Portland General Electric Company
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June 8, 2020

Via Electronic Filing

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street, S.E.
P.O. Box 1088
Salem, OR 97308-1088

RE: UE 377 – Supplemental Testimony and Confidential Exhibit

Dear Filing Center:

Attached for filing in the above referenced matter please find the following:

- Supplemental Testimony of
  - Kit Seulean, Cathy Kim, and Greg Batzler (PGE / 300), and
  - Confidential Exhibit 301

The confidential material is protected information subject to Protective Order No. 20-100.

PGE indicated in Exhibit 100 that it was actively pursuing additional capacity and may execute one or more agreements that would be effective in 2021. This Supplemental Testimony provides details regarding the power purchase agreement executed with the Public Utility District No. 1 of Douglas County for surplus capacity and energy and its effect on PGE's 2021 Net Variable Power Costs.

If you have any questions, please feel free to contact Stefan Cristea at (503) 464-8033. Please direct all formal correspondence and requests to the following e-mail address: pge.opuc.filings@pgn.com.

Sincerely,

/s/ *Jaki Ferchland*
Jaki Ferchland
Manager, Revenue Requirement

Cc: Sabrinna Soldavini, OPUC Staff
Bob Jenks, Citizens' Utility Board of Oregon
Tyler Pepple, AWEC

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I. Introduction

Q. Please state your names and positions with Portland General Electric (PGE).

A. My name is Kit Seulean. My position at PGE is Manager, Power Cost Forecasting & Analysis. My qualifications appear in PGE Exhibit 300.

My name is Cathy Kim. My position at PGE is Senior Director, Energy Supply. My qualifications appear in PGE Exhibit 100.

My name is Greg Batzler. My position at PGE is Consultant, Regulatory Affairs. My qualifications appear in PGE Exhibit 100.

Q. What is the purpose of your Supplemental Testimony?

A. In PGE Exhibit 100, we stated that, to address the capacity deficit that PGE will face when Boardman ceases operations at the end of 2020, PGE continues to actively pursue additional firm capacity and may execute one or more agreements that would be effective in 2021. More specifically, at the time of our initial 2021 AUT filing, PGE was actively negotiating with Public Utility District No. 1 of Douglas County, Washington (Douglas) for surplus capacity and energy, primarily produced by the Wells Hydroelectric Project (Wells). PGE and Douglas have since executed a power purchase agreement (PPA). The following supplemental testimony provides the details of this PPA with Douglas, the basis for entering into the agreement, and the effect of this agreement on PGE's 2021 Net Variable Power Cost (NVPC) forecast.

Q. How is the remainder of your testimony organized?

A. Our testimony has two additional sections. In Section II, we discuss: 1) the Douglas PPA background, 2) the transaction summary, and 3) the need for the transaction. In Section III, we provide the current expectation of the impact to the 2021 NVPC forecast associated with the Douglas PPA and conclude our testimony.

II. Douglas Power Purchase Agreement

1. Background

Q. Please provide a brief background of the existing relationship between PGE and Douglas.

A. PGE and Douglas originally entered into an agreement for a percent share (i.e., "slice"[1]) of the Wells Project in 1967. In 1989, PGE and Douglas entered into the Wells Settlement Agreement where PGE purchased a proportionate share of surplus[2] energy from Douglas' share of the Wells Project output after Douglas met its obligations. Both agreements expired August 31, 2018.

Q. Did PGE renew the agreements mentioned above?

A. No, the agreements above were not renewed. Instead, PGE, Avista, Puget Sound Energy, and Douglas negotiated a new, ten-year agreement ("Wells PPA") for a slice of the Wells Project and executed it on March 29, 2017.[3] Beginning on September 1, 2018, the Wells PPA provided PGE with a slice of Wells Project after accounting for Douglas' share required to serve forecasted load and meet other associated obligations. Each year, Douglas recalculates PGE's share based on their forecasted load. Under the Wells PPA, PGE pays Douglas a monthly capacity payment and contract prices for energy received. There is no surplus energy component. PGE's execution of the Wells PPA was driven by the need to replace the lost

[1] A slice is a contract type where the purchaser receives a percentage share of all of the attributes of the facility (e.g. inflow, storage, capacity, ancillary services, etc.).
[2] Generally, surplus contracts provide the purchaser with the specified attributes (e.g. capacity and/or energy) that are in excess of the seller's load, sales and other obligations.
[3] The Wells PPA was approved by the Commission in PGE's 2017 NVPC forecast (UE 308) through Commission Order No. 16-419.

