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August 21, 2020

***Via Electronic Filing***

Public Utility Commission of Oregon  
Attention: Filing Center  
201 High Street SE, Suite 100  
P.O. Box 1088  
Salem, OR 97308-1088

Re: UE 377 – Portland General Electric Company 2021 Annual Power Cost Update Tariff

Dear Filing Center:

Enclosed for filing today in UE 377 is the Joint Testimony in Support of the Net Variable Power Cost Stipulation and Exhibits of Sabrina Soldavini, William Gehrke, Lance Kaufman, and Greg Batzler (Stipulating Parties/100-101, Soldavini-Gehrke-Kaufman-Batzler), together with the Declaration of Greg Batzler.

These documents are being filed by electronic mail with the Filing Center.

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

Sincerely,

*/s/ Douglas C. Tingey*

Douglas C. Tingey  
Associate General Counsel

DCT:hp  
Enclosures

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF THE STATE OF OREGON**

**UE 377  
Annual Update Tariff**

**PORTLAND GENERAL ELECTRIC**

**Joint Testimony in Support of the  
Net Variable Power Cost Stipulation**

**Direct Testimony of**  
*Sabrina Soldavini, OPUC*  
*William Gehrke, CUB*  
*Lance Kaufman, AWEC*  
*Greg Batzler, PGE*

**August 21, 2020**

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## I. Introduction

1 **Q. Please state your names and positions with your respective organizations.**

2 A. My name is Sabrina Soldavini. I am a Senior Regulatory Analyst for the Public Utility  
3 Commission of Oregon (OPUC) Staff. My qualifications appear in Staff Exhibit 101.

4 My name is William Gehrke. I am an Economist for the Oregon Citizens' Utility Board  
5 (CUB). My qualifications appear in CUB Exhibit 101.

6 My name is Lance Kaufman. I am an independent consultant testifying on behalf of the  
7 Alliance of Western Energy Consumers (AWEC). My qualifications appear in AWEC  
8 Exhibit 101.

9 My name is Greg Batzler. I am a Regulatory Consultant for Portland General Electric  
10 (PGE). My qualifications appear in PGE Exhibit 100.

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

12 A. Our purpose is to describe and support the stipulation (Stipulation) between OPUC Staff  
13 (Staff), CUB, AWEC, and PGE (Stipulating Parties) resolving all issues identified by the  
14 Stipulating Parties related to PGE's 2021 forecast of net variable power costs (NVPC). A  
15 copy of the Stipulation is provided as Stipulating Parties Exhibit 101.

16 **Q. What is the basis for the Stipulation?**

17 A. PGE filed its initial forecast of 2021 NVPC on April 1, 2020 as part of its Annual Update  
18 Tariff (AUT) filing (UE 377). Over the following three months, PGE responded to 154 data  
19 requests from Staff, AWEC, and CUB. On June 8, 2020, PGE filed supplemental testimony  
20 regarding the power purchase agreement executed between PGE and the Public Utility District  
21 No. 1 of Douglas County (Douglas PPA) for surplus capacity and energy and its effect on  
22 PGE's 2021 Net Variable Power Costs. PGE's 2021 NVPC forecast was updated on July 15,

1       2020.<sup>1</sup> On June 5, 2020, Parties held a technical workshop to discuss issues and review PGE's  
2       Multi-Area Optimization Network Energy Transaction (MONET) power cost forecasting  
3       model. Staff, AWEC, and CUB submitted opening testimony on June 26, 2020 and  
4       supplemental testimony regarding the Douglas PPA on July 9, 2020. Parties held settlement  
5       discussions on July 13, 2020. At the July 13 meeting, Parties reached an agreement that they  
6       found reasonable for settlement. The Stipulation reached at the July 13, 2020 meeting resolves  
7       all issues raised by Parties in this docket (UE 377).

8       **Q. What power cost issues were raised by Staff, AWEC, and CUB in testimony and resolved**  
9       **in this settlement?**

10      A. The issues that were raised and settled are related to:

- 11           • Western Energy Imbalance Market (Western EIM or EIM);
- 12           • Faraday Production Tax Credits (PTCs);
- 13           • Gas Resale Optimization;
- 14           • Variable Energy Resources (VER) Integration Update;
- 15           • Transmission Resales;
- 16           • Colstrip Forced Outage Rate (FOR);
- 17           • Carty FOR;
- 18           • Port Westward (PW)/Beaver Complex Gas Supply;
- 19           • Gas Resale Transactions on the GTN Pipeline during Carty and Coyote Springs  
20           generation plant forced outages;
- 21           • BPA Transmission Rights Purchase;
- 22           • Qualifying Facilities (QFs);

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<sup>1</sup> PGE will provide three more 2020 NVPC forecast updates on October 1, November 6, and November 16.

