

Exh. DCG-26
Dockets UE-200900, UG-200901,
UE-200894
Witness: David C. Gomez

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**AVISTA CORPORATION, d/b/a
AVISTA UTILITIES,**

Respondent.

**DOCKETS UE-200900, UG-200901,
UE-200894 (*Consolidated*)**

**EXHIBIT TO
TESTIMONY OF**

David C. Gomez

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

PacifiCorp Oregon 2020 TAM, Staff Exhibit 300 – Enright

April 21, 2021



Oregon

Kate Brown, Governor

Public Utility Commission

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June 10, 2019

Via Electronic Filing

OREGON PUBLIC UTILITY COMMISSION
ATTENTION: FILING CENTER
PO BOX: 1088
SALEM OR 97308-1088

**RE: Docket No. UE 356 – In the Matter of PACIFICORP, dba PACIFIC POWER, 2020
Transition Adjustment Mechanism.**

Enclosed for electronic filing are Staff Opening Testimony and Exhibits,
Certificate of Service and UE 356 Service List.

Exhibit 100, confidential pages are 5, 16, 31
Exhibit 101-103 and Confidential Exhibit 104

Exhibit 200, confidential pages are 13, 16
Exhibit 200-202 and Confidential Exhibit 203

Exhibit 300, confidential pages are 2, 6-13, 17, 19-21 and 27-30
Exhibit 301-302 and Confidential Exhibit 303

Exhibit 400, confidential pages are 2, 6, 7-8, 10-13
Exhibit 401-402 and Confidential Exhibit 403

Confidential exhibits are being mailed today via US first class mail to parties who have signed
Protective Order No. 16-128.

/s/ Kay Barnes
Kay Barnes
PUC- Utility Program
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CASE: UE 356
WITNESS: MOYA ENRIGHT

**PUBLIC UTILITY COMMISSION
OF
OREGON**

STAFF EXHIBIT 300

Opening Testimony

June 10, 2019

Docket No: UE 356

Staff/300
Enright/1

1 **Q. Please state your name, occupation, and business address.**

2 A. My name is Moya Enright. I am a Senior Utility and Energy Analyst employed
3 in the Energy Rates, Finance and Audit Division of the Public Utility
4 Commission of Oregon (OPUC). My business address is 201 High Street SE,
5 Suite 100, Salem, Oregon 97301.

6 **Q. Please describe your educational background and work experience.**

7 A. My witness qualification statement is found in exhibit Staff/301.

8 **Q. What is the purpose of your testimony?**

9 A. I discuss the 2020 TAM filing and Staff's analysis of the issues. Specifically, I
10 will discuss Staff's review of and recommended Commission action regarding:
11 the Western Energy Imbalance Market (EIM) benefit forecast, Wholesale
12 Transactions and Hedging, Economic Cycling, and Day Ahead/Real Time (DA-
13 RT) Adjustment.

14 **Q. Did you prepare an exhibit for this docket?**

15 A. Yes. I prepared the following Staff Exhibits:

- 16 • Staff/301: Witness Qualification Statement
- 17 • Staff/302: PacifiCorp's responses to Staff DR Nos. 36, 37, 39, 63, 58, and
18 62.
- 19 • Staff/303: PacifiCorp's confidential responses to Staff DR Nos. 36, 37, 24,
20 and 53.

21 **Q. How is your testimony organized?**

22 A. My testimony is organized as follows:

23	Issue 1, Western Energy Imbalance Market Benefit Forecast	4
24	Issue 2, Wholesale Transactions and Hedging	14
25	Issue 3, Economic Cycling	17
26	Issue 4, Day Ahead/Real Time (DA-RT) Adjustment	25

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1 **Q. Please summarize your recommendations and adjustments.**

2 A. Staff makes the following recommendations and adjustments:

3 1. EIM benefit forecast

4 a. Staff recommends an inter-regional transfer benefits forecast of
5 **[BEGIN CONFIDENTIAL]** [REDACTED] **[END CONFIDENTIAL]**
6 on a total company basis.

7 b. Staff recommends including excess GHG revenue for the
8 benefit of customers, equaling an adjustment of **[BEGIN**
9 **CONFIDENTIAL]** [REDACTED] **[END CONFIDENTIAL]** on a
10 total company basis.

11 2. Wholesale transactions and hedging

12 a. No adjustment recommended.

13 3. Economic Cycling

14 a. Staff recommends removing the four-month economic cycling
15 period restriction.

