



April 17, 2024

## VIA ELECTRONIC FILING

Public Utility Commission of Oregon Filing Center 201 High Street SE, Suite 100 Salem, Oregon 97301-3398

Re: Docket PCN 6 - In the Matter of Portland General Electric Company's Certification of Public Convenience and Necessity.

Attention Filing Center:

Attached for filing in the above-referenced docket is Portland General Electric Company's Petition for a Certificate of Public Convenience and Necessity. Copies containing Highly Protected Information and Protected Information are being sent via encrypted zip file to the Filing Center and parties who have signed Modified Protective Order No. 24-087 and General Protective Order No. 23-132.

Please contact this office with any questions.

Sincerely,

Cole Albee Paralegal

Cole Slber

Attachments

## **CERTIFICATE OF SERVICE**

I hereby certify that I served a true and correct copy of the confidential pages of Portland General Electric Company's Petition for Certificate of Public Convenience and Necessity on the parties to Docket PCN 6 on the date indicated below by email addressed to said person(s) at his or her last-known address(es) indicated below.

## **SERVICE LIST**

## PCN 6

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**DATED:** April 17, 2024

Cole Albee Paralegal

Cole Slber

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

#### PCN 6

In the Matter of

PORTLAND GENERAL ELECTRIC COMPANY'S

Petition for a Certificate of Public Convenience and Necessity.

PORTLAND GENERAL ELECTRIC COMPANY'S PETITION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

In accordance with Oregon Revised Statute (ORS) 758.015 and Oregon Administrative Rule (OAR) 860-025-0030, OAR 860-025-0035, and OAR 860-025-0040, Portland General Electric Company (PGE or the Company) petitions the Public Utility Commission of Oregon (Commission) for a Certificate of Public Convenience and Necessity (CPCN) authorizing construction of an overhead, 115-kilovolt (kV) transmission line totaling 7.4 miles in length and located primarily within Clackamas County, between the existing Rosemont and Wilsonville Substations (the Rosemont-Wilsonville Line). In support of this Petition, PGE relies in part on the pre-filed testimony and exhibits of Company witnesses Dr. Ian Beil, Larry Bekkedahl, Kevin Putnam and Dan Nuñez, Matt Gordanier and Jordan Messinger, and Meredith Armstrong. Additionally, because the Company is pursuing its land use approval for the Rosemont-Wilsonville Line from Clackamas County concurrently with the filing of this Petition, PGE is simultaneously filing a request for a waiver in accordance with OAR 860-025-0030(4).

<sup>&</sup>lt;sup>1</sup> A small portion—less than 0.3 miles— is located in Washington County.

<sup>&</sup>lt;sup>2</sup> PGE/100.

<sup>&</sup>lt;sup>3</sup> PGE/200.

<sup>&</sup>lt;sup>4</sup> PGE/300. Matt Gordanier is also a joint witness for PGE/300.

<sup>&</sup>lt;sup>5</sup> PGE/400.

<sup>&</sup>lt;sup>6</sup> PGE/500.

#### I. INTRODUCTION AND BACKGROUND

PGE is an investor-owned electric utility engaged in the generation, transmission, delivery, sale, and purchase of electricity and is regulated by the Federal Energy Regulatory Commission and the Commission. PGE serves approximately 930,000 customers within the Company's designated service territory.

The Rosemont-Wilsonville Line is one component of a larger project known as the Tonquin Project. The Tonquin Project components include the construction of the new Tonquin Substation, building and upgrading associated distribution feeders and transformers, and upgrades to the transmission system. The Tonquin Project, including the Rosemont-Wilsonville Line, is critical to the Company's ability to provide adequate, safe and reliable energy services to its customers in Portland's rapidly growing south metropolitan area, including Tualatin, Sherwood, Wilsonville, West Linn, Lake Oswego, and unincorporated areas of Clackamas County and Washington County (hereinafter, South Metro area). In particular, load growth in the South Metro area is anticipated to increase significantly over the next ten years due to new semiconductor manufacturing and technology customers and general commercial and residential growth in the area.

Furthermore, the Tonquin Project, including the Rosemont-Wilsonville Line, is necessary to accommodate load from new essential public infrastructure in the area.<sup>8</sup> The growing populations in Hillsboro, Beaverton, and Tualatin have increased the need for drinking water supplied to these areas, and in response, the Willamette Water Supply System (WWSS)

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<sup>&</sup>lt;sup>7</sup> Technically, the area described above refers to the southern portions of PGE's western and eastern service regions. Note that PGE mistakenly referred to the southern portions of PGE's western and central service regions in the Notice of Intent filed on March 27, 2024. *See* Docket PCN 6, Portland General Electric Company's Notice of Intent for CPCN at 2 (Mar. 27, 2024).

<sup>&</sup>lt;sup>8</sup> Importantly, while the Rosemont-Wilsonville Line is the only portion of the Tonquin Project for which the Company will require a CPCN, the need for that line is driven by the same factors as the Tonquin Project as a whole, and the entire project has been designed as one integrated solution. For this reason, while PGE's Petition focuses on the Rosemont-Wilsonville Line, it will also discuss other aspects of the Tonquin Project.

Commission is in the process of building a new water treatment plant near SW 124<sup>th</sup> Avenue south of SW Tualatin-Sherwood Road in Sherwood. Construction of the new water treatment plant is essential to the new WWSS, which when complete, will be one of Oregon's most seismically resilient water systems—built to better withstand natural disasters, protect public health, and speed up regional economic recovery through restoring critical services more quickly.

In September 2017, the Willamette Water Supply Program (WWSP), predecessor to the WWSS Commission, submitted a load request to PGE informing the Company regarding its energy requirements for the water treatment plant. The load request indicated that operation of the water treatment plant would require approximately 11 megavolt-amperes (MVA)<sup>11</sup> of electricity, which represents a substantial increase to the total electricity delivered by PGE in the area. Following continued discussions between PGE and the WWSP and the WWSS Commission, PGE performed a robust study to determine the impact the new 11 MVA load would have on the existing distribution and transmission systems in the area, which was memorialized in a white paper published in January 2020 (January 2020 Study) (Highly Protected Exhibit PGE/101). Due to existing load conditions on the feeders and transformers adjacent to the proposed water treatment plant, the study showed that accommodation of the new load would require construction of the Tonquin Substation in Washington County, upgrades to both the distribution feeders and transformers associated with the new substation, as well as upgrades to

<sup>&</sup>lt;sup>9</sup> In 2019, the Tualatin Valley Water District (TVWD), Hillsboro, and Beaverton formed the WWSS Commission to complete the construction of the WWSS and to manage and operate the WWSS after its completion. The WWSP still operates on behalf of the WWSS Commission to complete the construction of the WWSS.

<sup>&</sup>lt;sup>10</sup> PGE/100, Beil/12.

<sup>&</sup>lt;sup>11</sup> MVA represents the apparent power in an electrical system. It is the combination of real power (in megawatts or MW) and reactive power (in megavolt-amperes reactive or MVAR) and represents the total power in an AC circuit. PGE/100, Beil/3 n.2.

<sup>&</sup>lt;sup>12</sup> PGE/100, Beil/12. The WWSS Commission has since revised this figure upwards to 11.8 MVA. PGE/100, Beil/12 n.4.

<sup>&</sup>lt;sup>13</sup> PGE/100, Beil/12-13.

the transmission system, including building approximately 5.0 miles of new 115-kV overhead transmission lines along the Rosemont-Wilsonville segment.<sup>14</sup>

With respect to PGE's transmission system in particular, the January 2020 Study showed that the addition of the new load from the water treatment plant would result in Begin Highly End Highly Protected contingency event Protected/ scenarios that could cause overloads (i.e., over 100 percent of the facility rating) on **Begin Highly** Protected/ End Highly Protected. 15 PGE's updated transmission power flow analysis, performed in 2024 (2024) Study), shows Begin Highly Protected/ **End Highly Protected** contingency event scenarios that may cause overloads on various 115-kV transmission lines in the area as a result of the new load from the facility, as well as **Begin Highly Protected** End Highly Protected near-overload scenarios (i.e., 95-100 percent of the facility rating) (Highly Protected Exhibit PGE/106). 16 Construction of the Tonquin Project, including the Rosemont-Wilsonville Line, will alleviate all **Begin Highly Protected** /End Highly Protected N-1-1 contingency event scenarios causing overloads and Begin Highly Protected/ End Highly Protected near-overload scenarios. 17

After the Company's consultant, Power Engineers, Inc. (Power Engineers), completed a routing and feasibility study in December 2020 considering multiple potential transmission corridors, <sup>18</sup> PGE identified three potential routes. This analysis demonstrated that the selected route, which was the shortest of the three alternatives considered, maximized the use of existing

<sup>&</sup>lt;sup>14</sup> See generally Highly Protected PGE/101.

<sup>&</sup>lt;sup>15</sup> PGE/100, Beil/4; Highly Protected PGE/101, Beil/19-20.

<sup>&</sup>lt;sup>16</sup> PGE/100, Beil/4-5; Highly Protected PGE/106.

<sup>&</sup>lt;sup>17</sup> PGE/100, Beil/5; Highly Protected PGE/106.

<sup>&</sup>lt;sup>18</sup> PGE/401.

rights-of-way, was the least costly route, and was the least impactful to the environment and landowners. 19

The Rosemont-Wilsonville Line, as one of the transmission facilities of the Tonquin Project, is necessary to help accommodate the significant new load from the water treatment plant, which is crucial public infrastructure for the Beaverton, Hillsboro, and Tualatin Valley Water District (TVWD) service areas. Importantly, the Rosemont-Wilsonville Line must be energized as soon as possible after the water treatment plant requires full electric load to be available—approximately July of 2025—to minimize reliability risks to the transmission systems in the South Metro area.

PGE intends to demonstrate compliance with the Statewide Planning Goals and compatibility with the acknowledged comprehensive plans and land use regulations of affected local governments by obtaining the remaining land use approvals from Clackamas County. The Company has been diligently working with all regulatory authorities to obtain required land use permits and approvals for the Rosemont-Wilsonville Line; however, special circumstances have delayed the Company's efforts in Clackamas County, as discussed below. PGE expects to file the land use permit application with Clackamas County by mid-May 2024 and understands that the process may take six months from filing the application. To minimize reliability risks on PGE's system, the Company wishes to minimize the period of time between the date on which the water treatment plant requires full electric load—approximately July of 2025—and the energization date for the Rosemont-Wilsonville Line. For this reason, the Company hopes to receive a CPCN and begin construction at the earliest possible date. Because PGE anticipates that condemnation

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<sup>&</sup>lt;sup>19</sup> PGE/400, Gordanier-Messinger/9-14.

<sup>&</sup>lt;sup>20</sup> See PGE/500, Armstrong/4.

authority will likely be needed to construct the Rosemont-Wilsonville Line, PGE requests that the Commission approve this Petition for CPCN on or before March 14, 2025. A CPCN issued by this date would provide the Company with sufficient time to initiate any necessary condemnation proceedings and be granted access to commence construction by May of 2025, and to energize the Rosemont-Wilsonville Line by December 31, 2025.

#### II. COMMUNICATIONS

PGE respectfully requests that all communications with reference to this Petition be sent to the following:

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## III. LEGAL STANDARD

ORS 758.015 requires electric utilities to petition the Commission for a CPCN if condemnation of land or an interest therein is necessary for construction of a transmission line. The petition for a CPCN must provide "a detailed description and the purpose of the proposed transmission line, the estimated cost, the route to be followed, the availability of alternate routes, a description of other transmission lines connecting the same areas, and such other information in such form as the commission may reasonably require in determining the public convenience and

necessity."<sup>21</sup> Upon receipt of a petition for a CPCN, the Commission must conduct an investigation to "determine the necessity, safety, practicability and justification in the public interest for the proposed transmission line and shall enter an order accordingly."<sup>22</sup> The Commission's CPCN rules articulate the Commission's review criteria for consideration of the necessity, safety, practicability, and justification of the transmission line:

- (a) Whether the transmission line will meet a demonstrated need for transmission of additional capacity or improved system reliability that enables the petitioner to provide or continue to provide adequate and reliable electricity service;
- (b) Whether the petition has demonstrated that it will ensure the transmission line is constructed, operated, and maintained in a manner that protects the public from danger and conforms with applicable Commission rules, and other applicable safety standards and best industry practices;
- (c) Whether the transmission line using petitioner's proposed route is practicable and feasible, whether it will be effectively and efficiently constructed in a commercially reasonable manner;
- (d) Whether petitioner has justified construction of the proposed transmission line as in the public interest, as compared with feasible alternatives for meeting the identified need, considering the public benefits and costs of the project, as they relate to the interests in land proposed to be condemned, petitioner's existing facilities and equipment, petitioner's Oregon customers, and other considerations that may be relevant to the public interest. Other such considerations include but are not limited to, the benefits and costs to other Oregon utilities, their customers, and all Oregonians, the value of connections to regional and inter-regional electricity grids and to a petitioner's non-Oregon service territories, and all Oregonians.<sup>23</sup>

The Commission considers the "public interest" when addressing each of these requirements, not as a separate standard.<sup>24</sup>

<sup>22</sup> ORS 758.015(2).

<sup>&</sup>lt;sup>21</sup> ORS 758.015(1).

<sup>&</sup>lt;sup>23</sup> OAR 860-025-0035(1)(a)-(d).