- 1           • PCAM/AUT Construct;
- 2           • Automated Demand Response (ADR) Programs; and
- 3           • Beaverton Public Safety Center (BPSC) Energy Storage Microgrid.

4           We explain the resolution of each of these issues below.

5           **Q. Are there any remaining issues not addressed in the Stipulation?**

6           A. No. The Stipulation addresses and settles all issues in Docket No. UE 377.

## II. Stipulated Issues

### A. Western EIM

1 **Q. What concerns regarding the Western EIM did Parties identify?**

2 A. Both Staff and AWEC raised concerns regarding PGE’s method to forecast benefits resulting  
3 from the participation in the Western EIM. To address their concerns, Parties provided the  
4 following recommendations:

5 1. Staff recommended that PGE add net benefits accruing from flexible ramping product  
6 award revenues to the EIM benefits forecast and increase the Greenhouse Gas (GHG)  
7 benefit forecast to reflect PGE’s use of California Carbon Offsets (CCO) in lieu of  
8 California Carbon Allowances for California Air Resource Board (CARB) compliance  
9 purposes.

10 2. Both Staff and AWEC raised issues related to the transaction limits modeled by PGE in  
11 the EIM subhourly dispatch benefits methodology. To address their issues, AWEC  
12 proposed modifications to PGE’s EIM market trading limits methodology, while Staff  
13 requested that PGE address in reply testimony how EIM trades in the forecast are  
14 representative of those occurring in actual operations.

15 **Q. Have Parties resolved this issue in this settlement?**

16 A. Yes. Parties agreed that PGE will include CAISO flexible ramping product award savings of  
17 approximately \$0.4 million in its 2021 EIM benefit forecast. Also, PGE will assume four  
18 percent of its 2021 forecast GHG cost obligation can be met with CCOs PGE has purchased  
19 since joining EIM. Additionally, Parties agreed that, except for the GHG benefits forecast,  
20 all results from PGE’s 2021 EIM Benefit Methodology will not change from PGE’s July 15,  
21 2020 MONET update. For GHG benefits, Parties agreed that PGE will continue to update

1 California Carbon Allowance (CCA) prices consistent with the date updates used for electric  
2 and gas prices in this AUT proceeding.

3 **Q. Staff recommended that PGE address the EIM transaction limits issue in reply**  
4 **testimony. How have Parties resolved this issue?**

5 A. Parties agreed that PGE will hold a workshop with the other Stipulating Parties on EIM trading  
6 limit methodology prior to PGE's initial 2022 NVPC filing. Furthermore, Parties agreed that  
7 presentation materials, including any workpapers used in developing the presentation  
8 materials, will be provided to the Parties no later than two weeks prior to the date of the  
9 workshop. As part of the workshop, PGE will address:

- 10 a. EIM trading limits methodology changes proposed by Parties in their opening testimony;  
11 and  
12 b. Parties' questions regarding whether EIM trades in the forecast are representative of  
13 trades that occur in actual operations and the interaction between PGE's participation in  
14 the EIM and PGE's reserve requirement.

**B. Faraday PTCs**

15 **Q. Please describe the issue regarding the Faraday PTCs.**

16 A. CUB raised concerns regarding Production Tax Credits (PTCs) estimated to be generated in  
17 2021 that are associated with eligible incremental generation at PGE's Faraday Powerhouse  
18 expected to result from the completion of the Faraday Repowering Project. CUB  
19 recommended that PGE include these PTC benefits in the 2021 NVPC forecast.

20 **Q. Have Parties resolved this issue in this settlement?**

21 A. Yes. Parties agreed that PGE will reduce its 2021 NVPC forecast by approximately \$0.6  
22 million to reflect forecasted PTC benefits associated with Faraday incremental generation.



**C. VER Integration Update**

1 **Q. Please describe PGE’s proposal regarding the VER Integration Update.**

2 A. In PGE Exhibit 200, filed on April 1, 2020, PGE proposed to change the Schedule 125  
3 language regarding costs associated with wind integration to “costs associated with integrating  
4 variable energy resources.” Then, on June 15, 2020, PGE submitted a letter in the docket to  
5 notify Parties that PGE would be updating its VER load following and regulating margin  
6 obligations as part of the July 15, 2020 MONET update, in order to reflect the addition of  
7 Wheatridge and on-system solar resources to PGE’s resource portfolio.