16 b. Staff recommends allowing GRID to economically cycle non-
17 majority-owned units as a case study, and based on those
18 results, PacifiCorp discuss economic cycling opportunities with
19 co-owners.

20 c. Staff recommends PacifiCorp conduct a cost benefit analysis of
21 allowing EIM participating units to economically cycle in GRID.

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- 1 4. DA-RT adjustment
- 2 a. Staff recommends an adjustment to the DA-RT price adder
- 3 calculation to use historic daily prices rather than historic
- 4 average monthly prices.

1 **ISSUE 1, WESTERN ENERGY IMBALANCE MARKET BENEFIT FORECAST**

2 **Q. What is the Energy Imbalance Market?**

3 A. The Energy Imbalance Market (EIM) is a real-time wholesale power market. Its
4 automated dispatch system provides economic benefits to participants by
5 efficiently balancing load and generation resources. It also provides reliability
6 and renewable integration benefits to the grid. PacifiCorp joined the EIM in
7 2014.

8 **Q. How does participating in the EIM benefit PacifiCorp?**

9 A. PacifiCorp benefits from its participation in EIM in a number of ways:

- 10 • *Excess Greenhouse Gas (GHG) Revenue.* GHG revenue is awarded when
11 CAISO determines generation within an EIM entity served CAISO load.¹
12 Excess GHG revenue results when a GHG emitting resource and non-GHG
13 emitting resource are generating at a node, power is being exported from the
14 node to California, and more power is generated than is exported to
15 California.
- 16 • *Flexibility Reserve Savings.* These savings occur because the diversified
17 footprint of EIM allows PAC to hold lower reserves than would otherwise be
18 necessary.
- 19 • *Intra-Regional Transfer Benefits.* These benefits accrue through EIM
20 optimizing the automated dispatch of PacifiCorp's EIM participating units.

¹ Energy generated in California or imported into the state to serve California load is subject to California's GHG obligation. GHG revenue in EIM is intended to compensate entities importing power into California for their compliance costs.

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Staff/300
Enright/5

- 1 • *Inter-Regional Transfer Benefits*. These benefits arise due to EIM facilitating
2 transactions between PacifiCorp, CAISO, and other EIM participants on a
3 five- and 15-minute basis.

4 **Q. Are each of the four benefits forecasted in the 2020 TAM?**

- 5 A. No, only two of the four benefits are currently forecasted in the TAM. Flexibility
6 reserve savings and inter-regional transfer benefits are currently forecasted;
7 however, excess GHG revenue and intra-regional benefits are not.

8 **Q. Please explain how flexibility reserve savings and inter-regional**
9 **transfer benefits are forecasted in the 2020 TAM.**

- 10 A. PacifiCorp proposes to use different forecasting approaches for each benefit:

- 11 • *Flexibility Reserve Savings*. These savings occur because the diversified
12 footprint of EIM allows PAC to hold lower reserves than would otherwise be
13 necessary. PacifiCorp has asserted that due to its participation in EIM, it will
14 be required to hold approximately 130 MW less reserves in 2020 than if it did
15 not participate. This benefit is modelled by simply reducing the reserve
16 requirement in GRID by 130 MW. Flexibility Reserve Savings in the 2020
17 TAM amount to a benefit of \$1.6 million.²
- 18 • *Inter-regional transfer benefits*. These benefits occur when PAC earns money
19 by exporting to EIM or saves money by importing from EIM. PacifiCorp has
20 forecasted this benefit using a linear regression.



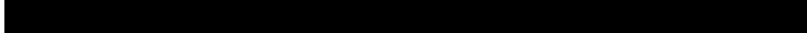

² PAC/100, Wilding/28, line 12.

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1 **Q. Has PAC changed its approach in forecasting EIM benefits in this year's**
2 **TAM filing?**

3 A. Yes. PacifiCorp has proposed a new approach for forecasting inter-regional
4 transfer benefits. In the 2019 TAM, inter-regional transfer benefits were
5 forecasted using a linear regression with one independent variable: time.
6 PacifiCorp now proposes to use four independent variables: electricity market
7 prices, gas market prices, EIM transfer capability, and spring oversupply
8 conditions.