<sup>&</sup>lt;sup>24</sup> See In re PacifiCorp, dba Pacific Power, Petition for Public Convenience and Necessity, Docket UM 1495, Order No. 11-366 at 4 (Sept. 22, 2011).

The Commission also considers whether the proposed transmission project complies with the Statewide Planning Goals and is compatible with the acknowledged comprehensive plans and land use regulations of each local government where the project is to be located.<sup>25</sup> Commission will rely on land use information and documentation from the affected city or county to make its land use findings.<sup>26</sup> In evaluating a petition, the Commission will give due consideration to related regulatory reviews and permitting approvals as pertinent to the proposed transmission line, and if the transmission line has already been acknowledged or approved by regulatory or permitting authorities.<sup>27</sup>

#### IV. **COMPLIANCE WITH OAR 860-025-0030 FILING REQUIREMENTS**

#### OAR 860-025-0030(2)(a): Information required under ORS 758.015. A.

Petitions under ORS 758.015 must contain the following information: (a) The information required under ORS 758.015 and the additional information set forth in this rule.

ORS 758.015(1) requires "a detailed description and the purpose of the proposed transmission line, the estimated cost, the route to be followed, the availability of alternate routes, a description of other transmission lines connecting the same areas, and such other information in such form as the commission may reasonably require in determining the public convenience and necessity." Additionally, ORS 758.015(2) requires the presentation of evidence sufficient for the Commission to make findings regarding the necessity, safety, practicability, and justification in the public interest for the proposed transmission line. The information requirements in ORS 758.015 are set forth in more detail in the Commission's Division 025 Rules, and accordingly, PGE discusses the information required under the statute and the Commission's rules in greater

<sup>&</sup>lt;sup>25</sup> OAR 860-025-0040(1).

<sup>&</sup>lt;sup>26</sup> OAR 860-025-0040(2)(a)-(c).

<sup>&</sup>lt;sup>27</sup> OAR 860-025-0035(2).

detail below and in the testimony of Company witnesses Dr. Ian Beil, Larry Bekkedahl, Kevin Putnam and Dan Nuñez, Matt Gordanier and Jordan Messinger, and Meredith Armstrong.

## B. OAR 860-025-0030(2)(b): Description of transmission line.

Thorough description of the proposed transmission line. A thorough description of the information listed in subsection (c) of this rule, including but not limited to the proposed route, voltage and capacity of the line. The description must include a comprehensive narrative that provides sufficient detail to enable a full understanding of the public convenience, necessity and justification in the public interest for the proposed transmission line and the benefits to be derived therefrom, and to enable a determination of its safety and practicability under normal and emergency conditions, as well as the foreseeable or potential consequences of not building the proposed transmission line.

Design, Voltage, and Rating of the Rosemont-Wilsonville Line. PGE proposes to construct, operate, and maintain a new overhead 115-kV transmission line between the Company's existing Rosemont and Wilsonville Substations. The Rosemont-Wilsonville Line is a 115-kV line composed of monopole structures, which will be built by adopting a combination of approaches to maximize the use of existing rights-of-way.<sup>28</sup> These approaches include converting single-circuit transmission line into double-circuit transmission line, rebuilding existing distribution lines to support both distribution and transmission lines located on the same pole/structure, and repurposing part of an existing transmission line.<sup>29</sup> The new construction portion of the line starts at Rosemont Substation and double-circuits with the existing Meridian-Rosemont 115-kV line until the roundabout at Borland Road, which is a distance of approximately 1.4 miles.<sup>30</sup> From

<sup>28</sup> PGE/300, Putnam-Nuñez-Gordanier/6.

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<sup>&</sup>lt;sup>29</sup> PGE/300, Putnam-Nuñez-Gordanier/6.

<sup>&</sup>lt;sup>30</sup> PGE/300, Putnam-Nuñez-Gordanier/6.

Borland Road the new construction portion of the line then transitions to the installation of new 115-kV structures along the existing Rosemont-Mossy Brae 13-kV distribution feeder right-of-way for approximately 0.3 miles.<sup>31</sup> New structures will be constructed for the next 0.3 miles along the Interstate 205 Freeway crossing where there are not currently any electrical lines.<sup>32</sup> Next, new 115-kV structures will again utilize the existing Meridian-Meridian 13 and Wilsonville-Boeckman 13-kV distribution rights-of-way for approximately 3.0 miles.<sup>33</sup> Finally, the line will tie into the repurposed, existing McLoughlin-Wilsonville 115-kV line for 2.4 miles until it connects to the Wilsonville Substation.<sup>34</sup>

The existing portions of the line contain Begin Highly Protected/

Protected All Aluminum Conductor (AAC) "Arbutus" conductor, which is capable of carrying

Begin Highly Protected/

End Highly Protected,

End Highly Protected Aluminum Conductor Steel

Reinforced (ACSR) "Drake" conductor, which is capable of carrying Begin Highly

Protected/

End Highly Protected.

End Highly Protected.

End Highly Protected.

End Highly Protected.

End Highly Protected

End Highly Protected at a 40
degree Celsius ambient temperature. The overall rating of the Rosemont-Wilsonville Line will

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<sup>&</sup>lt;sup>31</sup> PGE/300, Putnam-Nuñez-Gordanier/6.

<sup>&</sup>lt;sup>32</sup> PGE/300, Putnam-Nuñez-Gordanier/6.

<sup>&</sup>lt;sup>33</sup> PGE/300, Putnam-Nuñez-Gordanier/6.

<sup>&</sup>lt;sup>34</sup> PGE/300, Putnam-Nuñez-Gordanier/6.

<sup>&</sup>lt;sup>35</sup> PGE/300, Putnam-Nuñez-Gordanier/7.

<sup>&</sup>lt;sup>36</sup> PGE/300, Putnam-Nuñez-Gordanier/7.

be limited to the lowest rated AAC portion of the line, which is Begin Highly Protected

/End Highly Protected. 37

Need for the Rosemont-Wilsonville Line. The Rosemont-Wilsonville Line is a necessary transmission component of the Tonquin Project, which also includes the construction of the new Tonquin Substation, building and upgrading associated distribution feeders and transformers for the substation, and additional upgrades to the transmission system. The Tonquin Project, including the Rosemont-Wilsonville Line, is necessary to the Company's ability and obligation to provide adequate, safe and reliable energy services to its customers in the rapidly growing South Metro area. As discussed in more detail below, load growth in the South Metro area is anticipated to increase significantly over the next ten years due to new semiconductor manufacturing and technology customers and general commercial and residential growth in the area. 39

Load growth from the new water treatment plant in particular is driving the short-term urgent need and construction schedule for the Rosemont-Wilsonville Line. Operation of this water treatment facility will require approximately 11.8 MVA of electricity, which represents a substantial increase to the total electricity delivered by PGE in the area. Without the Tonquin Project, including the Rosemont-Wilsonville Line, the Company has modeled multiple double outage (N-1-1) contingency event scenarios resulting in significant overloads of transmission lines in the area. The models show that ameliorative actions such as switching substations to alternate sources or adjusting generation patterns are not sufficient to protect against overloads; instead, only direct shedding or curtailing of customer loads will bring the transmission facilities within

<sup>&</sup>lt;sup>37</sup> PGE/300, Putnam-Nuñez-Gordanier/8.

<sup>&</sup>lt;sup>38</sup> PGE/100, Beil/2.

<sup>&</sup>lt;sup>39</sup> PGE/100, Beil/36-37; Highly Protected PGE/111; PGE/200, Bekkedahl/4.

<sup>&</sup>lt;sup>40</sup> PGE/100, Beil/3.

<sup>&</sup>lt;sup>41</sup> See generally Highly Protected PGE/106.

rated limits.<sup>42</sup> In short, the Tonquin Project, including the Rosemont-Wilsonville Line, is needed to maintain reliability of the transmission systems in the South Metro area by adding additional high-capacity bulk electric facilities designed with the most up-to-date engineering standards and increasing the available load serving capability in the area.

Route Selection for the Rosemont-Wilsonville Line. PGE employed Power Engineers to perform a routing and feasibility study, which was completed in December 2020.<sup>43</sup> The routing study identified three potential routing corridors for the line.<sup>44</sup> In its routing study, Power Engineers identified routing opportunities to maximize the use of existing overhead distribution or transmission lines and major arterial streets and highways. 45 Power Engineers' priorities and concerns when considering routing options included, but were not limited to, rebuilding existing distribution lines to support both distribution and transmission lines located on the same pole/structure, following rights-of-way, maintaining avoiding road trees, and wetlands/floodplains.46

Power Engineers reviewed and analyzed a total of 38.3 miles of alternative route links for the Rosemont-Wilsonville segment, which resulted in three route options: the proposed route (Option A); Childs Road Alternative (Option C); and Schatz Road Alternative (Option B).<sup>47</sup> A map of the three routes identified and evaluated is provided below.

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<sup>&</sup>lt;sup>42</sup> PGE/100, Beil/34-35.

<sup>&</sup>lt;sup>43</sup> See PGE/401.

<sup>&</sup>lt;sup>44</sup> PGE/400, Gordanier-Messinger/8-9.

<sup>&</sup>lt;sup>45</sup> PGE/400, Gordanier-Messinger/6-7.

<sup>&</sup>lt;sup>46</sup> PGE/400, Gordanier-Messinger/7-8.

<sup>&</sup>lt;sup>47</sup> PGE/400, Gordanier-Messinger/8-9.

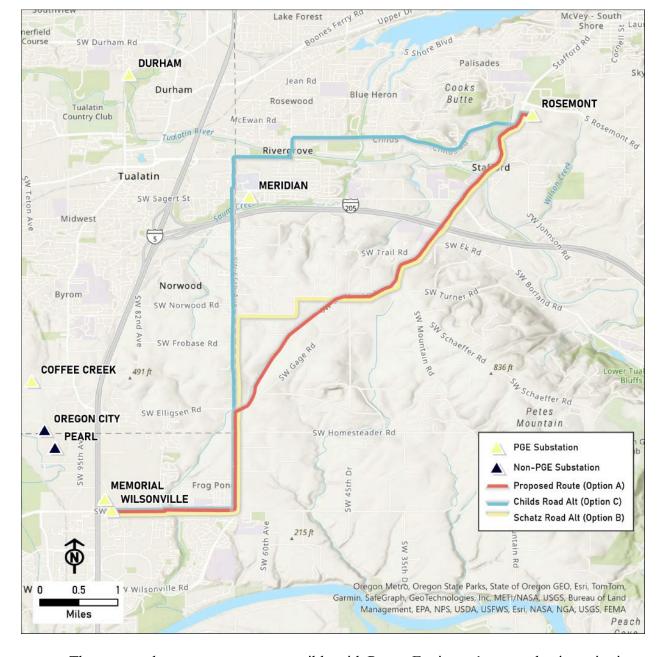


Figure 1: Map of Proposed Route and Alternative Routes

The proposed route was most compatible with Power Engineers' route selection criteria as

## follows:48

• The proposed route is the shortest of the three route options at approximately 7.4 miles in total length;

<sup>&</sup>lt;sup>48</sup> PGE/400, Gordanier-Messinger/9-13.

- The proposed route included the shortest distance for constructing the line in a new right-of-way at approximately 0.7 miles;
- The proposed route impacted the fewest total number of parcels as compared to the alternative routes;
- The proposed route passed the fewest number of buildings within 100 feet and 300 feet compared to the alternative routes;
- The proposed route was comparable, though nominally better in comparison with the Schatz Alternative (Option B) for the fewest number of schools and parks within 300 feet;
- The proposed route crossed the fewest number of streams and rivers;
- The proposed route crossed the shortest length (in linear feet) of wetlands and floodplains/floodways;
- No route, including the proposed route, crossed threatened or endangered species habitat; and
- The proposed route was the least costly as compared to the alternative routes.

In short, in comparison to the proposed route, the Childs Road Alternative (Option C) and Schatz Road Alternative (Option B) are more costly, pose the same if not more constructability challenges, would cause more environmental impacts, and would result in disturbance to a greater number of parcels and landowners.

<u>Compliance with Safety Standards and Applicable Laws</u>. The Rosemont-Wilsonville Line will be constructed, operated, and maintained to meet or exceed all applicable National Electrical Safety Code (NESC) standards, as well as all applicable federal state and local laws, regulations, and ordinances.<sup>49</sup> Further, PGE has substantial experience in constructing, operating, and maintaining transmission lines in a safe, efficient manner.<sup>50</sup>

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<sup>&</sup>lt;sup>49</sup> PGE/300, Putnam-Nuñez-Gordanier/17; see also PGE/314.

<sup>&</sup>lt;sup>50</sup> PGE/400, Gordanier-Messinger/22-24.

Additional narrative discussion of the spatial information listed in (c) is provided in Section IV.C. below.

## C. OAR 860-025-0030(2)(c): Spatial information.

A map or maps that are drawn to appropriate scale and show appropriate distinguishing colors and symbols to depict the following information:

*OAR 860-025-0030(2)(c)(A).* A general location and boundaries of petitioner's service area to be connected or served by the proposed transmission line.