8 **Q. Did any of the Parties express concerns about PGE’s proposal regarding the VER  
9 Integration Update?**

10 A. Yes. Both Staff and CUB raised concerns regarding PGE’s proposed update. Staff opposed  
11 PGE’s proposed VER integration update on the basis that Staff had insufficient time to review  
12 the proposal. CUB recommended that Schedule 125 language be modified to only reflect  
13 specific variable energy resources in PGE’s system, when they are modeled in PGE’s NVPC  
14 forecast. As such, CUB stated they would be comfortable with a change to Schedule 125  
15 language in this proceeding to include costs associated with both wind and solar integration.

16 **Q. Have Parties resolved this issue in this settlement?**

17 A. Yes. Parties agreed that PGE will update the load following and regulating margin obligations  
18 included in the 2021 NVPC forecast to only reflect the addition of the Wheatridge wind  
19 facility into PGE’s resource portfolio. Furthermore, Parties agreed that the language in  
20 Schedule 125 regarding updates to the costs associated with wind integration will not be  
21 changed in this proceeding.

**D. Gas Resale Optimization**

1 **Q. What concerns regarding gas resale optimization did Parties identify?**

2 A. Staff raised concerns regarding PGE's assumption of fuel transportation losses on the Gas  
3 Transmission Northwest (GTN) pipeline included in the gas resale optimization modeling as  
4 a percent increase to the AECO gas price curve. Staff recommended that PGE remove the  
5 fuel losses assumption from the gas resale optimization modeling on the basis that it appeared  
6 to Staff the percentage increase is not applied anywhere else in PGE's 2021 NVPC forecast.

7 **Q. Please describe the modeling of GTN fuel losses in PGE's gas resale optimization model.**

8 A. In the initial 2021 NVPC forecast filed April 1, PGE assumed a three percent gas  
9 transportation loss factor in gas resale optimization modeling that reduced the AECO-  
10 Stanfield gas price spread. In the Minimum Filing Requirements filed in support of PGE's  
11 initial 2021 NVPC forecast filed April 1, 2020, PGE provided that the loss factor will be  
12 updated in the November MONET update.

13 **Q. Have Parties resolved this issue in this settlement?**

14 A. Yes. Parties agreed that PGE will update the fuel losses assumption in the gas resale  
15 optimization modeling to be consistent with the GTN fuel loss assumption used in the  
16 MONET model for dispatching resources.

**E. Remaining Issues in the Stipulation**

17 **Q. What are the remaining power cost issues that are resolved through this settlement.**

18 A. The remaining power cost issues that Parties resolved as part of this agreement include:

- 19 • Transmission Resales;  
20 • Colstrip FOR;

- 1 • Carty FOR;
- 2 • PW/Beaver Complex Gas Supply;
- 3 • Gas Resale Transactions on the GTN Pipeline during Carty and Coyote Springs
- 4 generation plant forced outages;
- 5 • BPA Transmission Rights Purchase;
- 6 • Qualifying Facilities (QFs);
- 7 • PCAM/AUT Construct;
- 8 • ADR Programs; and
- 9 • BPSC Energy Storage Microgrid.

10 **Q. How have Parties resolved these issues in this settlement?**

11 A. For settlement purposes, PGE will reduce its 2021 NVPC forecast by \$2.2 million related to  
12 the remaining issues listed above. Parties agreed that the \$2.2 million reduction to PGE's  
13 2021 NVPC forecast and the agreement that PGE will hold a workshop with Parties to discuss  
14 Transmission Resale forecast and PW/Beaver Complex Gas supply constraints prior to PGE's  
15 initial 2022 NVPC filing represent appropriate and reasonable resolutions for these issues.  
16 Parties also agreed that workshop presentation materials will be provided to Parties no later  
17 than two weeks prior to the date of the workshop.

18 **Q. Please describe the Transmission Resales issue.**

19 A. AWEC raised concerns regarding PGE's forecast of transmission resale revenues modeled in  
20 the 2021 NVPC forecast. AWEC recommended that PGE change the forecast method to  
21 estimate the 2021 transmission resale revenues based on the average of the most recent four-  
22 years of actual transmission resales revenues.

