TO: Traci Kirkpatrick, Administrative Law Judge

Public Utility Commission of Oregon

FROM: Jaki Ferchland

Manager, Revenue Requirement

# PORTLAND GENERAL ELECTRIC UE 377 PGE's Response to OPUC Bench Request No. 001 Dated September 15, 2020

#### Request:

PGE's direct testimony on the Wheatridge wind facility states: "[t]he 100 MW of PGE-owned wind is expected to provide a \$14.8 million power cost benefit ... " (PGE/100, Seulean - Kim - Batzler /33). With regard to this statement:

- a. Please show how the \$14.8 million amount is calculated; and
- b. If applicable, please separate out the Production Tax Credit (PTC) benefit amount from the Net Power Cost (NPC) amount from zero fuel cost energy.
- c. For the PTC, please show the calculation with the following components visible, or if the below description is inaccurate please explain PGE's PTC calculation:
  - i. Nameplate capacity\* capacity factor= qualifying generation in MWh (i.e., 100 MW \* 40% CF \* 8760 hours= 350,400 MWh);
  - ii. Qualifying generation in MWh \* PTC rate, grossed up for taxes = PTC benefit in dollars. (i.e., 350,400 MWh \* 25/MWh = \$8.76 million); and
  - iii. If the Wheatridge calculation is already in PGE's workpapers provided in April 2020, please provide it again as I cannot locate the correct MONET file. For example, I see the file "2021AUTWheatridgePGE\_PTC" but cannot locate the cells "K595:V595" referenced for the PTC calculation.

#### Response:

a. The \$14.8 million is calculated from the difference between the total net variable power cost (NVPC) output in dollars from MONET model step 0f and Monet model step 0g. This can be seen in the file: "#2021AUT-ModelSteps-April01 Final.xlsx" located in the confidential "ToPUC" folder, as provided in PGE's April 1, 2020 Minimum Filing Requirements (MFRs). This amount can also be calculated by subtracting the total Power Cost Output from the MONET model step 0f from MONET step 0g using the "PwrCsOut" tabs of the files titled "#M610PUC10-00f-2021 AUT output.xlsm" and "#M610PUC10-

- 00g-2021 AUT output.xlsm", both located in the "Output" folder provided with PGE's confidential April 1, 2020 MFRs. For convienece, these files are provided here as Attachments 001-A through 001-C
- b. The PTC benefit amount forecast within the approximate \$14.8 million amount calculated in PGE's April 1, 2020 NVPC filing is approximately \$10.7 million, leaving approximately \$4.1 million attributable to energy benefits. This amount is located in cell N67 of the "PwrCsOut" tab of the "#M610PUC10-00g-2021 AUT output.xlsm" file, located in the "Output" folder provided with PGE's confidential April 1, 2020 MFRs.
- c. The calculation of PTC benefits (including the gross up factor for tax effects) begins on row 459 of the "PC Input" tab of the "#M610PUC10-00g-2021 AUT output.xlsm" file, located in the "Output" folder provided with PGE's confidential April 1, 2020 MFRs, with Wheatridge's PTCs being calculated in cells K595:V595 of the same worksheet. The calculation is as follows: Wheatridge monthly generation (Plant Capacity (MW) x Annual Capacity Factor (MW) x Monthly Shape Factor (%) x Monthly Hours) x grossed up PTC value (Federal PTC rate (\$/MWh) x Tax gross up factor (%)).

Attachments 001-A through 001-C are protected information and subject to Protective Order No. 20-100.

### **UE 377**

## **Attachment 001-A**

## Protected and Subject to Protective Order No. 20-100

**Provided in Electronic Format Only** 

#2021AUT-ModelSteps-April01 Final.xlsx

### **UE 377**

## **Attachment 001-B**

## Protected and Subject to Protective Order No. 20-100

## **Provided in Electronic Format Only**

#M610PUC10-00f-2021 AUT output.xlsm

### **UE 377**

## **Attachment 001-C**

## Protected and Subject to Protective Order No. 20-100

## **Provided in Electronic Format Only**

#M610PUC10-00g-2021 AUT output.xlsm

September 25, 2020

TO: Traci Kirkpatrick, Administrative Law Judge

Public Utility Commission of Oregon

FROM: Jaki Ferchland

Manager, Revenue Requirement

# PORTLAND GENERAL ELECTRIC UE 377 PGE's Response to OPUC Bench Request No. 002 Dated September 15, 2020

#### Request:

In docket UM 1934 the Independent Evaluator described an issue with PGE's use of the PTC for the benchmark, stating: "[t]his value was reduced for PGE-owned units due to the fact that PGE does not project to have the taxable income to fully use the PTC as it is earned. PGE presumed that any PTC earned would be carried forward as a deferred tax asset and used in the 2027-2030 time frame. The additional carrying cost for this asset was counted against the PGE-owned offer." Please clarify if this issue is still relevant by explaining how PGE will recognize the PTC in 2021 or in the next few years.