PGE serves approximately 930,000 customers with a service area population of 1.9 million Oregonians in seven counties and 51 cities. Nearly half of Oregon's population lives in the Company's service area, which is largely urban and home to roughly 75 percent of Oregon's commercial and industrial activity. PGE's service regions include:

- <u>Eastern.</u> Includes the western portion of Multnomah County as well as part of the northwestern portion of Clackamas County (including West Linn, Oregon City, and part of Lake Oswego, but excluding the area around Canby), and a large part of the eastern portions of Multnomah County and Clackamas County.
- <u>Western.</u> Includes a large part of Washington County, with the majority of PGE's western service area in the eastern portion of the County. The western service area also includes the northwestern tip of Multnomah County and the eastern portion of Columbia County. The southern portion of PGE's western service area includes Tualatin, Wilsonville, and part of Lake Oswego.
- <u>Southern.</u> Includes all of southwest Clackamas County, portions of Marion County, Polk County, and Yamhill County (excluding the area surrounding McMinnville).

The Rosemont-Wilsonville Line is located in the south portions of PGE's western and eastern service regions and will connect the existing Rosemont and Wilsonville Substations in Clackamas and Washington Counties.

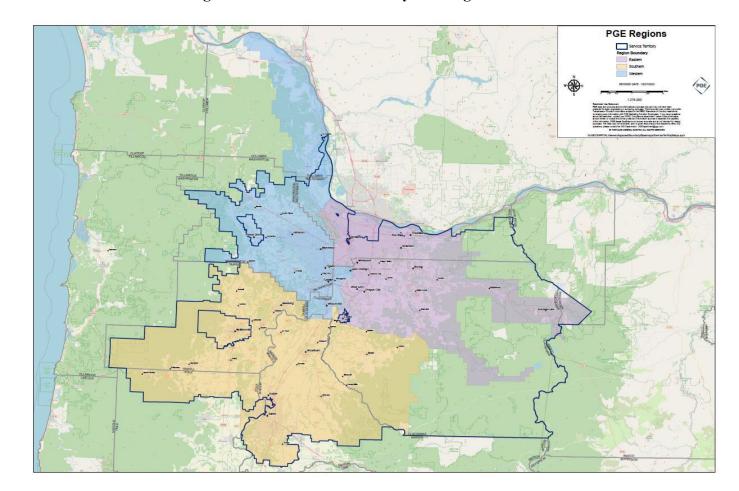


Figure 2: PGE Service Territory and Regions

OAR 860-025-0030(2)(c)(B). Proposed route, voltage and capacity of the proposed transmission line.

See Attachment 1 for a map of the proposed route of the Rosemont-Wilsonville Line, which consists of 7.4 miles in total length of 115-kV transmission line between the existing Rosemont and Wilsonville Substations in Clackamas and Washington Counties. Only approximately 5.0 miles of the Rosemont-Wilsonville Line will be new construction.

OAR~860-025-0030(2)(c)(C). Available alternate transmission line routes analyzed by petitioner, if any.

In addition to the proposed route included in Attachment 1, PGE analyzed two alternative transmission line routes connecting the Rosemont and Wilsonville Substations in depth. See Attachment 2 for a map of these analyzed alternative routes and corridors. PGE also conceptually evaluated a route alternative following Interstate 5 and Interstate 205; however, this option was rejected early in the routing analysis in light of guidance from the Oregon Department of Transportation (ODOT) indicating that siting within the freeway right-of-way would not be feasible under OAR 734-055-0080.<sup>51</sup>

In addition, links along the McLoughlin-Wilsonville transmission line lattice tower right-of-way were also initially evaluated but eliminated for constructability reasons by PGE. Specifically, the Company determined that the PGE easement that the lattice towers occupy did not have sufficient width to allow for a new 115-kV circuit and PGE would have to rebuild that corridor to allow for the addition.<sup>52</sup>

Finally, at a conceptual level during the initial, internal PGE planning phase for this transmission system upgrade, PGE considered a route that followed an existing railroad. This route was approximately 10.9 miles long, would pass through a number of densely developed residential areas, including areas with communities of color and low-income communities, and would have more complex regulatory and permitting requirements. This route was eliminated from further consideration after preliminary review because of the large number of impacts and constructability challenges. <sup>53</sup>

As discussed above, PGE's priorities when considering routing options included, but were not limited to, rebuilding existing distribution lines to support both distribution and transmission

52 DGE/400

<sup>&</sup>lt;sup>51</sup> PGE/400, Gordanier-Messinger/17; see also PGE/403, Gordanier-Messinger/1-2.

<sup>&</sup>lt;sup>52</sup> PGE/400, Gordanier-Messinger/17.

<sup>&</sup>lt;sup>53</sup> PGE/400, Gordanier-Messinger/17-18.

lines located on the same pole/structure, following road rights-of-way, maintaining trees, and avoiding wetlands/floodplains. As discussed above, the proposed route is the least costly and least impactful to the environment and landowners as compared to the alternatives.<sup>54</sup>

OAR 860-025-0030(2)(c)(D). Other transmission lines and substations of petitioner connecting, serving or capable of being adopted to connect or serve the areas covered by the proposed transmission line, if any.

See Attachment 1 for a map of PGE's other transmission lines and substations near the proposed route for the Rosemont-Wilsonville Line. These facilities include the existing Rosemont and Wilsonville Substations, which are the termini for the proposed Rosemont-Wilsonville Line.

*OAR* 860-025-0030(2)(c)(E). The terminals, substations, sources of energy, and load centers, existing or proposed, related to the proposed transmission line and its intended operation, including the proposed transmission line itself.

See Attachment 1 for a map of the proposed route for the Rosemont-Wilsonville Line, including the proposed terminals at the existing Rosemont and Wilsonville Substations.

OAR~860-025-0030(2)(c)(F). Each parcel of land that the petitioner has either acquired or has determined it should acquire an interest in to construct and operate the transmission line. The parcels of land that the petitioner has determined it should acquire an interest in must be clearly marked and must clearly show the general contour, uses, and improvements along that portion of the proposed route, inclusive of structures and agricultural uses.

See Attachment 3 for maps of the parcels on which the Company has acquired, or has determined it may need to acquire, an easement. Attachment 4 includes a table with the names

<sup>&</sup>lt;sup>54</sup> PGE/400, Gordanier-Messinger/5-18.

and addresses of all persons who have known interests in the land that may be physically impacted or traversed by the Rosemont-Wilsonville Line. The table in Attachment 4 also includes a column identifying whether or not the Company has obtained rights-of-way associated with the property as well as an identification number that corresponds with the maps of the properties.

## D. OAR 860-025-0030(2)(d): Cost information.

An estimate of both already incurred and forecasted costs of developing the transmission line project, including:

*OAR 860-025-0030(2)(d)(A).* Parcels of land that petitioner determines it should obtain an interest in and for which condemnation is assumed to be necessary at the time of the petition.

PGE already has obtained the necessary easements for or does not anticipate requiring easements because the facilities are located within rights-of-way for approximately 5.90 miles of the line, or about 80 percent of the total line length,<sup>55</sup> and is continuing to negotiate with landowners in good faith to obtain easements and avoid condemnation wherever possible. However, PGE anticipates it may need to initiate condemnation proceedings to obtain easements for certain parcels along the Rosemont-Wilsonville Line.

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<sup>&</sup>lt;sup>55</sup> PGE/400, Gordanier-Messinger/3.

<sup>&</sup>lt;sup>56</sup> PGE/400, Gordanier-Messinger/21.

<sup>&</sup>lt;sup>57</sup> PGE/400, Gordanier-Messinger/21.

*OAR* 860-025-0030(2)(d)(B). Other parcels of land and interests therein acquired or to be acquired.

PGE has acquired Begin Highly Protected/
represent approximately Begin Highly Protected/
/End Highly Protected of the total
easements the Company has determined it would need to obtain an interest in or for which
condemnation may be necessary. The total consideration paid by PGE for the RosemontWilsonville Line project easements it has already obtained that are necessary for construction of
the line is approximately Begin Highly Protected/
/End Highly Protected. In addition,
PGE has paid approximately Begin Highly Protected/
/End Highly Protected for
ancillary easements for proactive vegetation clearance. The total cost for easements is estimated
to be Begin Highly Protected/
End Highly Protected, excluding permitting costs,
costs for vegetation mitigation, or administrative or legal costs. Please see Highly Protected
Exhibit PGE/404.

OAR 860-025-0030(2)(d)(C). Transmission facilities, including but not limited to, poles, lines, substations, accessory and miscellaneous labor, plant and equipment inclusive of any communication apparatus and environmental mitigations.

PGE forecasts the total direct costs for the transmission facilities to be approximately \$18.6 million, including among other costs approximately **Begin Protected**End

Protected for construction services and approximately **Begin Protected**End

Protected for materials and equipment, including poles, wire, and communications material. 62 The

<sup>&</sup>lt;sup>58</sup> PGE/400, Gordanier-Messinger/3-4.

<sup>&</sup>lt;sup>59</sup> PGE/400, Gordanier-Messinger/21.

<sup>60</sup> PGE/400, Gordanier-Messinger/21.

<sup>61</sup> PGE/400, Gordanier-Messinger/21.

<sup>62</sup> PGE/400, Gordanier-Messinger/19.

Company is not aware of any factors related to topography, geology, environmental, agricultural, hydrology, stream crossing, or cultural or archaeological resource mitigations, or other conditions relevant to construction, that could cause PGE to incur incremental mitigation costs not already budgeted for in the contractor bid proposal. The total direct cost estimate for the project includes a flat contingency amount to cover any mitigation of impacts or other costs that are not already itemized. <sup>63</sup> Please see Highly Protected Exhibit PGE/404.

OAR~860-025-0030(2)(d)(D). Indirect and overhead costs including engineering, legal expense, taxes, interest during construction, and itemized administrative and general expenses.

PGE estimates overhead costs of approximately \$5.5 million, Allowance for Funds Used During Construction (AFUDC) costs of approximately \$3.1 million, and property taxes of approximately \$0.2 million.<sup>64</sup>

OAR 860-025-0030(2)(d)(E). Any other costs, direct or indirect, relating to the transmission line project including but not limited to operating and maintenance costs of the project.

PGE does not estimate operating and maintenance (O&M) costs for individual transmission lines. However, total O&M costs for 115-kV lines in PGE's service territory are **Begin**Protected End Protected. PGE has 552 circuit miles of 115-kV line in its service territory. Accordingly, the O&M cost per mile for 115-kV lines is approximately **Begin**Protected End Protected. For a 7.4-mile 115-kV line, this would equate to approximately **Begin**Protected End Protected in O&M costs.

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<sup>&</sup>lt;sup>63</sup> PGE/400, Gordanier-Messinger/19.

<sup>&</sup>lt;sup>64</sup> PGE/400, Gordanier-Messinger/19.

<sup>65</sup> PGE/109, Beil/8.

OAR~860-025-0030(2)(d)(F). Explanation of the foregoing cost estimates as needed to enable a full understanding of their basis and derivation.

Based on the most recent cost estimates, PGE anticipates the overall Rosemont-Wilsonville Line project costs to be approximately \$27.4 million, which includes \$18.6 million in direct costs made up of costs associated with the transmission facilities, including labor and material, as well as costs for easements and permits and a contingency (Highly Protected Exhibit PGE/404). 66 Because the Rosemont-Wilsonville Line is at 100 percent project design and construction documents have been issued, a five percent contingency is allocated in accordance with PGE project experience and is appropriate and sufficient to support construction of the line. 67 PGE's total cost estimate also includes costs for AFUDC, and property taxes. The following tables for the Rosemont-Wilsonville Line: 68

Table 1: Estimated Total Costs (in \$ millions)	
Direct Costs, including	\$18.6
contingency	
Overhead Costs	\$5.5
AFUDC	\$3.1
Property Taxes	<u>\$0.2</u>
Total	\$27.4

Table 2: Estimated Direct Costs (in \$ millions)	
PGE Internal Labor	\$0.34
Material and Equipment	Begin Protected
Engineering and Other	
Professional Services	
Construction Services	
Other Expenses	End Protected
Total	\$ 18.63

<sup>66</sup> PGE/400, Gordinier-Messinger/19.

<sup>&</sup>lt;sup>67</sup> PGE/400, Gordinier-Messinger/20.

<sup>68</sup> PGE/400, Gordinier-Messinger/19.

## E. OAR 860-025-0030(2)(e): Financial Feasibility.

An explanation of the financial feasibility of the proposed transmission line, including any expected costs, revenues, and financing tools.

Consistent with PGE's overall capital portfolio, the Rosemont-Wilsonville Line project is being financed through a combination of shareholder equity and long-term debt.<sup>69</sup> As the total capital cost of this asset is relatively small in comparison to PGE's overall capital portfolio, there is no specific debt or equity issuance tied to this project.<sup>70</sup>

## F. OAR 860-025-0030(2)(f): Description of Parcels Necessary for Construction.

A description of the parcels of land that petitioner determines it should obtain an interest in and for which condemnation is assumed to be necessary at the time of the petition, a full explanation of the intended use and the specific necessity and convenience of each. The description must be accompanied by the names and addresses of all persons who have interests, known or of record, in the land to be physically impacted or traversed by the proposed route from whom petitioner has not yet acquired the interest, rights of way or option therefor. Petitioner must include with the petition certification verifying that notice of the petition has been mailed to said persons.