23 **Q. What is PGE's position regarding the Transmission Resale issue?**

1 A. PGE does not agree with AWEC’s recommendation and adjustment because it incorporates  
2 historical transmission resale revenues that are related to a long-term transmission resale  
3 agreement no longer in effect. Moreover, costs incurred by PGE for short-term transmission  
4 purchases are not captured in AWEC’s analysis. For the 2021 NVPC modeling the  
5 transmission resale revenue forecast assumes that PGE has 300 MW of transmission capacity  
6 available for resale for Q1, Q2, and Q4 of 2021. PGE does not assume any transmission  
7 available for resale in Q3 due to expected transmission needs for PGE’s load service  
8 obligation or PGE’s Market Sales Obligation (Delivery to the market hub).

9 **Q. Did Parties reach an agreement specific to this item?**

10 A. Yes, Parties agreed that PGE will hold a workshop to further discuss the transmission resale  
11 forecast methodology prior to PGE’s initial 2022 NVPC filing.

12 **Q. Please describe the Colstrip FOR issue.**

13 A. AWEC questioned the prudence of the extended forced outages that occurred at Colstrip in  
14 2018 due to plant emissions exceeding the Mercury and Air Toxic Standards compliance  
15 limits. AWEC recommended that PGE remove the 2018 actual Colstrip forced outage rate  
16 from the four-year rolling average methodology approved in Commission Order No. 10-414  
17 and used by PGE to model the 2021 Colstrip FOR. Consistent with Commission Order No.  
18 10-414, AWEC recommended that the 2018 Colstrip FOR be replaced with the 20-year rolling  
19 average FOR. In support of their recommendation, AWEC cited the decision in the  
20 Washington case UE-109882 and referenced PGE’s responses to data requests that provided  
21 documents and communications between PGE, the Colstrip plant operator, and other co-  
22 owners that occurred prior to the 2018 outages.

1 **Q. What is PGE’s position regarding the Colstrip FOR issue?**

2 A. PGE does not agree with AWEC’s recommendation and adjustment noting that the WUTC  
3 did not find the operations of Washington utilities on the matter of Colstrip 2018 June and  
4 July outages to be imprudent. The WUTC rather stated that it was not able to determine  
5 prudence due to an insufficient evidentiary record. Additionally, PGE proposed changes to  
6 AWEC’s methodology that would result in a reduction to the adjustment AWEC proposed.

7 **Q. Please describe the Carty FOR issue.**

8 A. AWEC raised concerns regarding the Carty FOR modeling in PGE’s 2021 NVPC forecast  
9 because the four year average includes two years of hypothetical outage rates which are not  
10 representative of future expected outages. AWEC recommended that PGE modify the  
11 Schedule 125 methodology and calculate the 2021 Carty FOR using a three-year average of  
12 actuals and forecast which included PGE’s 2018 through May 2020 actuals and June 2020  
13 through December 2020 forecasted FOR.

14 **Q. What is PGE’s position regarding the Carty FOR issue?**

15 A. PGE does not agree with AWEC’s proposal contending that there is no reasonable basis for  
16 changing Carty’s FOR forecast methodology from what is prescribed in Schedule 125. PGE  
17 is modeling the 2021 Carty FOR using the four-year rolling average of actuals methodology  
18 provided in Schedule 125. Because Carty was placed in service mid-year 2016, PGE is using  
19 two years of initial estimates and two years of actual FOR data in the four-year rolling average  
20 to calculate the 2021 Carty FOR.

1 **Q. Please describe the PW/Beaver Complex Gas Supply issue.**

2 A. AWEC raised concerns regarding the gas supply constraints applied by PGE to the dispatch  
3 of the Beaver gas plant and recommended that PGE remove all Beaver dispatch constraints  
4 from the 2021 NVPC forecast modeling.

5 **Q. What is PGE’s position regarding the PW/Beaver Complex Gas Supply issue?**

6 A. PGE does not agree with AWEC’s recommendation. PGE updated Beaver plant parameters  
7 in MONET as part of the gas storage optimization modeling to limit the plant’s dispatch given  
8 current natural gas pipeline transportation rights and storage capabilities. Allowing Beaver to  
9 run unconstrained as proposed by AWEC is not representative of actual plant operations and  
10 would result in reduced North Mist Storage injections during less expensive months. This  
11 would then render PGE’s gas storage optimization modeling ineffective and result in a  
12 reduction to total forecasted net customer benefits.

