "NovFin_ORTAM17 NPC Study_2016 11 15.xlsm" which on the "STF DA-RT" tab, on row 65, captures that historic gain; and (3) please refer to the Company's response to subpart (c) above for further detail.

For the 2018 TAM, please refer to Confidential Attachment Vitesse 26-2 which contain: (1) one of the predecessor files to "Aurora GN Market Prices CONF.xlsb", titled "NovFin_ORTAM18w_DA-RT Price Adder (171108) CONF.xlsx" which on the "Adders" tab (renamed to "Adders Source" in this docket) demonstrates the same informational summary historic gain data along with the DA/RT dollar aggregate impacts; (2) the NPC report "NovFin ORTAM18 NPC CONF.xlsm" which on the "STF DA-RT" tab, on row 65, captures that historic gain; and (3) please refer to the Company's response to subpart (c) above for further detail.

Note: in confidential file "NovFin_ORTAM18w_DA-RT Price Adder (171108) CONF.xlsx", the DA/RT dollar impact calculation is instead cell range "C192:Z251" and the DA/RT dollar aggregate impacts are on row 266.

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Vitesse/201 Johnson/8

PacifiCorp Response to DR 26 Attachments are only available in electronic format.

Vitesse Data Request 28

PacifiCorp recommends the Commission reject Vitesse's price correction adjustment to the DA/RT price adder. PAC/400, Mitchell/39:6. PacifiCorp argues that Vitesse's adjustment is double counting due to the Company's volume component of the DA/RT adjustment shown as a correction in its reply testimony. PAC/400, Mitchell/39:10:14, PAC/401, Mitchell/1 (see "corrections," line C04) and 2023.06.02 PacifiCorp List of Corrections- Omissions, filed June 2, 2023. PacifiCorp's reply testimony does not discuss, compare or contrast the relative merits of using its adjustment versus Vitesse's to calculation 2024 NPC. PAC/400. Mitchell/38:8 through 39:14.

- (a) Please confirm that the only objection PacifiCorp raises in its reply testimony is that the Company includes its volume component of the DA/RT adjustment as part of its DA/RT price adder adjustment.
- (b) Please state and explain the Company's position and arguments (if any) concerning the relative merits of using the Company's volume component of the DA/RT adjustment verses Vitesse's price correction adjustment in the 2024 TAM, including but not limited which approach is better to reflect net power costs (NPC) in the future rate year of 2024.

Response to Vitesse Data Request 28

As an initial matter, the Company does <u>**not**</u> argue that Vitesse's adjustment is double counting due to the Company's volume component of the day-ahead / real-time (DA/RT) adjustment shown as a correction in its reply testimony.

The Company argues that Vitesse's adjustment is double counting due to the historical arbitrage revenue embedded in the Company's volume component of the DA/RT adjustment which has existed since the 2016 transition adjustment mechanism (TAM), Docket UE-296.

The correction to the DA/RT volume component is separate from the double counting issue.

(a) Not confirmed; the question implies a misunderstanding. The only objection the Company raises in its reply testimony is that the Company already includes historical arbitrage revenue in the DA/RT volume component which offsets that arbitrage revenue which is lost in the DA/RT price adder due to the DA/RT price adder's single price adjustment.

This volume component of the DA/RT adjustment and its associated arbitrage revenue is not a part of the DA/RT "price adder adjustment". It is separate and has been so since the 2016 TAM. Note: the DA/RT "price adder adjustment" is synonymous with the DA/RT price component (i.e., they are the same thing in the context of the reply testimony).

(b) The question implies a misunderstanding. The Company is not using the volume component of the DA/RT adjustment in place of Vitesse's price correction adjustment.

The Company is using the historical arbitrage revenue embedded in the volume component of the DA/RT adjustment in place of Vitesse's price correction adjustment.

With this as context, the Company has not yet advanced any position or arguments concerning the relative merits of using the historical arbitrage revenue embedded in the volume component of the DA/RT adjustment in place of Vitesse's price correction adjustment. The Company has only pointed out that Vitesse's price correction adjustment is double counting revenue.

Vitesse Data Request 29

CONFIDENTIAL REQUEST – PacifiCorp identifies its volume component of the DA/RT adjustment as a reflecting in NPC "historical" arbitrage revenue. PAC/400, Mitchell/39. Please confirm that the Company's volume component of the DA/RT adjustment:

- (a) Does not use in its calculation 2024 future rate data, power or fuel prices, or Aurora modeling methods to determine its impact on NPC.
- (b) Relies on a the of historical revenues to project the NPC impact on 2024 rates.
- (c) Uses historical

to measure the impact on NPC for conditions when the purchase and sales price is inverted while, for conditions when the purchase and sales price is not inverted, the DA/RT price adder adjustment uses 2024 rate year inputs and modeling including 2024 projected power prices scaled by the DA/RT price adder adjustment.