See Attachment 3 for maps of the parcels of land for which PGE has determined it has acquired, or will need to acquire, for the Rosemont-Wilsonville Line. PGE already has obtained the necessary easements for or does not anticipate requiring easements because the facilities are located within rights-of-way for approximately 5.90 miles of the line, or about 80 percent of the total line length.<sup>71</sup> However, the Company anticipates it may need to initiate condemnation

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<sup>&</sup>lt;sup>69</sup> PGE/400, Gordinier-Messinger/21.

<sup>&</sup>lt;sup>70</sup> PGE/400, Gordinier-Messinger/21.

<sup>&</sup>lt;sup>71</sup> PGE/400, Gordanier-Messinger/3.

proceedings to gain access to certain parcels along the route for the Rosemont-Wilsonville Line. Attachment 4 includes a table with the names and addresses of all persons who have known interests in the land that may be physically impacted or traversed and from whom PGE has not yet acquired an easement or option. The maps identify those parcels for which the Company has not obtained rights-of-way and therefore may need to be condemned. The maps consist of satellite images along the route showing the necessity and convenience for each parcel, and include the proposed route, proposed tower locations, substations, and parcel identification numbers. Included with this Petition as Attachment 5 is a Notice of the Petition and Certificate of Service listing all the potential affected landowners as recipients of the Notice of the Petition.

G. OAR 860-025-0030(2)(g): Information related to alternate routes. A statement and explanation with supporting data comparable to that described in subsections (d) and (e) of this section for possible alternative routes analyzed by petitioner.

## 1. Description of Alternative Routes

As discussed above in Section IV.B., PGE's consultant, Power Engineers, identified three potential routing corridors for the line that would connect the Company's existing Rosemont and Wilsonville Substations: the proposed route (Option A); the Childs Road Alternative (Option C); and the Schatz Road Alternative (Option B). A map of the alternate routes considered is included as Attachment 2. The proposed route was most compatible with PGE's route selection criteria. All analyzed routes included PGE's preference to repurpose the existing McLoughlin-Wilsonville 115-kV transmission line from SW Stafford Road and SW 65th Avenue to connect to the Wilsonville Substation.

<u>Childs Road Alternative (Option C)</u>. The Childs Road Alternative (Option C) was the longest route considered at 8.88 miles and required the most construction in new right-of-

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<sup>&</sup>lt;sup>72</sup> PGE/401; PGE/400, Gordanier-Messinger/5-13.

way—1.58 miles. <sup>73</sup> Childs Road Alternative starts at the existing Rosemont Substation and follows SW Stafford Road southwest for approximately 0.2 miles, at which point the route turns west and follows SW Childs Road west and southwest for approximately 2.2 miles, at which point the route turns south and crosses the Tualatin River. <sup>74</sup> Unlike the other two routes PGE considered, Childs Road Alternative would not utilize the right-of-way from an existing transmission line to cross the Tualatin River but would instead require a new crossing where there is no bridge for access and only existing distribution line. Childs Road Alternative then follows SW Nyberg Lane heading west for approximately 0.5 miles. Childs Road Alternative then turns south following SW 65th Avenue and then SW Stafford Road for approximately 4.5 miles. Finally, Childs Road Alternative follows SW Boeckman Road west for approximately 1.1 miles to the existing Wilsonville Substation.

Schatz Road Alternative (Option B). The Schatz Road Alternative (Option B) totaled approximately 8.03 miles and would require constructing 0.81 miles of transmission line in new rights-of-way. Schatz Road Alternative is co-located with the proposed route along Stafford Road for approximately 3.1 miles, including the existing Tualatin River crossing approximately one mile from the Rosemont Substation. Schatz Road Alternative then continues west along SW Schatz Road for approximately 0.4 miles before turning south and following SW 55th Avenue for approximately 0.2 miles. Schatz Road Alternative goes west on SW Meridian Ave 0.5 miles. From that point on, Schatz Road Alternative then follows the same corridor as Childs Road Alternative following SW 65th Avenue and SW Boeckman Road to the existing Wilsonville Substation.

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<sup>&</sup>lt;sup>73</sup> PGE/401, Gordanier-Messinger/22.

<sup>&</sup>lt;sup>74</sup> PGE/401, Gordanier-Messinger/8.

<sup>&</sup>lt;sup>75</sup> PGE/401, Gordanier-Messinger/22.

<sup>&</sup>lt;sup>76</sup> PGE/401, Gordanier-Messinger/8.

# 2. Cost Information and Financial Feasibility of Alternative Routes

Although the Power Engineers study included a rough per unit cost for each route, it did not include a number of key factors that inform the development of a more precise cost estimate. At that time, no engineering or surveying had been performed for any alternative, and the Power Engineers study primarily considered the length of the line, tree-trimming, and areas requiring rebuilding existing distribution, but did not account for areas of constrained right-of-way, did not account for additional steel poles that would be required, and did not include costs associated with acquisition of easements.<sup>77</sup> That said, based on the basic design and relative locations of the alternative routes, PGE made a working assumption that the cost of the three routes would be roughly comparable—an assumption that the Power Engineers study bore out, albeit at a very general level.<sup>78</sup>

PGE prepared an updated Class 5 cost estimate that builds from the Power Engineers routing study and factors in 2024 costs for materials (including the additional steel poles) and also includes easement acquisition, among other factors. <sup>79</sup> In the updated direct cost study, the proposed route is the least costly, at \$17.5 million, <sup>80</sup> while the Childs Road Alternative is \$19.6 million, and the Schatz Road Alternative is \$19.0 million. <sup>81</sup> Class 5 cost estimates are typically used for initial screening and are prepared without the benefit of detailed design and have an accuracy of -50 percent to +100 percent. <sup>82</sup>

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<sup>&</sup>lt;sup>77</sup> PGE/400, Gordanier-Messinger/15.

<sup>&</sup>lt;sup>78</sup> PGE/400, Gordanier-Messinger/15.

<sup>&</sup>lt;sup>79</sup> PGE/400, Gordanier-Messinger/15-16.

<sup>&</sup>lt;sup>80</sup> The Company's most current direct cost estimate of approximately \$18.6 million is based upon a 100 percent design and hard bids from contractors and suppliers and is therefore more accurate. PGE/400, Gordanier-Messinger/16 n.5.

<sup>81</sup> PGE/400, Gordanier-Messinger/16.

<sup>82</sup> PGE/400, Gordanier-Messinger/16.

## H. OAR 860-025-0030(2)(h): Additional information.

Such additional information as may be needed for a full understanding of the petition.

In addition to the information provided in this Petition, the testimony of Company witness Dr. Ian Beil presents the need for the Rosemont-Wilsonville Line, summarizing the load forecasts for the South Metro area, anticipated load impacts from the water treatment plant, the results of the Company's January 2020 Study, the identification of the Tonquin Project as necessary in the Company's annual transmission planning assessments, and the results of PGE's updated power flow analysis, the 2024 Study. Results of the Company witness Larry Bekkedahl summarizes the justification for the project, including an analysis of the overall costs and benefits of the line. Company witnesses Kevin Putnam, Dan Nuñez, and Matt Gordanier present testimony regarding the design and safety of the Rosemont-Wilsonville Line, and Matt Gordanier and Jordan Messinger present testimony concerning the feasibility and practicability of the line. Finally, Company witness Meredith Armstrong testifies regarding the land use approval process for the Rosemont-Wilsonville Line, including the Company's progress in obtaining the necessary permits. The Rosemont-Wilsonville Line is needed to maintain adequate, safe and reliable energy service in the rapidly growing South Metro area.

## I. OAR 860-025-0030(2)(i): Safety standards information.

A summary of petitioner's plan to ensure compliance with applicable Commission rules, including but not limited to OAR Chapter 860, Division 24, and other safety standards for the safe construction, operation and maintenance of the transmission line. Petitioner must include a

84 PGE/200.

<sup>&</sup>lt;sup>83</sup> PGE/100.

<sup>&</sup>lt;sup>85</sup> PGE/300.

<sup>86</sup> PGE/400

<sup>87</sup> PGE/500.

certificate executed by an authorized representative of petitioner affirming that it will adhere to the applicable Commission rules and other applicable safety standards for construction operation and maintenance of the transmission line. The representative's certificate must be a sworn statement under ORS 162.055 attesting to the truth of the certification.

As described in the testimony of Company witnesses Kevin Putnam, Dan Nuñez, and Matt Gordanier, and evidenced by the declaration of Kevin Putnam included as Exhibit PGE/314, the Rosemont-Wilsonville Line will satisfy the Commission's safety criterion, because it will be constructed, operated, and maintained to meet or exceed all applicable NESC standards, as well as all applicable federal state and local laws, regulations, and ordinances.<sup>88</sup>

Further, PGE has extensive experience constructing, operating, and maintaining transmission lines in its designated service territory in a safe and reliable manner for more than 130 years. The Company operates and maintains 1,613 circuit miles of subtransmission/transmission lines (including generation lead lines) ranging from 57-kV through 500-kV in its service territory. In particular, PGE maintains over 550 circuit miles of 115-kV transmission lines like the proposed Rosemont-Wilsonville Line in its service territory. In addition to its 115-kV transmission lines, in the past five years the Company has developed over 25 circuit miles of high-voltage transmission ranging from 57-kV to 230-kV system-wide.

PGE also has in place a Wildfire Mitigation Plan, which includes wildfire risk mitigation guidance to PGE through operating protocols, public safety power shutoff (PSPS) events, asset management and inspections, vegetation management, community engagement, public awareness

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<sup>88</sup> PGE/300, Putnam-Nuñez-Gordanier/16-17.

<sup>89</sup> PGE/400, Gordanier-Messinger/22.

<sup>90</sup> PGE/400, Gordanier-Messinger/22; PGE/109, Beil/8.

<sup>91</sup> PGE/400, Gordanier-Messinger/22; PGE/109, Beil/8.

<sup>92</sup> PGE/400, Gordanier-Messinger/22.

and outreach, and research and development.<sup>93</sup> Additional details concerning the Wildfire Mitigation Plan and discussion of fire safety related issues are provided in the testimony of Company witnesses Kevin Putnam, Dan Nuñez, and Matt Gordanier.<sup>94</sup>

## J. OAR 860-025-0030(2)(j): Estimated revenue requirement impacts.

At a minimum, petitioner must include an estimate of the levelized, annual revenue requirement of the transmission line as a percentage of its estimated annual revenue requirement.

A revenue requirement estimate provided under this rule may be used solely for purposes of evaluating the petition.

The total estimated costs for the Rosemont-Wilsonville Line (\$27.4 million) represent 0.12 percent of the Company's annual revenue requirements. 95 This figure is based on the revenue requirements approved in docket UE 416. 96

## K. OAR 860-025-0030(2)(k): Public benefits and cost information.

Public benefits and costs of the transmission line, if any, are reasonably known to petitioner, including but not limited to: (A) costs and benefits to petitioner's Oregon customers and customers of other Oregon utilities and to Oregonians in general, (B) costs and benefits that the proposed transmission line will provide related to connection to regional and inter-regional grids.

<sup>&</sup>lt;sup>93</sup> The Commission approved PGE's 2023 Wildfire Mitigation Plan on June 26, 2023. *In re Portland Gen. Elec. Co., 2023 Wildfire Protection Plan*, Docket UM 2208, Order No. 23-221 (June 26, 2023); *see also* PGE/300, Putnam-Nuñez-Gordanier/20; PGE/316. The Company filed its 2024 Wildfire Mitigation Plan on December 29, 2023. PGE/300, Putnam-Nuñez-Gordanier/20. A copy of PGE's 2024 Wildfire Mitigation Plan is attached to the Company's testimony of Kevin Putnam, Dan Nuñez, and Matt Gordanier as Exhibit PGE/317. Pursuant to ORS 757.963(5), the Company anticipates that the Commission will complete its review of the 2024 Wildfire Mitigation Plan no later than June 26, 2024. PGE/300, Putnam-Nuñez-Gordanier/20.

<sup>94</sup> PGE/300, Putnam-Nuñez-Gordanier/18-33.

<sup>95</sup> PGE/400, Gordanier-Messinger/18-19.

<sup>&</sup>lt;sup>96</sup> In re Portland General Elec. Co., Request for a General Rate Revision; and 2024 Annual Power Cost Update, Docket UE 416, Order No. 23-386 (Oct. 30, 2023).

Regional Costs and Benefits. "Regional" impacts typically refer to interactions with 500-kV and 230-kV networks, often between utility systems or across long multi-state transmission paths. The Rosemont-Wilsonville Line is critical to alleviating local transmission congestion in the Tualatin, Sherwood, and Lake Oswego areas and increasing the available load serving capability in the South Metro area. <sup>97</sup> As a 115-kV line, it does not generally impact the regional transmission system outside of the greater Portland metropolitan area. <sup>98</sup> Accordingly, PGE does not anticipate that the Rosemont-Wilsonville Line will produce any costs or benefits related to connection to regional and inter-regional grids. <sup>99</sup>

## **Local Costs and Benefits.**

Benefits to PGE's Customers

As part of the Tonquin Project, the Rosemont-Wilsonville Line will provide significant reliability benefits to customers in the South Metro area. In particular, construction of the Rosemont-Wilsonville Line and the McLoughlin-Tonquin 115-kV line will maintain system reliability in the South Metro area by eliminating or reducing Begin Highly Protected/

End Highly Protected contingency event scenarios resulting in overloads (i.e., greater than 100 percent of the facility rating) on various transmission lines in the area, and an additional Begin Highly Protected/

/End Highly Protected (i.e., 95-100 percent of the facility rating) scenarios. This includes overloads as high as Begin Highly Protected/

/End Highly Protected of the facility rating. 101 Critically, in these scenarios, ameliorative actions such as switching substations to alternate sources or adjusting

<sup>97</sup> PGE/100, Beil/37; PGE/200, Bekkedahl/6-8.