13 **Q. Did Parties reach an agreement specific to this item?**

14 A. Yes, Parties agreed that PGE will hold a workshop to further discuss the PW/Beaver Complex  
15 Gas supply constraints prior to PGE’s initial 2022 NVPC filing.

16 **Q. Please describe the Gas Resale Transactions Pursued during Carty and Coyote Springs  
17 generation plants forced outages issue.**

18 A. Staff questioned PGE’s argument that gas resale transactions between the AECO and Stanfield  
19 cannot be planned for as part of the gas resale optimization modeling during forced outages  
20 at Carty and Coyote Springs due to their unpredictable nature. Staff did not propose a method  
21 change but recommended a small outboard adjustment to capture potential gas resale benefits  
22 based on an average of actual gas resale transactions that PGE pursued when Carty and Coyote  
23 Springs were in extended forced outages during 2018 and 2019.

1 **Q. What is PGE’s position regarding the Gas Resale Transactions Pursued during Carty**  
2 **and Coyote Springs generation plants forced outages issue?**

3 A. PGE argues forced outages occur randomly, and often have short durations making it difficult  
4 to plan for gas transaction resales during these events.

5 **Q. Did Parties reach an agreement specific to this item?**

6 A. Yes, for settlement purposes in this case Parties agreed that PGE will not change the gas resale  
7 methodology to incorporate potential gas resale benefits related to transactions pursued when  
8 Carty and Coyote Springs are in forced outages in the 2021 NVPC forecast.

9 **Q. Please describe the BPA Transmission Rights Purchase issue.**

10 A. AWEC raised concerns regarding BPA transmission rights that PGE purchased in 2015.  
11 AWEC proposed that the benefit of the transaction be spread over the life of the contracts,  
12 which extend beyond the amortization period of the deferred BPA wheeling rights.

13 **Q. What is PGE’s position regarding the BPA Transmission Rights Purchase issue?**

14 A. PGE does not agree with any adjustment related to this issue because the amortization of  
15 deferred BPA wheeling rights ends in 2020 and has no impact to 2021 NVPC.

16 **Q. Please describe the QFs issue.**

17 A. Staff raised concerns regarding PGE’s 2021 projection of power costs associated with QFs  
18 that are operating as of year-end 2019. Staff recommended that PGE apply an adjustment to  
19 the 2021 NVPC forecast to reflect the power costs associated with QFs that are operating as  
20 of year-end 2019 based on Staff’s calculation of a maximum value of actual QF power costs  
21 escalated by an annual factor of 17.1 percent from 2019 to 2021.

1 **Q. What is PGE’s position regarding the QFs issue?**

2 A. PGE does not agree with Staff’s recommendation. PGE’s forecast for 2021 QF power costs is  
3 based on expected QF generation and avoided cost prices approved by the Commission. The  
4 two most significant drivers increasing the 2021 QF forecast as compared to the actual 2019  
5 QF costs included in Staff’s analysis are: 1) increases to contract pricing due to certain QF  
6 Schedule 201 and Schedule 202 power purchase agreements entering the defined deficiency  
7 period, and 2) QFs with partial year generation in 2019<sup>2</sup> that are expected to be operational  
8 for all of 2021, and thus deliver more energy.

9 **Q. Please describe the PCAM/AUT Construct issue.**

10 A. CUB proposed a procedural modification such that PGE’s AUT and PCAM filings be  
11 combined in a consolidated docket. Parties agreed that such procedural modification will not  
12 be pursued in this proceeding.

13 **Q. Please describe the ADR Programs issue.**

14 A. CUB did not propose an adjustment in this case but raised concerns regarding the modeling  
15 of ADR programs benefits in NVPC forecasts. CUB argued that the reduced demand resulting  
16 from demand response programs should be modeled in MONET to produce power cost  
17 benefits to all customers.

18 **Q. What is PGE’s position regarding the ADR Programs issue?**

19 A. PGE does not oppose Parties ability to raise this issue in future proceedings but notes that both  
20 costs and benefits resulting from ADR programs are currently reflected in customer prices  
21 through Schedule 135.

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<sup>2</sup> Due to achieving commercial operation subsequent to January 1, 2019.