energy and capacity resulting from the expiring 1967 and 1989 agreements and supported by the following:

- Commission Order No. 14-415 from PGE's 2016 Integrated Resource Plan (IRP), in which the Public Utility Commission of Oregon stated: "We agree that PGE should seek to renew its expiring hydro-facility contracts to the extent it is cost-effective to do so and acknowledge the company's pursuit of cost effective hydro contract renewals."[4]
- The Wells PPA provided PGE and its customers with needed capacity.
- The Wells Project provides real-time load following and balancing services that help PGE self-integrate its Biglow Canyon and Tucannon River wind facilities.
- When considering the capacity and energy value of the Wells PPA, the transaction was forecast to produce a net benefit for customers over the term.

Q. Please summarize PGE's new PPA with Douglas.

A. Under, the PPA between PGE and Douglas ("Douglas PPA"), PGE will purchase surplus capacity, energy, ancillary services, and environmental attributes associated with the Douglas and Public Utility District No. 1 of Okanogan (Okanogan) resource portfolios. Additionally, PGE will manage load supply and wholesale market services for Douglas and Okanogan.[5] The executed PPA, including terms and pricing information, is provided in Exhibit 301.

Q. What is the relationship between Douglas and Okanogan?

A. Douglas operates its own Balancing Authority Area (BAA) and Okanogan resides within that BAA. Okanogan has a slice of the Wells Project, which, in combination with other resources and contracts, is used to serve Okanogan's load. Douglas and Okanogan have a relationship

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[4] Commission Order No. 14-415, page 7.

[5] The PPA is executed between PGE and Douglas as Douglas manages the Okanogan resources and load supply on behalf of Okanogan.

whereby Douglas manages Okanogan's power supply on Okanogan's behalf. While the Douglas PPA was executed solely with Douglas, Okanogan provided Douglas with written approval to enter into the agreement on Okanogan's behalf.

Q. Please describe the operations and resource portfolios for both Douglas and Okanogan.

A. Both Douglas' and Okanogan's service territories are located in central Washington along the Columbia River, with a combined peak load of approximately 400 MWs. The PUDs are interconnected with Bonneville Power Administration (BPA), Chelan PUD, and Grant PUD at a grouping of interconnection points commonly referred to as the "Mid-Columbia" or "Mid-C"; the predominant power trading hub in the Pacific Northwest. Douglas' and Okanogan's resource portfolios include the Wells Project, Rocky Reach Project, Nine Canyon Wind Farm, along with long-term firm PPAs from BPA and Avista. While the portfolio of resources accompanying the Douglas PPA are highly flexible, the loads are relatively steady and flat. This enables PGE to leverage the portfolio for meeting capacity needs, providing flexibility, and optimizing the synergies of the combined Douglas/Okanogan systems and PGE system for the benefit of both Douglas and PGE customers.

2. Transaction Summary

Q. Please summarize the terms of the Douglas PPA.

A. The Douglas PPA term is five-years commencing on January 1, 2021 and will supply PGE customers with approximately 100 to 160 MW of additional non-emitting capacity. Under the agreement, PGE will have full access to the Douglas and Okanogan portfolios, including the real-time dispatch capability of the Wells and Rocky Reach projects. Annually, Douglas will provide forecasts to PGE that are used to determine the amount of available surplus and annual capacity payment for the next year. The PPA also has terms and conditions that address specific circumstances, such as forecasted resource deficits, outages, spill, etc. Additionally, while Douglas continues to operate as the BAA under the agreement, PGE will be responsible for managing the energy supply for both Douglas and Okanogan loads, serving as the "supplier of choice."

Q. What surplus capacity and resources is PGE expecting to be able to access?

A. After accounting for Douglas and Okanogan load along with their existing PPAs, the resource expected to provide surplus is the Wells project. Wells, completed in 1967, is located on the Columbia River, downstream of Chief Joseph Dam. Wells has ten generating units rated at a combined 840 megawatts. Douglas owns and operates the project. Rocky Reach is also listed as a firm resource in the PPA; however, the forecasted load needs of Douglas and Okanogan do not result in it providing surplus capacity at this time.

Q. You mentioned above that the Douglas and Okanogan resource portfolios include the Nine Canyon Wind Project. Is PGE receiving the Renewable Energy Certificates from the Nine Canyon Wind Project?