<sup>98</sup> PGE/200, Bekkedahl/8.

<sup>99</sup> PGE/200, Bekkedahl/8.

<sup>&</sup>lt;sup>100</sup> PGE/100, Beil/34-35; PGE/200, Bekkedahl/6-835.

<sup>&</sup>lt;sup>101</sup> PGE/100, Beil/35; PGE/200, Bekkedahl/7.

generation patterns will not be sufficient to protect against overloads. Instead, only direct shedding or curtailing of customer loads will bring the transmission facilities within rated limits. 102 Moreover, the larger the overload, the more load that needs to be shed to alleviate the constraints. Without the Tonquin Project, including the Rosemont-Wilsonville Line, in a **Begin Highly Protected**End Highly Protected scenario, PGE will need to shed 35 MW, which equates to 21,000 residential customers losing power. 103

Constructing the Rosemont-Wilsonville Line and the McLoughlin-Tonquin 115-kV line will alleviate identified congestion under N-1-1 transmission outage conditions on the following transmission facilities:<sup>104</sup>



/End Highly Protected

The Rosemont-Wilsonville Line will also support future development of new customer load in the South Metro area. The Rosemont-Wilsonville Line, as a component of the Tonquin Project, is intended to respond to multiple inquiries for load development that PGE has received. <sup>105</sup> PGE has performed preliminary evaluations of several inquiries for prospective load addition requests in the Tualatin, Sherwood, and Wilsonville areas, including prospective semiconductor manufacturing and technology customers. <sup>106</sup> PGE's ten-year power flow analysis conducted in 2024 indicates that once the Rosemont-Wilsonville Line and McLoughlin-Tonquin 115-kV line

<sup>&</sup>lt;sup>102</sup> PGE/100, Beil/35; PGE/200, Bekkedahl/7.

<sup>&</sup>lt;sup>103</sup> PGE/100, Beil/35; PGE/200, Bekkedahl/7-8.

<sup>&</sup>lt;sup>104</sup> PGE/100, Beil/37; PGE/200, Bekkedahl/837.

<sup>&</sup>lt;sup>105</sup> PGE/200, Bekkedahl/9.

<sup>&</sup>lt;sup>106</sup> PGE/100, Beil/36-37; PGE/200, Bekkedahl/9.

are constructed, there will be sufficient capacity on both of these lines to avoid any further reconductoring through 2034. 107

Furthermore, in emergency scenarios, such as ice storms or wildfires, the Rosemont-Wilsonville Line will provide needed capacity to avoid and minimize load shedding and outages to customers. <sup>108</sup> The Rosemont-Wilsonville Line increases connectivity between the Sherwood, Tualatin, and Lake Oswego areas, which can be used to re-route electricity in the event of an outage or capacity constraint on the existing 115-kV lines in these areas during an emergency scenario. <sup>109</sup> Additionally, with the upgrade to the 50-year-old distribution line, <sup>110</sup> PGE will incorporate new monitoring and protection equipment that allows for immediate switching or cut-off to reduce impacts related to overloads, outages (e.g., vehicle collisions, fallen trees or limbs, etc.), or ignitions. <sup>111</sup>

## Benefits to Oregonians in General

The Tonquin Project, including the Rosemont-Wilsonville Line, is necessary to help accommodate load from essential public infrastructure—i.e., new water treatment plant—for the Beaverton, Hillsboro, and TVWD service areas. 112 Construction and operation of the new water treatment plant is essential to the new WWSS, which when complete, will be one of Oregon's most seismically-resilient water systems and will produce high-quality, safe, and reliable drinking water for the residents in the Beaverton, Hillsboro, and TVWD service areas. 113 The plant, which will initially produce up to 60 million gallons of water per day (mgd), is planned for an ultimate

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<sup>&</sup>lt;sup>107</sup> PGE/100, Beil/38; PGE/200, Bekkedahl/9.

<sup>&</sup>lt;sup>108</sup> PGE/200, Bekkedahl/10.

<sup>109</sup> PGE/200, Bekkedahl/10.

<sup>&</sup>lt;sup>110</sup> Some components of the distribution system in the area date back to the 1940s. PGE/200, Bekkedahl/10 n.16.

<sup>&</sup>lt;sup>111</sup> PGE/200, Bekkedahl/10.

<sup>&</sup>lt;sup>112</sup> PGE/200, Bekkedahl/10.<sup>112</sup> PGE/200, Bekkedahl/9-10.

<sup>113</sup> PGE/200, Bekkedahl/9-10.

capacity of 120 mgd to account for future population growth in the area. <sup>114</sup> Moreover, the water treatment plant, which is located on basalt rock and is being constructed to have superior seismic resiliency, will enhance emergency preparedness by being able to produce drinking water for emergency responders and the community within 24 hours of a major seismic event. <sup>115</sup> Although the water treatment plant will have back-up power generation capabilities, it will be dependent upon PGE power service to restore the full water-production capacity at the plant. <sup>116</sup>

In addition, the Rosemont-Wilsonville Line will result in positive economic impacts for the communities in the vicinity of the line in the form of family-wage union construction jobs and an estimated increase of \$400,000 in annual tax benefits in total to the counties for Rosemont-Wilsonville Line-specific property tax dollars. <sup>117</sup>

Costs to PGE Customers and Oregonians

Based on the Power Engineers routing and feasibility study and PGE's updated Class 5 direct cost estimates, PGE selected the least costly route which will minimize costs to the Company's customers. Moreover, the Company's choice to not underground the entire line prevented the project's direct costs from increasing from \$18.6 million to approximately \$111-185 million—about six to 10 times more than the estimated direct cost for this project. 119

PGE sought to minimize impacts—and related costs—to landowners and Oregonians more generally by maximizing the use of existing rights-of-way. <sup>120</sup> In evaluating route options for the Rosemont-Wilsonville Line, PGE thoroughly analyzed potential impacts to landowners and

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<sup>&</sup>lt;sup>114</sup> PGE/200, Bekkedahl/9-10.

<sup>&</sup>lt;sup>115</sup> PGE/200, Bekkedahl/10.

<sup>&</sup>lt;sup>116</sup> PGE/200, Bekkedahl/10.

<sup>&</sup>lt;sup>117</sup> PGE/200, Bekkedahl/10.

<sup>&</sup>lt;sup>118</sup> PGE/401, Gordanier-Messinger/19; PGE/400, Gordanier-Messinger/15-16.

<sup>&</sup>lt;sup>119</sup> PGE/200, Bekkedahl/8.

<sup>&</sup>lt;sup>120</sup> PGE/400, Gordanier-Messinger/5-7.

various resources, including impacts to hydrologic features such as streams and wetlands, wildlife habitat, agricultural land, and cultural resources, among others. <sup>121</sup> The proposed route for the Rosemont-Wilsonville Line minimizes these potential impacts to PGE customers, Oregonians, and the environment by making use of existing rights-of-way for existing distribution lines, transmission lines, and roadways.

## L. OAR 860-025-0030(2)(1): Regulatory approval information.

A review of and reference to regulatory approvals and reviews that concern, analyze or otherwise discuss the proposed transmission line, such as an integrated resource plan acknowledgement, other short- or long-term planning documents, construction work plans filed with a regulatory body, and any relevant site certificate issued by the EFSC.

The Tonquin Project transmission system configuration changes, including the Rosemont-Wilsonville Line, have been submitted by PGE as part of the annual Western Electricity Coordinating Council (WECC) Base Case Creation process under North American Electric Reliability Corporation (NERC) Reliability Standard MOD-032-1, along with all other planned transmission system topology changes anticipated in a ten-year timeframe. Given that the Tonquin Project's impacts are limited to the local PGE transmission system, no additional scrutiny from neighboring utilities, regional entities (WECC, Western Power Pool, NorthernGrid), or third parties has been requested for the Rosemont-Wilsonville Line.

Furthermore, because the Rosemont-Wilsonville Line is a local transmission line intended to alleviate local transmission congestions and is not expected to substantively impact generation dispatch patterns or reduce or delay future generation resource needs, the Company did not request Commission acknowledgement of the transmission line in its integrated resource plans (IRP).

<sup>&</sup>lt;sup>121</sup> PGE/200, Bekkedahl/11-32; PGE/400, Gordanier-Messinger/7-8,10-13.

## M. OAR 860-025-0030(2)(m): Load forecast.

The most recent load forecasts available to petitioner supporting need for the line. The load forecasts shall, when feasible, include a load forecast of at least 10 years, and an accompanying narrative explaining the kind, nature, extent, and estimated growth of the energy requirements or reasonably anticipated need, load or demand, as relevant to the proposed transmission line.

Future load growth in the South Metro area is anticipated to increase significantly over the next 10 years due to new semiconductor manufacturing and technology customers, newly constructed crucial public infrastructure, and general commercial and residential growth. In particular, over the next ten years, PGE projects that the load in the South Metro area will increase Begin Highly Protected Protected Exhibit PGE/111 for load forecasts supporting the need for the Rosemont-Wilsonville Line.

PGE anticipates 11.8 MVA load growth resulting from operations of the water treatment plant, which represents a substantial increase to the total electricity delivered by PGE in the area. <sup>124</sup> Load growth from the water treatment plant in particular, is driving the short-term urgent need and construction schedule for the Rosemont-Wilsonville Line, as the plant will need its full electric load requirements in approximately July of 2025. <sup>125</sup>

### N. OAR 860-025-0030(2)(n): Transmission line alternatives information.

An evaluation of available alternatives to construction of the transmission line, including but not limited to conservation measures, non-wires alternatives, and construction of one or more

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<sup>&</sup>lt;sup>122</sup> PGE/200, Bekkedahl/4,9.

<sup>&</sup>lt;sup>123</sup> PGE/100, Beil/36-37.

<sup>&</sup>lt;sup>124</sup> PGE/100, Beil/3.

<sup>&</sup>lt;sup>125</sup> PGE/100, Beil/3.

lower-voltage single or multi-circuit lines. The petitioner may make reference to relevant sections of its most recent integrated resource plan (IRP) filed under OAR 860-027-0400, local transmission plans, or a planning document substantially equivalent to an IRP.

In the Company's January 2020 Study, PGE Transmission Planning developed six alternative transmission configuration options to accommodate the new load from the water treatment plant. 126 These options included: 127

• Transmission Configuration Option 1: Transmission Configuration Option 1 was one of the base cases that PGE considered where the Tonquin Substation was built to accommodate the new load from the water treatment plant. However, unlike most other transmission configuration options, Option 1 would build Tonquin Substation into a two-source loop-in configuration and would simply split the existing Meridian-Sherwood 115-kV transmission line, creating the new Sherwood-Tonquin 115-kV and Meridian-Tonquin 115-kV lines in order to provide two sources of power to the Tonquin Substation. It was under this base case option that PGE observed Begin Highly Protected/

/End Highly Protected.

• Transmission Configuration Option 2: Transmission Configuration Option 2 would build Tonquin Substation in a ring bus configuration, with a third transmission source connecting from the nearby Coffee Creek Substation. Part of the existing Coffee Creek Tap-Sherwood 115-kV line section would be idled in this scenario, and a short 115-kV line section would be constructed to Tonquin Substation. In order to provide a third source of power, Coffee

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<sup>&</sup>lt;sup>126</sup> Highly Protected PGE/101, Beil/17-30.

<sup>&</sup>lt;sup>127</sup> PGE/100, Beil/26-34.

Creek Substation would also be rebuilt as a five-position ring bus. Transmission Configuration Option 2 resulted in an N-1-1 overload scenario on the Oswego-West Portland 115-kV transmission line.

- Transmission Configuration Option 3: Under Transmission Configuration Option 3, Tonquin Substation would be built in a ring bus configuration and 14 MW would be offloaded from Tualatin Substation onto Tonquin Substation. In this case, circuit switchers at Coffee Creek Substation would be replaced with breakers, but the substation would not need to be rebuilt. The addition of breakers at Coffee Creek Substation would create a three-terminal line, Coffee Creek-Sherwood-Wilsonville 115-kV. At the time of the study, Transmission Configuration Option 3 would resolve the observed N-1-1 outage scenarios if 14 MW were offloaded from Tualatin Substation to Tonquin Substation.
- Transmission Configuration Option 4: Under Transmission Configuration Option 4, Tonquin Substation would be built in a two-source loop-in configuration as opposed to a five-position ring bus. Importantly, however, this option would require rebuilding Tualatin Substation to a gas-insulated (due to space constraints) five-position ring bus and Coffee Creek Substation to an air-insulated five-position ring bus. This option would also require constructing a new Coffee Creek-Tualatin 115-kV line in all new right-of-way, and reconfiguring the existing Coffee Creek tap off Sherwood-Wilsonville 115-kV line into new Coffee Creek-Sherwood 115-kV and Coffee Creek-Wilsonville 115-kV lines. Finally, this option would require reconductoring the Coffee Creek tap section and an existing section of the Meridian-Tualatin 115-kV lines. At the time of the study, Transmission Configuration Option 4 resolved the observed N-1-1 outage scenarios.