1 **Q. Please describe the BPSC Energy Storage Microgrid issue.**

2 A. CUB proposed that if cost recovery for prudently incurred costs associated with the BPSC  
3 Energy Storage Microgrid is approved by the Commission prior to the final 2021 NVPC  
4 update in this proceeding, PGE should include the related net variable power costs in the 2021  
5 NVPC forecast. For settlement purposes in this case Parties agreed with CUB’s proposal.

6 **Q. Does this Stipulation resolve all NVPC-related issues raised by Parties in this docket (UE**  
7 **377)?**

8 A. Yes.

### III. Pricing

1 **Q. What is PGE’s current estimate of the 2021 NVPC forecast, inclusive of the items agreed**  
2 **upon in the UE 377 Stipulation?**

3 A. PGE’s current 2021 NVPC forecast, inclusive of the UE 377 Stipulation terms, is  
4 approximately \$436.7 million. This represents a \$43.1 million increase relative to PGE’s  
5 final 2020 NVPC forecast, and a \$0.5 million increase from PGE’s initial filing.

6 **Q. What are the base rate impacts of the currently estimated \$43.1 million increase in**  
7 **Schedule 125 prices,<sup>3</sup> inclusive of changes in system usage charge and Schedule 122<sup>4</sup>**  
8 **prices?**

9 A. Table 1 below provides preliminary estimates of the 2021 cost of service (COS) base rate  
10 impacts for selected rate schedules. These estimates are subject to changes in market electric  
11 and gas prices and forecasted loads, among other items.

**Table 1**  
**Estimated Base Rate Impacts**

Schedule	Rate Impact
Sch 7 Residential	2.7%
Sch 32 Small Non-residential 30 kW or less	2.7%
Sch 83 Non-residential 31-200 kW	3.4%
Sch 85 Secondary 201-4,000 kW	3.8%
Sch 85 Primary 201-4,000 kW	4.1%
Sch 89 Primary Over 4,000 kW	4.4%
Sch 89 Subtransmission Over 4,000 kW	4.0%
Schedule 90 Over 100 MWa	4.6%
COS Overall	3.0%

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<sup>3</sup> Preliminary estimate inclusive of the items agreed upon in this Stipulation. The cost impact estimate is subject to change in subsequent NVPC updates scheduled for October 1, November 6, and November 16, 2020.

<sup>4</sup> Preliminary estimate based on currently estimated revenue requirement related to the addition of the Wheatridge facility to PGE’s resource portfolio. The addition of Wheatridge is investigated by stakeholders and Commission Staff in Docket No. UE 370.

1 **Q. With the supplemental items that are known, what is the expected total price change**  
2 **by major rate schedule including these items?**

3 A. Table 2 below provides preliminary estimates of the 2021 cost of service (COS) base rate  
4 impacts for selected rate schedules. It only includes estimates related to Schedules 123 and  
5 132 in addition to the changes in Schedules 125 and system usage charge prices. Schedule  
6 122 prices are presumed to already be in effect before January 1, 2021

**Table 2**  
**Estimated Base Rate Impacts Including Schedules 125, 123\*, and 132**

Schedule	Rate Impact
Sch 7 Residential	5.1%
Sch 32 Small Non-residential 30 kW or less	4.8%
Sch 83 Non-residential 31-200 kW	5.0%
Sch 85 Secondary 201-4,000 kW	5.0%
Sch 85 Primary 201-4,000 kW	5.2%
Sch 89 Primary Over 4,000 kW	5.5%
Sch 89 Subtransmission Over 4,000 kW	5.1%
Schedule 90 Over 100 MWa	5.6%
COS Overall	5.1%

\* Schedule 123 price changes only include those related to Schedules 7,32, and 83

#### IV. Recommendation to the Commission

1 **Q. What is your recommendation to the Commission regarding the adjustments contained**  
2 **in the Stipulation?**

3 A. The Stipulating Parties recommend and request that the Commission approve these  
4 adjustments. Based on careful review of PGE's, OPUC Staff's, CUB's, and AWEC's filings;  
5 consideration of the documentation provided in PGE's Minimum Filing Requirements;  
6 thorough discovery conducted by Parties in Docket No. UE 377, including more than 150 data  
7 requests; and thorough discussion of the issues during workshops and the July 13, 2020  
8 settlement conference, we believe the proposed adjustments represent appropriate and  
9 reasonable resolutions to all issues in this docket. Rates reflecting these adjustments will be  
10 fair, just, reasonable, and provide PGE with adequate revenues consistent with the standard in  
11 ORS 756.040.