#### Response:

This issue is still relevant. However, as PTC carryforwards are included within PGE's rate base, the issue is not relevant within this proceeding, as Docket UE 377 specifically pertains to PGE's net variable power costs, which does not include any amounts related to PGE's rate base.

As described above, PGE reduced the overall benefits calculated in the Wheatridge RFP bid by the forecasted cost of including a deferred tax asset in rate base for generated PTCs. Based on PGE's forecast of wind generation for the year, customers recognize the full amount of forecasted annual PTC generation as an offset to customer prices (for 2021, this amount is \$10.7 million as provided in PGE's Response to OPUC Bench Request No. 001). However, the ability for PGE to actually use these tax credits as an offset to its tax burden within the year they are generated is dependent on the amount of taxes PGE owes, which is based on PGE's taxable income. Because PGE's taxable income is not large enough for PGE to utilize all of the PTCs its wind generation facilities produce each year, a certain amount is then carried forward and recognized as an increase to PGE's accumulated deferred income taxes. As such, while customers receive an immediate benefit in the form of lower prices, PGE does not recognize a similar reduction in costs.

<sup>&</sup>lt;sup>1</sup> Docket No. UM 1934, PGE's Request for Acknowledgment of Final Short List of Biddeers, Attachment A, Idependent Evaluatior Final Closing Report at 12 (Occt 3, 2018)

PTC carryforwards for Wheatridge were discussed within Docket No. UE 370 and reflected as part of a partial stipulation in that docket, subsequently adopted by the Commission in Order No. 20-279. The next opportunity for PGE to update any PTC carryforward amounts currently included within its rate base used to calculate customer prices would likely be within a general rate case proceeding, while PGE's forecasted PTC NVPC benefit provided to customers is updated annually within PGE's NVPC proceeding.

TO: Traci Kirkpatrick, Administrative Law Judge

Public Utility Commission of Oregon

FROM: Jaki Ferchland

Manager, Revenue Requirement

# PORTLAND GENERAL ELECTRIC UE 377 PGE's Response to OPUC Bench Request No. 003 Dated September 15, 2020

#### Request:

If PGE calculated NPC benefits from Wheatridge in response to question 1.c., please describe these benefits. For example describe whether the zero fuel cost energy from Wheatridge is displacing a certain volume of higher prices market transactions that were used before Wheatridge. If possible, show the calculation for the NPC benefits.

#### Response:

As provided in PGE's Response to OPUC Bench Request No. 001, part b., the 100 MW of PGE-owned wind included in PGE's April 1, 2020 forecast of 2021 net variable power costs (NVPC) provided a forecast energy-related benefit of approximatly \$4.1 million. This is calculated by removing the PTC benefit from the overall forecasted benefit calculated for the 100 MW of PGE-owned wind included in PGE's April 1, 2020 forecast of 2021 NVPC as described in PGE's Response to OPUC Bench Request No. 001. A forecasted energy benefit within MONET generally results from one or more of the following:

- 1. the reduction of generation from a higher priced resource;
- 2. a reduction in higher priced market purchases; and/or
- 3. an increase in market sales.

Upon review of the MONET output files for steps 0f and 0g (files "#M610PUC10-00f-2021 AUT output.xlsm" and "#M610PUC10-00g-2021 AUT output.xlsm" as referenced in PGE's Response to OPUC Bench Request No. 001), the inclusion of the 100 MW of PGE-owned wind resulted in MONET reducing its market purchases by approximately 123,000 MWh and increasing market sales by approximately 191,000 MWh. Please note that, along with many other items (as summarized in PGE Exhibit 100, Section I) PGE updates the forward market curves in MONET for each update filing, which will not affect the forecasted PTC benefit but will affect the energy benefits included in NVPC. MONET does not forecast or account for capacity benefits.