- Transmission Configuration Option 5: Transmission Configuration Option 5 would build Tonquin Substation in a ring bus configuration and reconfigure the surrounding 115-kV transmission system in order to avoid rebuilding the Coffee Creek and Tualatin Substations. This option involves idling a small section of the McLoughlin-Wilsonville 115-kV line, building a small 115-kV section off of Coffee Creek tap to Tonquin Substation, constructing a new portion of line from McLoughlin Substation to Rosemont Substation, and creating a Tonquin-Wilsonville 115-kV line (with alternate tap to Coffee Creek Substation) and a McLoughlin-Rosemont 115-kV line. Transmission Configuration Option 5 would result in several N-1-1 outage scenarios causing overloads on the Meridian-Rosemont 115-kV and Sherwood-Six Corners 115-kV transmission lines.
- Transmission Configuration Option 6: Transmission Configuration Option 6 (or the Tonquin Project) builds Tonquin Substation in a ring bus configuration and repurposes the existing McLoughlin-Wilsonville 115-kV transmission line, creating the new McLoughlin-Tonquin 115-kV line and Rosemont-Wilsonville Line. Like Transmission Configuration Option 5, this reconfiguration avoids having to rebuild the Coffee Creek and Tualatin Substations and requires a similar amount of new transmission construction. At the time of the study, PGE determined that Transmission Configuration Option 6 was the most costeffective solution as it avoided having to rebuild any other substations in the area and resolved all the observed outage scenarios.

As relevant here, only two of these options—Transmission Configuration Options 3 and 4—were modeled at the time to alleviate the observed overloads in the same manner as the transmission configuration that included the Rosemont-Wilsonville Line (i.e., Transmission

Configuration Option 6 or the Tonquin Project) and did not include significant construction of transmission facilities.

PGE did not choose Transmission Configuration Option 3 as it created a three-terminal line (which can cause protection and reliability issues as compared with a two-terminal line) and required 14 MW to be offloaded from Tualatin Substation to Tonquin Substation in order to mitigate the observed Base Case overload. PGE determined that this scenario was impractical because it would require shifting load to the **Begin Highly Protected**/

/End Highly Protected. <sup>129</sup> Additionally, Transmission Configuration Option 3 would create a three-terminal transmission line and PGE policy does not allow for the construction of new three-terminal transmission lines due to the challenges they introduce from a system protection standpoint. <sup>130</sup> For these reasons, PGE determined that Transmission Configuration Option 3 was not a viable option. <sup>131</sup>

PGE did not choose Transmission Configuration Option 4 as it would require rebuilding both the Coffee Creek and Tualatin Substations. <sup>132</sup> Rebuilding these two substations would be both impractical and extremely expensive. <sup>133</sup> Specifically, due to space limitations and lack of available land for expansion at Tualatin Substation, rebuilding the substation as a ring bus would require

<sup>&</sup>lt;sup>128</sup> PGE/100, Beil/31.

<sup>&</sup>lt;sup>129</sup> PGE/100, Beil/31-32.

<sup>&</sup>lt;sup>130</sup> PGE/100, Beil/32.

<sup>&</sup>lt;sup>131</sup> PGE/100, Beil/32.

<sup>132</sup> PGE/100, Beil/32-33.

<sup>&</sup>lt;sup>133</sup> PGE/100, Beil/33.

gas-insulated switchgear (GIS) equipment, which would add significant cost. GIS equipment is necessary when substations need to expand but are space-constrained by an inability to expand substation fence lines. GIS equipment is inherently much more expensive than equivalent air-insulated switchgear (AIS) equipment. <sup>134</sup> In fact, PGE estimated that selection of Transmission Configuration Option 4 would result in direct costs for all project components (not including loadings and AFUDC) of approximately \$86 million, as compared to \$59 million under Transmission Configuration Option 6. <sup>135</sup>

### O. OAR 860-025-0030(2)(0): Electrical engineering studies.

All electrical engineering studies and reliability or resiliency analyses, whether performed by the petitioner or other entities, supporting the necessity of the transmission line when relevant, including those addressing single and multiple contingencies.

PGE performed the January 2020 Study to assess the impacts of the additional, significant load from a new water treatment plant on PGE's system. It was in this study that PGE first determined the need for the Rosemont-Wilsonville Line as part of the Tonquin Project. The January 2020 study showed that building the Tonquin Substation to accommodate the new load from the water treatment plant without the Tonquin Project transmission facilities would result in Begin Highly Protected/

End Highly Protected contingency event scenarios that could cause overloads (i.e., over 100 percent of the facility rating) on Begin Highly Protected/

Protected/

**Highly Protected**. <sup>137</sup> At this time, the transmission configuration including the construction of the Rosemont-Wilsonville Line was modeled to alleviate all observed overloads.

<sup>135</sup> PGE/100, Beil/33.

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<sup>&</sup>lt;sup>134</sup> PGE/100, Beil/33.

<sup>&</sup>lt;sup>136</sup> Highly Protected PGE/101, Beil/4.

<sup>&</sup>lt;sup>137</sup> Highly Protected PGE/101, Beil/19-20.

In 2024, PGE performed an updated power flow analysis that now shows **Begin Highly** Protected/ End Highly Protected contingency event scenarios that may cause overloads (i.e., over 100 percent of the facility rating) on various 115-kV transmission lines in the area, as well as Begin Highly Protected/ /End Highly **Protected** (i.e., 95-100 percent of the facility rating) scenarios. <sup>138</sup> All **Begin Highly Protected**/ /End Highly Protected scenarios are alleviated by the construction of the Rosemont-Wilsonville Line and McLoughlin-Tonquin 115-kV line. 139 PGE has also repeatedly identified the Tonquin Project, including the Rosemont-Wilsonville Line, in the Company's annual Local Transmission Plans as a transmission project that will be needed to maintain reliability on PGE's bulk electric system. In the Company's 2020-2021 Near Term Local Transmission Plan, the Company identified the Tonquin Project as a necessary project to address new customer load and loading concerns on the Oswego-West Portland 115-kV line. 140 PGE similarly indicated a need to construct the Tonquin Project to maintain reliability on its system in the Company's 2022-2023 Near Term Local Transmission

### P. OAR 860-025-0030(2)(p): Land use information and permits.

Plan<sup>141</sup> and in its 2023-2024 Long Term Local Transmission Plan.<sup>142</sup>

A narrative that identifies all land use approvals and permits required for construction of the transmission line. This narrative must include information on whether petitioner has submitted an application for each approval or permit, the status of all such applications, and an explanation

<sup>&</sup>lt;sup>138</sup> Highly Protected PGE/106.

<sup>&</sup>lt;sup>139</sup> Highly Protected PGE/106.

<sup>&</sup>lt;sup>140</sup> PGE/107, Beil/29.

<sup>&</sup>lt;sup>141</sup> PGE/108, Beil/23.

<sup>&</sup>lt;sup>142</sup> PGE/109, Beil/39. Note that the PGE Long Term Local Transmission Plan For the 2021-2022 Planning Cycle document covered the 6–10-year planning horizon and did not mention any near term (1-5 year) projects, including the Tonquin Project. *See generally* PGE/110. PGE Transmission Planning has since changed this practice, and now describes all projects identified in a 1–10-year timeframe in all Local Transmission Plans (both the Nearand Long-term versions). PGE/100, Beil/36 n. 27.

as to why petitioner did not obtain any pending or outstanding approvals or permits before submitting a petition under this rule as applicable, including anticipated timelines for issuance of any pending or outstanding approvals and permits, and the section of OAR 860-025-0040 under which the petitioner seeks to demonstrate compliance with that rule.

Local and state permits necessary for the Rosemont-Wilsonville Line include the following: 143

Permit or Approval	Regulatory Authority	State/Local	Submission Date	Status	Date Issued or Expected
Oregon	ODOT	State	May 15,	Issued	May 30, 2023
Department of	District 2B		2023		
Transportation					
(ODOT)				_	
Washington	Washington	Local	March 11,	Issued	March 14, 2024
County Right-	County		2024		
of-Way					
Permit					
Clackamas	Clackamas	Local	May 16,	Pending	Prior to Construction
County Right-	County		2023		
of-Way					
Permit					
Clackamas	Clackamas	Local	Mid-May	Pending	Mid-November 2024
County	County		2024		
Alteration of					
Non-					
Conforming					
Use Permit					

While PGE has been diligently working with all regulatory authorities to obtain required land use permits and approvals for the Rosemont-Wilsonville Line, confusion regarding whether the Clackamas County Zoning and Development Ordinance (ZDO) required a land use permit for the Rosemont-Wilsonville Line delayed the Company's efforts in Clackamas County. 144 Per the

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<sup>&</sup>lt;sup>143</sup> PGE/503.

<sup>&</sup>lt;sup>144</sup> PGE/500, Armstrong/3.

County's standard and traditional practice (and as is typical with neighboring jurisdictions for the siting of utilities in the right-of-way), PGE understood that no land use permits would be required by Clackamas County. Accordingly, the Company submitted only a Right-of-Way Permit application in May of 2023—a permit that is typically issued within one to two weeks upon receipt of application and without any land use review required. However, in late Fall 2023, the County's counsel reviewed the ZDO and determined that County staff's past application of the ZDO was not correct per the current ZDO. County staff subsequently informed PGE that the ZDO did require a land use permit for the Rosemont-Wilsonville Line. 147

In November 2023, County staff indicated that the ZDO should allow construction of utility power lines both inside and outside the right-of-way of roads as an outright permitted use (i.e., without the need for a land use permit) and initiated a process to update the ZDO through amendment. It is adopted and the project no longer requires land use review, the Right-of-Way Permit that was placed on hold will be issued, and the Company will require no additional approvals for the Rosemont-Wilsonville Line. However, the timing and outcome of the effort to amend the ZDO is uncertain. Therefore, to ensure timely completion of the project, the Company decided to move ahead with the land use permit application process while the County considers potential changes to its ZDO.

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<sup>&</sup>lt;sup>145</sup> PGE/500, Armstrong/3.

<sup>&</sup>lt;sup>146</sup> PGE/500, Armstrong/3.

<sup>&</sup>lt;sup>147</sup> PGE/500, Armstrong/3.

<sup>&</sup>lt;sup>148</sup> PGE/500, Armstrong/3.

<sup>&</sup>lt;sup>149</sup> PGE/500, Armstrong/3.

<sup>&</sup>lt;sup>150</sup> PGE/500, Armstrong/4.

<sup>&</sup>lt;sup>151</sup> PGE/500, Armstrong/4.

PGE initiated permit review by submitting its pre-application request for a land use permit on February 15, 2024. <sup>152</sup> The Company expects to file the land use application mid-May 2024, and anticipates the land use permit review process to be complete by mid-November 2024. <sup>153</sup>

A segment of the Rosemont-Wilsonville Line's proposed route is located in Washington County, which necessitated a permit for constructing the line within the right-of-way of roads. Washington County issued this permit for the Rosemont-Wilsonville Line on March 14, 2024. PGE has confirmed with Washington County that no additional land use permit is necessary for the line segment in Washington County.

The necessary state approvals include a crossing permit from ODOT, which was issued to PGE on May 30, 2023. 155

### Q. OAR 860-025-0030(2)(q): Standard data requests.

When filing a petition, a petitioner must also certify that it has concurrently submitted its responses to the most recent version of the Standard Data Requests for Petitions for Certificates of Public Convenience and Necessity, developed by Staff and available on the Commission's website.

As noted earlier, PGE filed its responses to the draft Standard Data Requests on the Commission's Huddle site.

#### V. CONCLUSION

The Rosemont-Wilsonville Line, as part of the Tonquin Project, is necessary for the Company's ability and obligation to provide adequate, safe and reliable energy services to its

153 PGE/500, Armstrong/4.

<sup>&</sup>lt;sup>152</sup> PGE/500, Armstrong/4.

<sup>154</sup> PGE/500, Armstrong/2.

<sup>155</sup> PGE/500, Armstrong/2.

customers in the South Metro area. The Company is anticipating substantial load growth over the next ten years due to new semiconductor manufacturing and technology customers, newly constructed public infrastructure, and general commercial and residential growth in the area. In particular, the urgent need for the project results from the new water treatment plant, which will need its full electric load requirements by approximately July of 2025. The Rosemont-Wilsonville Line is critical to serve this increasing load, and to avoid significant overloads and the potential for load-shedding during double outage (N-1-1) contingency event scenarios in the surrounding areas. Once operational, the Rosemont-Wilsonville Line will help accommodate essential public infrastructure and commercial and residential growth in the surrounding areas for years to come.

PGE considered several alternatives to serve the anticipated increased load and the Rosemont-Wilsonville Line is the most cost-effective solution that will ensure adequate, safe and reliable service to the South Metro area while causing the least impact to landowners and the environment. PGE further minimized the impacts associated with construction and operation of the Rosemont-Wilsonville Line by routing the line primarily within existing rights-of-way.

The Rosemont-Wilsonville Line will be constructed, operated, and maintained to meet or exceed all applicable NESC standards, as well as all applicable federal state and local laws, regulations, and ordinances. Finally, while the Company has not yet obtained two outstanding permits from Clackamas County, PGE believes that these permits will be issued after the County review is complete. After obtaining all necessary permits and securing the needed interests in land, PGE will effectively and efficiently construct the Rosemont-Wilsonville Line in a commercially reasonable manner.