Response to Vitesse Data Request 29

- (a) Not confirmed. The Company's volume component of the day-ahead / realtime (DA/RT) adjustment does use in its calculation 2024 power prices and volumes from Aurora to determine its impact on net power costs (NPC). However, the Company understands Vitesse to be referring to the historical arbitrage revenue that is embedded in the DA/RT volume component and addresses that portion specifically below.
- (b) Not confirmed; the question is unspecific. The Company's volume component of the DA/RT adjustment relies on 48 months of data to adjust system balancing transaction volumes and associated costs to reflect the inefficiencies and associated costs of the operational practice of transacting on a monthly basis, rebalancing on a daily basis and finally closing the remaining position on an hourly basis in real-time markets.

To the extent that Vitesse is referring to the historical arbitrage revenues embedded in this volume component, then it is correct that these historical arbitrage revenues rely on 48 months of history to estimate the test period arbitrage revenues.

(c) Not confirmed. The historical arbitrage revenues embedded in the Company's volume component of the DA/RT adjustment uses historical normalized revenues to measure the impact on NPC under <u>all conditions</u>. That is to say

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Vitesse/201 Johnson/12

regardless of whether the prices are inverted or not in the DA/RT price component, the DA/RT volume component always embeds the historical arbitrage revenue into the NPC forecast.

Vitesse Data Request 30

Please confirm that Vitesse's price correction adjustment uses 2024 rate year inputs and assumptions. Vitesse/100, Johnson/15.

Response to Vitesse Data Request 30

Confirmed. However, please refer to the Company's response to Vitesse Data Request 28 for the Company's perception of Vitesse's misunderstanding regarding: (1) the entirety of the day-ahead / real-time (DA/RT) volume component; and (2) the historical arbitrage revenue embedded in the DA/RT volume component.

Vitesse/201 Johnson/14

Vitesse Data Request 31

Please provide all reasoning and supporting documents and data used by PacifiCorp to conclude the impact on 2024 TAM NPC of its volume component of the DA/RT adjustment better reflects the Company's NPC is 2024 than Vitesse's price correction adjustment.

Response to Vitesse Data Request 31

This question implies a misunderstanding. The Company is not comparing the volume component of the day-ahead / real-time (DA/RT) adjustment to Vitesse's price correction adjustment.

The Company is comparing the historical arbitrage revenue embedded in the volume component of the DA/RT adjustment to Vitesse's price correction adjustment.

With the above as context, please refer to the Company's response to Vitesse Data Request 28 subpart (b).

Vitesse Data Request 32

PacifiCorp accepts Vitesse's EIM GHG benefits escalation method. PAC/400, Mitchell/116:9 through 17. PacifiCorp lists the update to EIM benefits as approximately \$24 million which is a total of all three categories of EIM benefits. PAC/401, Mitchell/1, update U08.

(a) Please provide the EIM GHG benefits the Company calculated from its use of Vitesse's EIM GHG benefits escalation method on a standalone basis from the other EIM benefits and based on the company's collective position for calculating 2024 NPC presented in its reply testimony.

Confidential Response to Vitesse Data Request 32

The preamble to this question implies a misunderstanding. There are only two categories of energy imbalance market (EIM) benefits: (1) EIM inter-regional transfer benefits; and (2) EIM GHG benefits.

(b) Please refer to the confidential work papers supporting the reply testimony / July 2023 Update of Company witness, Ramon J. Mitchell, specifically confidential folder "Mitchell Testimony Support CONF\MitchellTestSupp -EIM Benefits Forecast CONF", confidential file, "EIM GHG Forecast Vitesse CONF.xlsx". The benefits are

as referenced in Mr.

Mitchell's reply testimony, Exhibit PAC/400, Mitchell/13, line 15.

The Company is unclear as to what Vitesse means by "the company's collective position for calculating 2024 NPC". Regardless, the EIM benefits are all standalone and unaffected by the cumulative net power costs (NPC) forecast and therefore, there is no other number to provide.

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Vitesse Data Request 34

CONFIDENTIAL REQUEST – PacifiCorp testifies that it

PAC/400, Mitchell/13:15-17. The Company includes the additional cost per MWh of electricity produced from its Chehalis generation plant due to the cost of Washington state cap and invest allowances need for producing power from the plant.

(a) Does the Company intend

under the Washington cap and invest program?

- (b) Has the Company modeled and estimated additional revenues it may be able to realize by
 - i. If not, why not?
 - ii. If so, what are the benefits and how was the calculation done?

Confidential Response to Vitesse Data Request 34

(a) Please refer to the Company's response to Vitesse Data Request 25 subpart (a) for details on

(b) Please refer to the Company's response to Vitesse Data Request 25 subpart (a) for details on



i. Please refer to the Company's response to subpart (b) above.

ii. Please refer to the Company's response to subpart (b) above.

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CERTIFICATE OF SERVICE

I certify that on this 16th day of August 2023, I served the foregoing Confidential Rebuttal Testimony and exhibit of Steve Johnson on behalf of Vitesse, LLC upon the eligible party representatives shown below by electronic communication.

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