9 **Q. Does Staff have any concerns with the new model proposed by**
10 **PacifiCorp?**

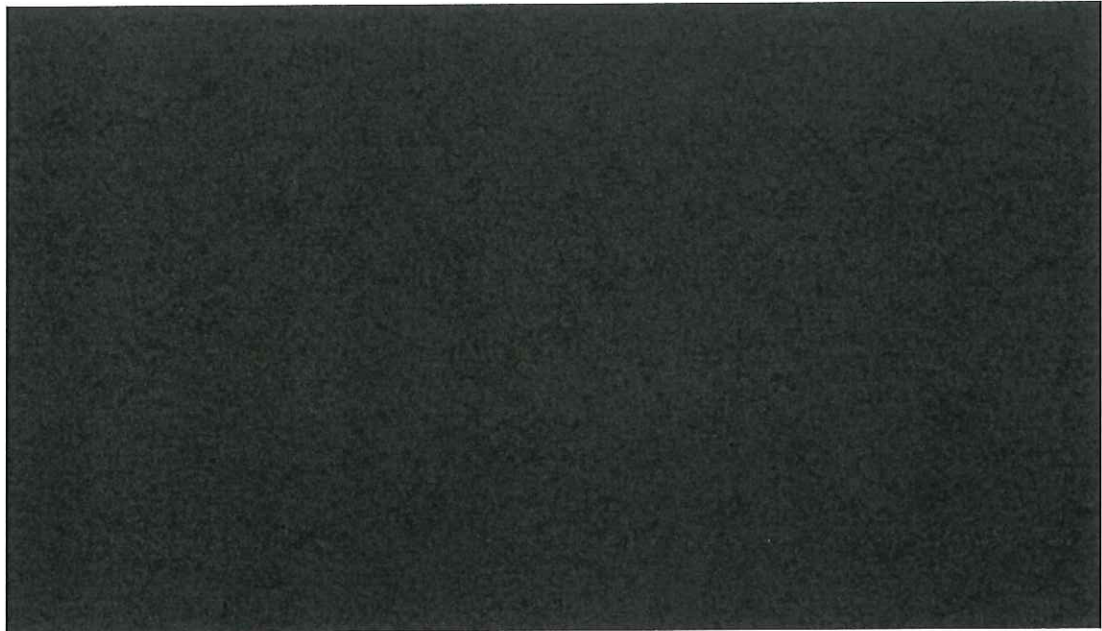
11 A. Yes, Staff is concerned to see a proposed **[BEGIN CONFIDENTIAL]** 
12  **[END CONFIDENTIAL]** reduction in EIM benefits in the 2020 TAM
13 compared with the 2019 TAM. There has been no convincing evidence
14 presented to suggest that EIM benefits should decline in 2020. In fact, the
15 latest data made available by PacifiCorp shows that **[BEGIN**
16 **CONFIDENTIAL]** 
17  **[END**
18 **CONFIDENTIAL].**³ These trends can be observed in Figure 1.

19 **[BEGIN CONFIDENTIAL]**

³ PacifiCorp confidential workpaper "ORTAM20w_EIM Benefits CONF".

1

Figure 1



2

3

[END CONFIDENTIAL]

4

The model proposed by PacifiCorp adds weight to springtime results in recent years, however the Company has not presented any empirical evidence to demonstrate that spring oversupply conditions affect EIM results, nor has it provided convincing arguments to support its approach.

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Modeling inter-regional benefits with an added emphasis on spring months

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reduces the impact of higher prices and higher loads at other times of the

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year. Higher prices and higher loads are the same market conditions which

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PacifiCorp identified as drivers of higher EIM benefits in testimony.⁴ It is not

12

logical that this approach would be taken considering the Company's

13

expectation of higher prices in 2020 power markets.⁵

⁴ PAC/100, Wilding/30 & 31.

⁵ PAC/100, Wilding/13.