A. No. PGE is only receiving the environmental attributes associated with Douglas's and Okanogan's shares of the Wells and Rocky Reach Projects.

Q. Public statements regarding the Douglas PPA mention load management and wholesale market services. What load management and wholesale market services is PGE providing to Douglas and/or Okanogan?

A. As stated above, PGE will manage load supply for Douglas and Okanogan. This means that PGE will be responsible for managing the energy supply for Douglas and Okanogan load, which includes buying and selling energy, as well as, physical delivery to/from the Douglas BAA, providing load following capabilities, and managing ancillary services such as contingency reserves. Currently, Douglas manages all load supply activities for Douglas and Okanogan, and PGE will have full access to the Douglas and Okanogan portfolios in order to provide these services during the PPA term.

Q. Is PGE receiving separate compensation for these services?

A. No. These services were negotiated as part of the overall transaction and the value they provide is reflected in the agreed upon fixed payments of the contract.

Q. Does the contract provide protections for PGE customers to address situations where Douglas or Okanogan are "deficit"?[6]

A. Yes. The contract has several provisions that are incorporated into the payment calculations to address possible situations where the Douglas and/or Okanogan portfolios are insufficient to address their own needs. While we don't expect these situations to occur given the makeup of the Douglas and Okanogan portfolios and their load profiles, PGE believed it was important to include safeguards to protect our customers.

3. The Need for The Transaction

Q. How does the Douglas PPA align with the PGE's 2019 IRP acknowledged action plan?

A. PGE's 2019 IRP action plan acknowledged by the Commission through Order No. 20-152 in Docket No. LC 73 called for bilateral procurement of existing regional capacity.[7] The Douglas PPA is expected to contribute approximately 100 to 160 MW of non-emitting capacity toward a roughly 250 MW near-term capacity need identified in PGE's 2019 IRP. Furthermore, the capacity and portfolio of resources offered by Douglas and Okanogan within

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[6] Situations where the Douglas and/or Okanogan portfolios are insufficient to address their own needs.

[7] Commission Order No. 20-152 memorialized the Commission decision made at the March 16, 2020 Special Public Meeting. PGE subsequently provided an update to the Commission on April 15 regarding bilateral negotiations wherein PGE provided information related to the pursuit and characteristics of the Douglas PPA.

the agreement provides flexible capacity and other attributes (e.g., ancillary services) to enhance PGE's operational capabilities necessary to integrate additional renewable resources.

Q. Did PGE add any transmission capacity for wheeling the Douglas PPA output?

A. No, PGE did not add any additional transmission capacity. To wheel the Douglas PPA output, PGE relies on existing long-term firm BPA transmission capacity from the Mid-C market to the BPAT.PGE interconnection point.[8]

Q. Given current circumstances related to COVID-19 pandemic does PGE still expect to have a capacity need in the near-term?

A. Yes. Even though PGE expects that loads will decrease in the near-term as a result of the COVID-19 economic impacts, the addition of the Douglas PPA does not address the entire 250 MW capacity need identified in PGE's 2019 IRP reference case for the 2021 test year. Furthermore, PGE does not expect the impacts to last for five years and the Douglas PPA represented a time limited opportunity to purchase cost competitive non-emitting hydro capacity.

Q. Does the Douglas PPA support Oregon's and PGE's decarbonization goals?

A. Yes. The Douglas PPA provides PGE and its customers with non-emitting capacity that enhances PGE's ability to execute on its near-term decarbonization goals to support Oregon's policy to decarbonize the energy supply. As most recently articulated in Executive Order No. 20-04,[9] Governor Kate Brown calls for substantial reductions in greenhouse gas emissions (GHG) (i.e., reduce GHG emissions to 45% below 1990 levels by 2035). In addition, there is urgency in Executive Order No. 20-04 to act now to reduce GHG emissions as they "present

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[8] Please see PGE's response to AWEC Data Requests No. 016, Attachment 016-A for additional information regarding the PGE contracts or resources that rely on BPA transmission from the Mid-C market.
[9] Brown, Kate. "Executive Order No. 20-04." Office of the Governor. State of Oregon. 10 Mar 2020, page 8. Retrieved from https://drive.google.com/file/d/16islO3GTqxVihqhhIcjGYH4Mrw3zNNXw/view

a significant threat to Oregon's public health, economy, safety, and environment" and "the transition from fossil fuels to cleaner energy resources can significantly reduce emissions and increase energy security and the resilience of Oregon communities in the face of climate change."