For the reasons detailed in this Petition and in the Company's supporting testimony, the Rosemont-Wilsonville Line is necessary, safe, practicable, and justified in the public interest. PGE requests that the Commission issue a CPCN for the line.

Respectfully submitted this 17th day of April, 2024.

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## Docket PCN 6

# Petition for a Certificate of Public Convenience and Necessity

PORTLAND GENERAL ELECTRIC COMPANY

## Petition

## Attachment 1

Map of Proposed Route and PGE's Existing Voltage Transmission System

**PCN 6 - Petition for CPCN** 



## Docket PCN 6

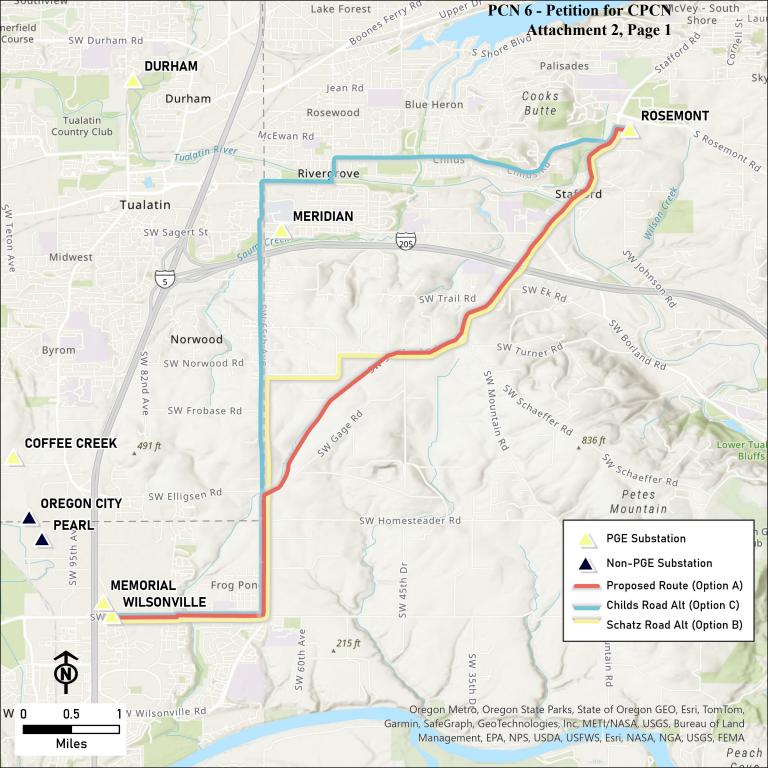
# Petition for a Certificate of Public Convenience and Necessity

PORTLAND GENERAL ELECTRIC COMPANY

Petition

Attachment 2

Map of Alternative Routes



## Docket PCN 6

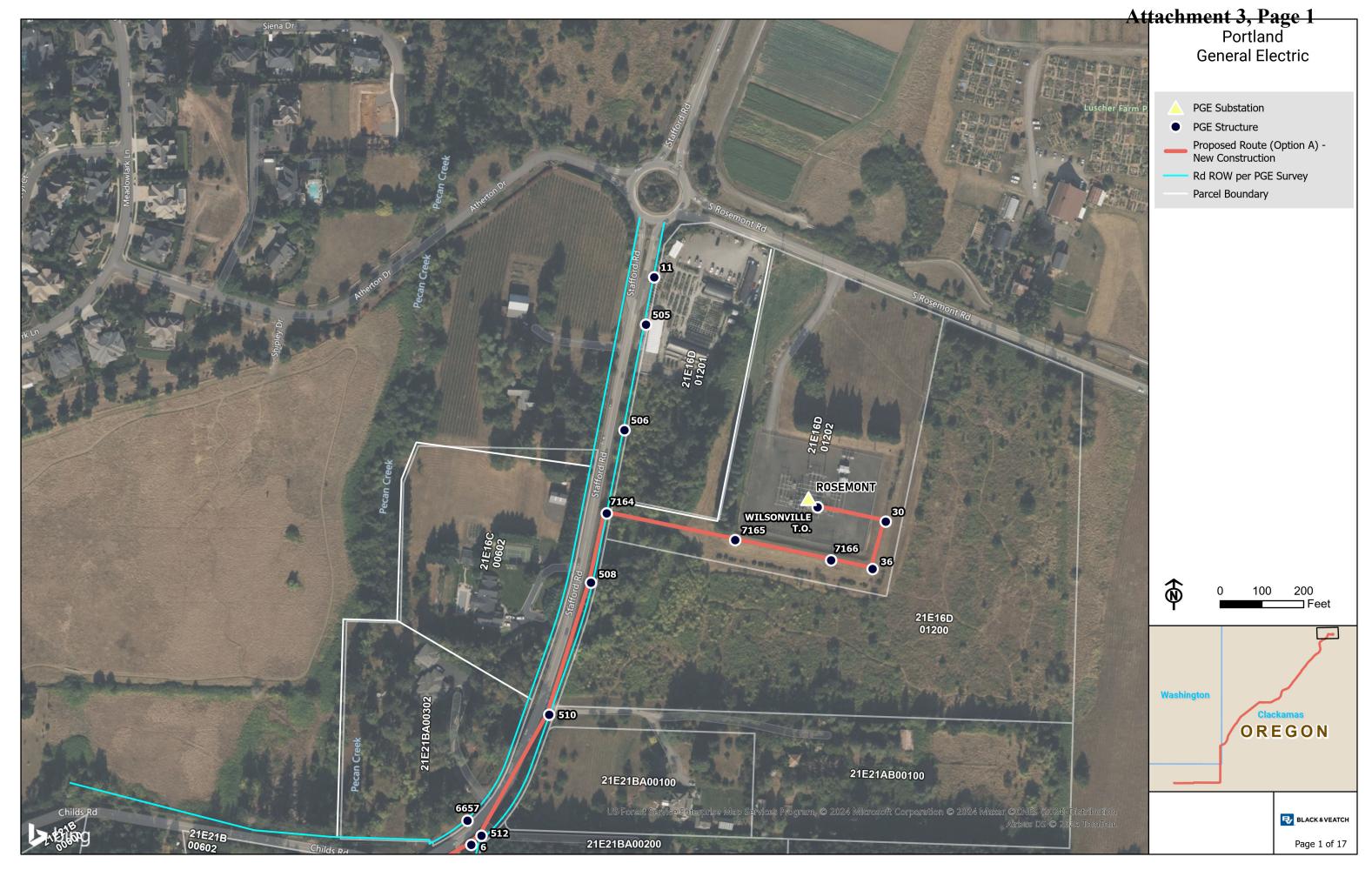
# Petition for a Certificate of Public Convenience and Necessity

PORTLAND GENERAL ELECTRIC COMPANY

Petition

Attachment 3

Landowner Parcel Maps

















**PCN 6 - Petition for CPCN** 





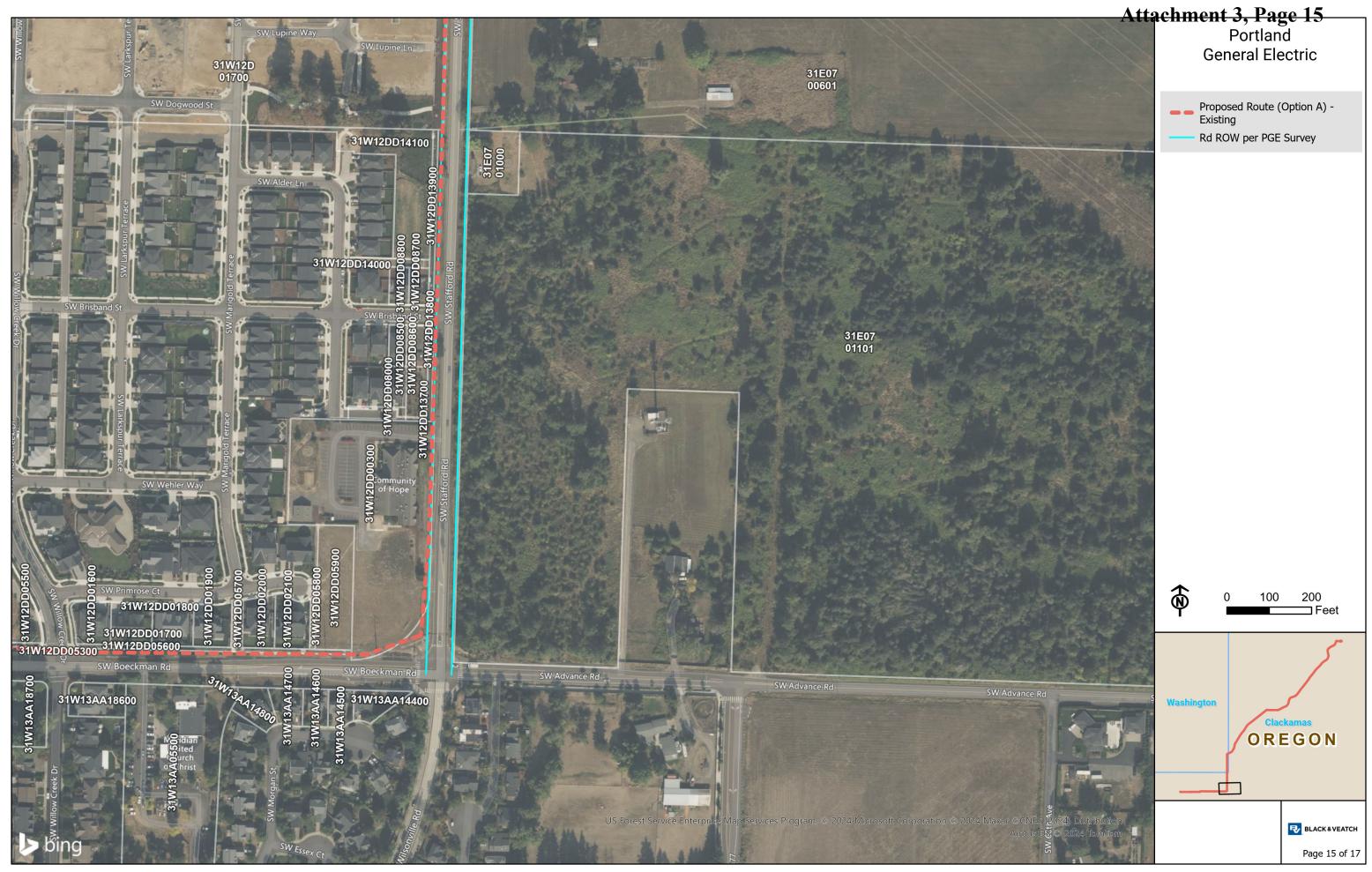


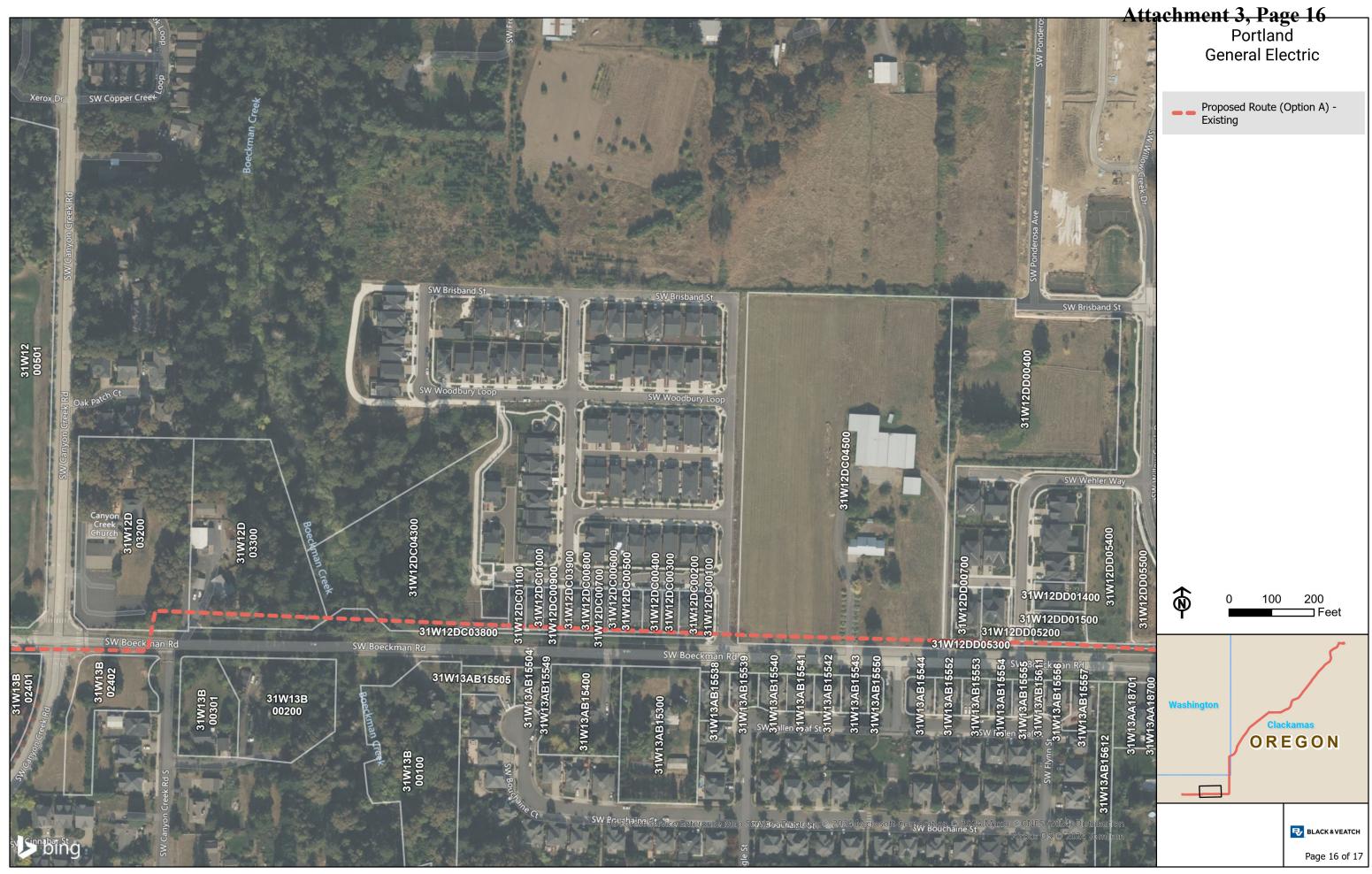




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Portland **General Electric** 