12 **Q. Does this Stipulation resolve all issues raised by Parties in this docket (UE 377)?**

13 A. Yes.

14 **Q. Does this conclude your testimony?**

15 A. Yes.

**List of Exhibits**

**Stipulating Parties Exhibit**

**Description**

101

Net Variable Power Cost Stipulation

**1BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UE 377**

In the Matter of

PORTLAND GENERAL ELECTRIC  
COMPANY

2021 Annual Power Cost Update Tariff  
(Schedule 125)

**STIPULATION**

This Stipulation is between Portland General Electric Company ("PGE"), Staff of the Public Utility Commission of Oregon ("Staff"), the Citizens' Utility Board of Oregon ("CUB"), and the Alliance of Western Energy Consumers ("AWEC") (collectively, the "Stipulating Parties").

PGE filed this Annual Power Cost Update Tariff filing on April 1, 2020, for 2021 net variable power costs ("NVPC"). The filing included the minimum filing requirements required by Schedule 125 and testimony and exhibits. PGE also provided to Staff and other parties work papers in support of its filing. Since that time, Staff and intervening parties have submitted over 150 data requests obtaining additional information. On June 8, 2020, PGE filed supplemental testimony regarding a new power purchase agreement executed between PGE and the Public Utility District No. 1 of Douglas County (Douglas PPA). On June 26, 2019, Staff, CUB and ICNU filed their opening testimony in this docket. On July 9, 2020, Staff, CUB, and AWEC filed supplemental testimony regarding the Douglas PPA. On July 13, 2019, the Stipulating Parties participated in a settlement conference. As a result of those discussions, the Stipulating Parties have reached a compromise settlement of all issues in this docket, as described in detail below.

## TERMS OF STIPULATION

1. This Stipulation resolves all issues in this docket.
2. Western Energy Imbalance Market (“EIM”). The Stipulating Parties agree that for ratemaking in this docket:
  - a. CAISO flexible ramping product award savings of \$408,450 will be included in the EIM benefit forecast.
  - b. PGE will assume 4% of its 2021 forecast greenhouse gas (GHG) cost obligation can be met with ARB Offset Credits PGE has purchased since joining EIM.
  - c. With one exception, all results from PGE’s 2021 EIM Benefit Methodology will not change from PGE’s July 15, 2020 MONET update submittal in this docket. The single exception is GHG benefits. PGE will continue to update California Carbon Allowance (CCA) prices consistent with the updates used for electric and gas prices in the AUT proceeding.
  - d. PGE will hold a workshop with the other Stipulating Parties on EIM trading limit methodology prior to PGE’s initial 2022 NVPC filing. Presentation materials, including any workpapers used in developing the presentation materials, will be provided to the parties no later than two weeks prior to the date of the workshop.
    - i. PGE will address in the workshop the EIM transaction limits methodology changes proposed by Parties in their opening testimony.
    - ii. PGE will address in the workshop Parties’ questions regarding whether EIM trades in the forecast are representative of trades that occur in actual operations and the interaction between PGE’s participation in the EIM and PGE’s reserve requirements.

3. Faraday Production Tax Credits (PTCs). For ratemaking in this docket the 2021 NVPC forecast will be reduced by \$557,488 to reflect PTCs associated with eligible incremental generation at the Faraday Powerhouse expected to be generated in 2021.
4. Gas Resale Optimization. PGE will update the fuel losses assumption in the gas resale optimization modeling to be consistent with the MONET GTN fuel loss assumption used for dispatching resources in the model.
5. Variable Energy Resources Integration Update.
  - a. PGE will update the load following and regulating margin obligations included in the 2021 NVPC forecast to only reflect the addition of the Wheatridge wind facility into PGE's resource portfolio.
  - b. The language in Schedule 125 regarding updates to the costs associated with wind integration will not be changed in this proceeding.
6. Transmission Resales, Colstrip Forced Outage Rate, Port Westward (PW)/Beaver Complex Gas Supply, Gas Resale Transactions pursued during Carty and Coyote Springs generation plants forced outages, Qualifying Facilities, and any remaining NVPC issues not separately identified.
  - a. In settlement of Transmission Resales, Colstrip Forced Outage Rate, Port Westward/Beaver Complex Gas Supply, Gas Resale Transactions pursued on the GTN pipeline during Carty and Coyote forced outages, Qualifying Facilities, and any other NVPC issue not separately identified herein, NVPC in this proceeding will be reduced \$2.2 million. In addition, Parties agree to the following:
    - i. PGE will hold a workshop with Parties to discuss Transmission Resale forecast methodology and Port Westward/Beaver Complex Gas supply constraint prior



to PGE's initial 2022 NVPC filing. Presentation materials will be provided to Parties no later than two weeks prior to the date of the workshop.