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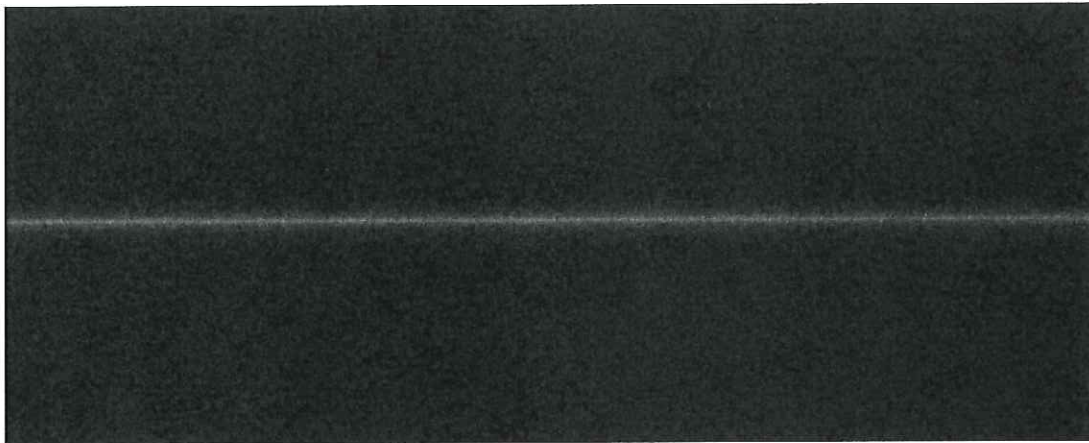
1 **Q. Have PacifiCorp’s models for forecasting inter-regional dispatch**
2 **benefits been accurate to date?**

3 A. No. Figure 2 below summarizes how inter-regional dispatch benefits were
4 forecasted in previous TAM filings. Staff measures accuracy as the percentage
5 of actual benefits accounted for in the forecast.

6 As demonstrated in Figure 2, inter-regional dispatch benefits have been
7 consistently under forecasted in the TAM. In the three year period of 2016 to
8 2018, the cumulative difference between the forecast and actuals is [BEGIN
9 CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL]. This
10 represents a [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL]
11 reduction to NPC that customers did not benefit from.

12 [BEGIN CONFIDENTIAL]

13 *Figure 2*



14 [END CONFIDENTIAL]⁶

15 ⁶ UE 339 - PAC/100, Wilding/41, table 5, and PacifiCorp confidential workpaper “ORTAM20w_EIM Benefits CONF”.

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1 **Q. What action does Staff recommend?**

2 A. Staff recommends reverting to the model used to forecast inter-regional
3 benefits in the 2019 TAM, which was agreed on by PacifiCorp and parties.
4 Although previous models to date have under-forecast benefits, the 2019 TAM
5 model is yet to show inaccuracies in its forecast ability. It was the first model in
6 which all parties agreed to a methodology. It is simpler and more transparent
7 than the Company's updated model. It further provides a more common sense
8 forecast result as it maintains the trend of increasing benefits over time
9 evidenced in Figure 1 above. This model forecasts inter-regional transfer
10 benefits totaling [BEGIN CONFIDENTIAL] [REDACTED] [END
11 CONFIDENTIAL] for 2020⁷.

12 **Q. Please explain why excess GHG revenue and intra-regional transfer**
13 **benefits are not forecasted in the 2020 TAM?**

14 A. *Intra-Regional Transfer Benefits.* Discussion with PacifiCorp has led Staff to
15 understand that intra-regional benefits arising from optimized dispatch are
16 comparable to the optimization carried out in GRID. This indicates that
17 although not explicitly forecasted in the TAM, intra-regional benefits are
18 reflected in NPC.
19 *Excess GHG Revenue.* PacifiCorp was unable to provide a reasonable
20 response as to why GHG revenue was not included. PacifiCorp has stated
21 that it does not currently have a model to forecast excess GHG revenue.
22 However, the Company did include a GHG adjustment to its forecast in

⁷ PacifiCorp confidential workpaper "ORTAM20w_EIM Benefits CONF".

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1 UE 323 (2018 TAM) and excess GHG revenue is included in the currently
2 proposed EIM benefits model for Portland General Electric (UE 359).

3 **Q. Would ratepayers benefit from Excess GHG revenue being included in**
4 **the TAM?**

5 A. Yes, ratepayers would benefit from including excess GHG revenue in the
6 TAM through a reduction to net power costs.

7 PacifiCorp's responses to Staff discovery requests show that PacifiCorp has
8 received GHG revenue totalling [BEGIN CONFIDENTIAL] [REDACTED] [END
9 CONFIDENTIAL] since joining EIM.⁸ The utility maintains that due to its
10 record keeping processes it is unable to provide data on what proportion of
11 the GHG revenue is excess to its EIM GHG obligation.⁹

12 Excess GHG revenue is calculated as the difference between GHG revenue
13 earned in EIM, and GHG expenses to meet obligations arising from EIM sales
14 associated with the cost of compliance with California Air Resource Board
15 Cap-and-Trade program. PacifiCorp currently records GHG expenses for both
16 non-EIM bilateral sales into California and EIM trades in the same account.
17 Staff discovery has shown that the Company's total GHG expense for EIM
18 and bilateral sales since joining EIM was [BEGIN CONFIDENTIAL] [REDACTED]
19 [REDACTED] [END CONFIDENTIAL].¹⁰

⁸ Staff/302, Enright/1 (PacifiCorp's response to Staff DR 36); Staff/303, Enright/1 (confidential attachment to PacifiCorp's response to Staff DR 36).