Q. What risks would PGE and its customers face in the absence of the Douglas PPA?

A. As mentioned above, PGE's 2019 IRP identified a roughly 250 MW capacity need for 2021, which continues to increase through 2025. In the absence of this transaction, PGE would likely be in a more significant capacity deficit position for 2021-2025 and be forced to seek alternative capacity products. If PGE did not execute the Douglas PPA, PGE and customers would be exposed to acquiring capacity from other existing sources, if available, in an environment with significant retirements of baseload resource.[10] Additionally, there is a high likelihood that capacity procurements in lieu of the Douglas PPA would be from an emitting resource, which would conflict with Governor Brown's Executive Order No. 20-04, referenced above.

Q. Does PGE have any sense of what the supply and pricing of existing regional capacity looks like?

A. Yes. In late 2019, early 2020 PGE engaged in a bilateral auction for structured products. The Company ultimately elected not to execute a contract from that process but did receive information regarding available supply and pricing. Due to non-disclosure agreements, PGE is prohibited from providing specific pricing and bid information publicly; however, the Douglas PPA is competitively priced and provides for carbon-free energy as well.

[10] Baseload energy supply is expected to shrink significantly in the near-term in the Pacific Northwest with the retirements of coal resources such as Boardman, Centralia, or Colstrip Units 1 and 2.

Q. How does the Douglas PPA compare to the capacity agreements previously executed by PGE as part of the 2017 bilateral solicitation that occurred pursuant to the waiver application submitted in UM 1892?

A. The 2017 bilateral solicitation resulted in the execution of three capacity contracts with two counterparties. The Douglas PPA is a cost competitive transaction that is similar in price or compares favorably to the contracts executed pursuant to the 2017 bilateral solicitation.[11] Furthermore, PGE's 2019-2020 bilateral auction for structured products resulted in hydro offers significantly more costly compared to the Douglas PPA.

Q. Did PGE issue a capacity RFP or file for a waiver of the competitive bidding rules that resulted in the Douglas transaction?

A. No. The competitive bidding rules require an RFP for any procurement greater than 80 MW <u>and</u> longer than five years. While the new Douglas PPA does exceed the size threshold, it does not exceed the term threshold. Thus, neither an RFP nor a waiver request were required. Furthermore, PGE's 2019 IRP action plan acknowledged by the Commission through Order No. 20-152 provided that, prior to issuing a capacity RFP, "PGE would pursue cost-competitive, bilateral agreements for existing capacity in the region."

Q. Did PGE explore a longer-term agreement?

A. Yes. PGE did discuss the concept of a longer agreement early in the process, but both parties agreed that they should reengage at a later date, after operations under the agreement have commenced to determine if a longer agreement would be mutually beneficial. For more details please refer to the executed PPA provided as Exhibit 301.

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[11] Please see details regarding size and pricing of the capacity PPAs resulting from the 2017 bilateral solicitation in PGE's April 1 and April 15 MFRs submitted in this docket.

III. Conclusion

Q. What is the NVPC effect of the Douglas PPA?

A. The Douglas PPA is expected to increase PGE's 2021 NVPC forecast by approximately $4.6 million.[12]

Q. Does PGE expect this value to change?

A. Yes. In addition to the change from normal updates such as updates to natural gas and power prices, Douglas will provide an updated forecast in September that will be used to calculate the final capacity payment amount for 2021.

Q. Is PGE currently working on any other bilateral capacity negotiations?

A. Not at this time, but PGE continues to evaluate and monitor our short- to mid-term capacity needs.[13] Additionally, PGE remains engaged with owners of existing bilateral capacity resources to determine the availability and suitability of capacity offerings to meet PGE's capacity needs. Should PGE execute additional capacity agreements PGE would update the 2021 NVPC forecast to include those agreements as soon as practicable, in an upcoming MONET update.

Q. Does this conclude your testimony?

A. Yes.

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[12] The current power cost impact estimate is based on February 28, 2020 forward price curves and does not incorporate any adjustments to the EIM benefits to account for the addition of the Douglas PPA. PGE's July 15 MONET update will use updated forward price curves and will incorporate adjustments to the EIM benefits.
[13] PGE's 2019 IRP identified a capacity deficit of roughly 250 MW in 2021 increasing to 697 MW in 2025.

List of Exhibits

PGE Exhibit	**Description**
301C	Douglas County PUD Power Purchase Agreement

Exhibit 301C

Confidential Information Subject to Protective Order 20-100