7. The Stipulating Parties recommend and request that the Commission approve the adjustments and provisions described herein as appropriate and reasonable resolutions of all issues in this docket.
8. The Stipulating Parties agree that this Stipulation is in the public interest, and will contribute to rates that are fair, just and reasonable, consistent with the standard in ORS 756.040.
9. The Stipulating Parties agree that this Stipulation represents a compromise in the positions of the Stipulating Parties. Without the written consent of all of the Stipulating Parties, evidence of conduct or statements, including but not limited to term sheets or other documents created solely for use in settlement conferences in this docket, are confidential and not admissible in the instant or any subsequent proceeding, unless independently discoverable or offered for other purposes allowed under ORS 40.190.
10. The Stipulating Parties have negotiated this Stipulation as an integrated document. The Stipulating Parties, after consultation, may seek to obtain Commission approval of this Stipulation prior to evidentiary hearings. If the Commission rejects all or any material part of this Stipulation, or adds any material condition to any final order that is not consistent with this Stipulation, each Stipulating Party reserves its right: (i) pursuant to OAR 860-001-0350(9), to present evidence and argument on the record in support of the Stipulation, including the right to cross-examine witnesses, introduce evidence as deemed appropriate to respond fully to issues presented, and raise issues that are incorporated in the settlements embodied in this Stipulation; and (ii) pursuant to ORS 756.561 and OAR 860-001-0720,

to seek rehearing or reconsideration, or pursuant to ORS 756.610 to appeal the Commission's final order. The Stipulating Parties agree that in the event the Commission rejects all or any material part of this Stipulation or adds any material condition to any final order that is not consistent with this Stipulation, the Stipulating Parties will meet in good faith within ten days and discuss next steps. A Party may withdraw from the Stipulation after this meeting by providing written notice to the Commission and other Parties. Nothing in this paragraph provides any Stipulating Party the right to withdraw from this Stipulation as a result of the Commission's resolution of issues that this Stipulation does not resolve.

11. This Stipulation will be offered into the record in this proceeding as evidence pursuant to OAR 860-001-0350(7). The Parties agree to support this Stipulation throughout this proceeding and in any appeal, and provide witnesses to support this Stipulation (if specifically required by the Commission), and recommend that the Commission issue an order adopting the settlements contained herein. By entering into this Stipulation, no Stipulating Party shall be deemed to have approved, admitted or consented to the facts, principles, methods or theories employed by any other Stipulating Party in arriving at the terms of this Stipulation. Except as provided in this Stipulation, no Stipulating Party shall be deemed to have agreed that any provision of this Stipulation is appropriate for resolving issues in any other proceeding.

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12. This Stipulation may be signed in any number of counterparts, each of which will be an original for all purposes, but all of which taken together will constitute one and the same agreement.

DATED this 21st day of August, 2020.

/s/ Douglas C. Tingey  
PORTLAND GENERAL ELECTRIC  
COMPANY

/s/ Stephanie S. Andrus  
STAFF OF THE PUBLIC UTILITY  
COMMISSION OF OREGON

/s/ Michael P. Goetz  
CITIZENS' UTILITY BOARD  
OF OREGON

/s/ Tyler C. Pepple  
ALLIANCE OF WESTERN  
ENERGY CONSUMERS

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

UE 377

In the Matter of

PORTLAND GENERAL ELECTRIC  
COMPANY,

2021 Annual Power Cost Update Tariff.

**DECLARATION OF GREG BATZLER**

I, GREG BATZLER, declare under penalty of perjury under the laws of the State of Oregon:

1. My name is Greg Batzler. I am a Regulatory Consultant in the Rates and Regulatory Affairs Department at Portland General Electric Company (“PGE”).
2. On August 21, 2020, I filed testimony and associated exhibits (Joint Testimony in Support of Net Variable Power Cost Stipulation/Stipulating Parties/100-101, Soldavini-Gehrke-Kaufman-Batzler).
3. To the best of my knowledge, my pre-filed testimony and exhibits are true and accurate. If I were asked the same questions today, my answers would be the same.

DATED this 21st day of August, 2020.

*/s/ Greg Batzler*

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Greg Batzler