⁹ Staff/302, Enright/2 (PacifiCorp's response to Staff DR 37); Staff/302, Enright/3 (PacifiCorp's response to Staff DR 39).

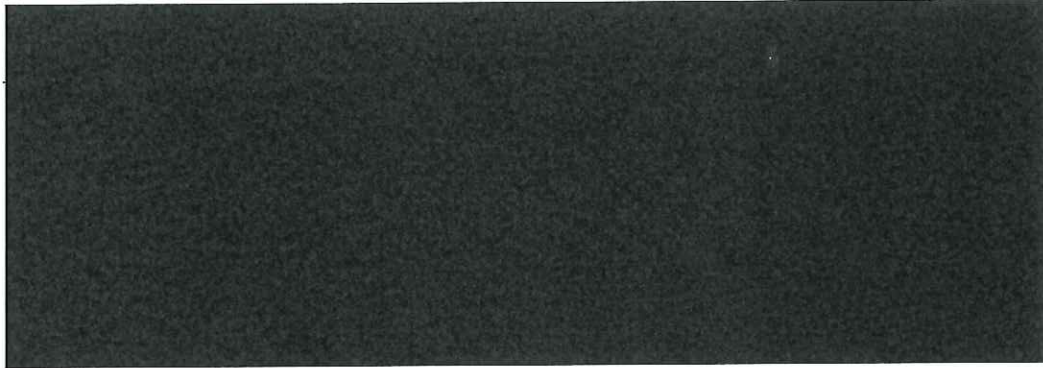
¹⁰ Staff/302, Enright/2 (PacifiCorp's response to Staff DR 37); Staff/303, Enright/2 (confidential attachment to PacifiCorp's response to Staff DR 37).

1

[BEGIN CONFIDENTIAL]

2

Figure 3



3

4

[END CONFIDENTIAL]¹¹

5

Staff estimates that PacifiCorp has received a minimum of [BEGIN

6

CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] in excess GHG

7

revenue since joining EIM. It is important to note that actual excess GHG

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revenue is higher than this estimate. The correct value of excess GHG

9

revenue cannot be calculated by Staff using the data provided by

10

PacifiCorp.¹² This is due to EIM GHG expenses and non-EIM GHG expenses

11

being tracked together. In Staff's calculation the excess GHG revenue is

12

reduced due to the GHG expenses from PacifiCorp's non-EIM trades into

13

California being included in the overall GHG expense figure.

14

Q. What action does Staff recommend?

15

A. Staff recommends that excess GHG revenue be included in EIM benefits for

16

the 2020 TAM. As PacifiCorp has not been forthcoming with the details of its

¹¹ Staff/303, Enright/1 (confidential attachment to PacifiCorp's response to Staff DR 36); Staff/303, Enright/2 (confidential attachment to PacifiCorp's response to Staff DR 37).

¹² Staff/302, Enright/2 (PacifiCorp's response to Staff DR 37); Staff/302, Enright/3 (PacifiCorp's response to Staff DR 39).

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1 EIM-related GHG expenses, Staff recommends that GHG revenues in their
2 entirety are allocated as an EIM benefit.

3 Staff recommends a forecast of [BEGIN CONFIDENTIAL] [REDACTED] [END
4 CONFIDENTIAL] in GHG revenue for the 2020 TAM. This amounts to the
5 average GHG revenue received in the four full calendar years that PacifiCorp
6 has participated in EIM.

7 Staff also recommends that PacifiCorp begin tracking GHG expenses from EIM
8 sales in an individual account, so that in future TAM filings more accurate data
9 is available to estimate excess GHG revenue.

10 **Q. Are fixed EIM costs being recovered?**

11 A. Yes. In UE 339, the Commission ordered that fixed EIM costs continue to be
12 recoverable under the TAM on an interim basis until the Company's next
13 general rate case.

14 **Q. What are Staff's recommendations?**

15 A. Staff has recommendations relating to GHG revenue and inter-regional transfer
16 benefits.

- 17 • *Inter-regional transfer benefits.* Staff recommends rejecting the model for
18 inter-regional transfer benefits inter-regional transfer benefits proposed by
19 PacifiCorp, and that the model approved in the 2019 TAM is used in its place.
20 Staff recommends a forecast of [BEGIN CONFIDENTIAL] [REDACTED] [END
21 CONFIDENTIAL] for inter-regional transfer benefits.
- 22 • *Excess GHG revenues.* Staff recommends that an adjustment of [BEGIN
23 CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] to the 2020 TAM to

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Enright/13

1 account for excess GHG revenue. This is the average GHG revenue received
2 in the four full years that PacifiCorp has been operating in EIM. Staff also
3 recommends that PacifiCorp begin to track GHG expenses from EIM sales in
4 an individual account, so that in future TAM filings, more accurate data is
5 available to estimate excess GHG revenue.

- 6 • *Total EIM benefits.* Staff recommends a total EIM benefit of **[BEGIN**
7 **CONFIDENTIAL]** [REDACTED] **[END CONFIDENTIAL]**. See Figure 4 for a
8 breakdown of this amount.

9 **[BEGIN CONFIDENTIAL]**

10 *Figure 4*



11

12 **[END CONFIDENTIAL]**

UE 356 / PacifiCorp
May 29, 2019
OPUC Data Request 36

OPUC Data Request 36

EIM Benefits - In Excel format, please show total monthly revenue from the EIM greenhouse gas (GHG) adder since joining EIM.

Response to OPUC Data Request 36

PacifiCorp records greenhouse gas (GHG) revenues received in California Independent System Operator (CAISO) Charge Code 491 in SAP Account 508015. Please refer to Confidential Attachment OPUC 36 for the SAP detail. Note: CAISO resettles months multiple times, therefore, in any given SAP month multiple production months are being recorded. The production period is noted in the "text" column of the SAP detail.

Confidential Attachment OPUC 36 is designated as Protected Information under Order No. 16-128 and may only be disclosed to qualified persons as defined in that order.

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 356 / PacifiCorp
May 29, 2019
OPUC Data Request 37

OPUC Data Request 37

EIM Benefits - In Excel format, please show total monthly expenses for GHG compliance with the California Air Resources Board since joining EIM.

Response to OPUC Data Request 37

PacifiCorp records greenhouse gas (GHG) expenses incurred by selling bilaterally into the California Independent System Operator (CAISO) market or through the energy imbalance market (EIM) in SAP Account 546516. Please refer to Confidential Attachment OPUC 37 which provides the SAP detail. The "Text" field in the SAP detail notes what production period the amounts relate to. PacifiCorp does not differentiate between GHG obligations incurred related to the EIM and wholesale bilateral sales. This expense relates to both EIM and bilateral California sales.

Confidential Attachment OPUC 37 is designated as Protected Information under Order No. 16-128 and may only be disclosed to qualified persons as defined in that order.

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 356 / PacifiCorp
May 29, 2019
OPUC Data Request 39

OPUC Data Request 39

EIM Benefits - Please provide the calculation methodology for GHG proceeds, including an explanation of the rationale for using the methodology. If PacifiCorp is not calculating GHG proceeds as GHG adder revenue less GHG compliance expenses for California load, please also calculate the benefits using this methodology.

Response to OPUC Data Request 39

PacifiCorp does not calculate a net proceeds on greenhouse gas (GHG) related to wholesale activities and the energy imbalance market (EIM). PacifiCorp's goal is to procure a sufficient quantity of allowances to cover the GHG obligation incurred by making bilateral wholesale sales into California and the EIM. PacifiCorp can identify the revenues received from the EIM to cover the obligation incurred in the EIM – please refer to the Company's response to OPUC Data Request 36. PacifiCorp records expense related to the bilateral and EIM activity by accruing expense at the average cost of inventory of GHG allowances purchased – please refer to the company's response to OPUC Data Request 37. PacifiCorp, however, does not know the proceeds received to cover the GHG obligation incurred by non-EIM bilateral sales into California. There is no GHG cleared price in the California Independent System Operator (CAISO) day-ahead market. Thus, when PacifiCorp sells into the CAISO day-ahead market and receives a day-ahead locational marginal price (LMP) proceeds, it is not possible to know how much of those proceeds relate specifically to GHG and not energy.

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.