## Docket PCN 6

# Petition for a Certificate of Public Convenience and Necessity

PORTLAND GENERAL ELECTRIC COMPANY

Petition

Attachment 4

Landowner Parcel List

## PCN 6 - Petition for CPCN Attachment 4, Page 1

County	PARCEL_APN	TAX_ACCT_NBR	OWNER_NAME_1	OWNER_NAME_2	SiteAddress	MailingAddress	Status
Clackamas	21E29D 02300	395600	ADZHIGIREY, IVAN	ADZHIGIREY, IRINAI	21590 SW STAFFORD RD TUALATIN OR 97062	3845 NW 172ND PL BEAVERTON OR 97006	
Clackamas	31E06B 00900	756284	ARAKELIAN, VAHE	ARAKELIAN, SUSAN	24775 SW GAGE RD WILSONVILLE OR 97070	24775 SW GAGE RD WILSONVILLE OR 97070	
Clackamas	21E32 00403	398509	BISHOP, BLAKE K	BISHOP, SARA L	21980 SW STAFFORD RD TUALATIN OR 97062	21980 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	31E06B 00800	756275	BRAUN, JEFFREY SCOTT	BRAUN, JEANIE MARIE	24805 SW GAGE RD WILSONVILLE OR 97070	24805 SW GAGE RD WILSONVILLE OR 97070	
Clackamas	21E32 00411	398572	BRESEE, JAMES M	HAINLEY, NICOLE	21998 SW STAFFORD RD TUALATIN OR 97062	21998 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	21E21CA00600	357713	CLACKAMAS COUNTY		No site	ROAD ABERNETHY RD DEPT 902 OREGON CITY OR 97045	
Clackamas	21E21CA01500	357802	CLACKAMAS COUNTY		19620 SW STAFFORD RD WEST LINN OR 97068	ENGINEE RD 150 BEAVERCREEK RD OREGON CITY OR 97045	
Clackamas	21E31D 00300	398171	DAVIS, EUGENE K	DAVIS, BARBARA A	23000 SW STAFFORD RD TUALATIN OR 97062	4340 PARKER RD WEST LINN OR 97068	
Clackamas	21E31A 01201	397788	DICK, GERALDINE ANN	THE GERALDINE ANN DICK REVOCAB	22720 SW STAFFORD RD TUALATIN OR 97062	22720 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	31E06C 00501	756453	DORSETT, THOR	DORSETT, CHRISTENE M	25124 SW STAFFORD RD TUALATIN OR 97062	25124 SW STAFFORD RD TUALATIN OR 97062	Secured
Clackamas	21E32 00409	398554	HEROS, ROBERT DAVID	HEROS, WHITNEY E	3501 SW TURNER RD WEST LINN OR 97068	3501 SW TURNER RD WEST LINN OR 97068	
Clackamas	31E06B 00100	756060	HUTCHINSON, SAMUEL WRAY	HUTCHINSON, EILEEN R	24024 SW STAFFORD RD TUALATIN OR 97062	24024 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	21E21C 01300	357544	KINMAN, SPENCER	KINMAN, GEORGINA	19870 SW STAFFORD RD WEST LINN OR 97068	PO BOX 3127 TUALATIN OR 97062	
Clackamas	21E32B 00800	399036	LEE, JASON		22400 SW STAFFORD RD TUALATIN OR 97062	22400 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	31E06B 00601	756257	LEIGH, PETER W	LEIGH, ASHLEY C	24835 SW GAGE RD WILSONVILLE OR 97070	24835 SW GAGE RD WILSONVILLE OR 97070	
Clackamas	21E21CA00400	357697	LOPEZ, DAVID V		19600 SW STAFFORD RD WEST LINN OR 97068	19600 SW STAFFORD RD WEST LINN OR 97068	
Clackamas	21E31C 00903	398108	LUDLOW, MARK	LUDLOW, LISA	23616 SW STAFFORD RD TUALATIN OR 97062	23616 SW STAFFORD RD TUALATIN OR 97062	Secured
Clackamas	31E06C 00800	756499	MOLATORE, CLIFTON	MOLATORE, REGAN SONNEN	25272 SW GAGE RD WILSONVILLE OR 97070	25272 SW GAGE RD WILSONVILLE OR 97070	Secured
Clackamas	21E31D 00600	398251	OLDENSTADT, DARLENE J			23510 SW 65TH AVE TUALATIN OR 97062	Secured
Clackamas	21E21C 01400	357553	OREGON CAMBOD BUDD SOC INC		19940 SW STAFFORD RD WEST LINN OR 97068	19940 SW STAFFORD RD WEST LINN OR 97068	Secured
Clackamas	21E29A 01500	394861	RESURRECTION CATHOLIC CHURCH		21060 SW STAFFORD RD TUALATIN OR 97062	21060 SW STAFFORD RD TUALATIN OR 97062	Secured
Clackamas	21E29D 02400	395619	RITZ, HENRY PATTERSON	RITZ, TRUDY ELIZABETH	21580 SW STAFFORD RD TUALATIN OR 97062	21580 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	21E31A 01301	397804	RYSER, GERALD E	RYSER, MARLENE J	22560 SW STAFFORD RD TUALATIN OR 97062	22560 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	21E21C 01500	357571	STAFFORD ROUNDABOUT INVESTORS LLC		19950 SW STAFFORD RD WEST LINN OR 97068	2 CENTERPOINTE DR # 6TH LAKE OSWEGO OR 97035	
Clackamas	21E28 04500	393666	STROUPE, DUANE E	STROUPE, LORETTA M	20200 SW STAFFORD RD TUALATIN OR 97062	20200 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	21E31D 00504	5003475	TIEU, THANH THOMAS		23418 SW STAFFORD RD TUALATIN OR 97062	23418 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	21E28 04300	393648	TOLBERT, TRACIE M		2400 SW BORLAND RD WEST LINN OR 97068	2400 SW BORLAND RD WEST LINN OR 97068	Secured
Clackamas	21E21C 01401	357562	TUALATIN VALLEY FIRE & RESCUE			11945 SW 70TH AVE TIGARD OR 97223	Secured
Clackamas	21E29D 03300	395708	VANDENBURGH, MICHAEL D	VANDENBURGH, SUSAN G	21892 SW STAFFORD RD TUALATIN OR 97062	21892 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	21E31C 00901	398082	VANDERHOFF, KENNETH J	VANDERHOFF, CELESTA J	23510 SW STAFFORD RD TUALATIN OR 97062	23510 SW STAFFORD RD TUALATIN OR 97062	Secured
Clackamas	21E31D 00505	5003476	WALKER FAMILY TRUST		23232 SW STAFFORD RD TUALATIN OR 97062	23232 SW STAFFORD RD TUALATIN OR 97062	
Clackamas	21E32 00401	398484	WEINSTEIN, BRYAN D	BROOKS, SUMNER	22301 SW MOUNTAIN RD WEST LINN OR 97068	4823 IRELAND LN WEST LINN OR 97068	
Clackamas	21E31C 00902	398091	WIGANT, CALVIN R	WIGANT, DIANE R	23662 SW STAFFORD RD TUALATIN OR 97062	PO BOX 399 TUALATIN OR 97062	
Clackamas	21E31A 01302	397813	WILSON, DESY	WILSON, BRUCE	22409 SW NEWLAND RD WILSONVILLE OR 97070	22409 SW NEWLAND RD WILSONVILLE OR 97070	

## Docket PCN 6

# Petition for a Certificate of Public Convenience and Necessity

PORTLAND GENERAL ELECTRIC COMPANY

Petition

Attachment 5

Notice of Petition and Certificate of Service



JOCELYN PEASE Direct (503) 290-3620 jocelyn@mrg-law.com

April 17, 2024

### VIA ELECTRONIC FILING

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

Re: Docket No. PCN-6 – In the Matter of Portland General Electric Company's Petition for Certificate of Public Convenience and Necessity.

## Attention Filing Center:

On March 27, 2024, Portland General Electric Company (PGE or the Company) submitted to the Public Utility Commission of Oregon (Commission) a Notice of Intent to File a Petition for a Certificate of Public Convenience and Necessity (CPCN) authorizing construction of an overhead, 115-kilovolt (kV) transmission line totaling 7.4 miles in length and located primarily within Clackamas County, between the existing Rosemont and Wilsonville Substations (the Rosemont-Wilsonville Line). PGE mailed that Notice of Intent to all landowners for which condemnation may be necessary, though we indicated condemnation is not our preferred path and we remain committed to negotiating fair compensation for landowners in exchange for easements and rights-of-entry to property along the Rosemont-Wilsonville Line.

Consistent with the representations in the Notice of Intent, on April 17, 2024, PGE submitted to the Commission a Petition for a CPCN for the Rosemont-Wilsonville Line (Petition). Pursuant to the requirements of OAR 860-025-0030(2)(f), the Company is also mailing a copy of this notice to all landowners for which condemnation may be necessary informing them of the Company's submittal of the Petition. Persons who wish to obtain a copy of the Company's Petition will be able to access it on the Commission's website in connection with Docket PCN 6¹ or by contacting PGE directly:

<sup>&</sup>lt;sup>1</sup> The filings in connection with Docket PCN 6, including the Petition and supporting information, are available here: <a href="https://apps.puc.state.or.us/edockets/docket.asp?DocketID=24040">https://apps.puc.state.or.us/edockets/docket.asp?DocketID=24040</a>.

April 17, 2024 Page 2

Brendan McCarthy
Portland General Electric Company
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Portland, OR 97204
Telephone: (503) 464-7371

Facsimile: (503) 464-2354 Brendan.McCarthy@pgn.com Jocelyn Pease McDowell Rackner Gibson PC 419 SW 11<sup>th</sup> Avenue, Ste. 400 Portland, Oregon 97205 Telephone: (503) 290-3620

Facsimile: (503) 595-3928 jocelyn@mrg-law.com

If you have any questions about this notice filing, please do not hesitate to contact me.

Respectfully submitted,

Jocelyn Pease

McDowell Rackner Gibson PC 419 SW 11<sup>th</sup> Avenue, Suite 400 Portland, OR 97205

jocelyn@mrg-law.com

Attorneys for Portland General Electric Company

## **DOCKET PCN 6 – CERTIFICATE OF SERVICE**

I hereby certify that I served a true and correct copy of Portland General Electric Company's Notice of Petition for a Certificate of Public Convenience and Necessity, on the date indicated below by mail addressed to said person(s) as his or her last known address(es) indicated below.

Calvin R. Wigant	Walker Family Trust		
Diane R. Wigant	23232 SW Stafford Rd.		
PO Box 399	Tualatin, OR 97062		
Tualatin, OR 97062	Tualatili, OK 97002		
Tualatili, OK 97002			
Bryan D. Weinstein	Robert David Heros		
Sumner Brooks	Whitney E. Heros		
4823 Ireland Ln.	3501 SW Turner Rd.		
West Linn, OR 97068	West Linn, OR 97068		
Blake K. Bishop	Samuel Wray Hutchinson		
Sara L. Bishop	Eileen R. Hutchinson		
21980 SW Stafford Rd.	24024 SW Stafford Rd.		
Tualatin, OR 97062	Tualatin, OR 97062		
Peter W. Leigh	Ivan Adzhigirey		
Ashely C. Leigh	Irinai Adzhigirey		
24835 SW Gage Rd.	3845 NW 172nd PL.		
Wilsonville, OR 97070	Beaverton, OR 97006		
Spencer Kinman	Duane E. Stroupe		
Georgina Kinman	Loretta M. Stroupe		
PO Box 3127	20200 SW Stafford Rd.		
Tualatin, OR 97062	Tualatin, OR 97062		
Vahe Arakelian	Michael D. Vandenburgh		
Susan Arakelian	Susan G. Vandenburgh		
24775 SW Gage Rd.	21892 SW Stafford Rd.		
Wilsonville, OR 97070	Tualatin, OR 97062		
Jeffrey Scott Braun	Geraldine Ann Dick		
Jeanie Marie Braun	The Geraldine Ann Dick Revocable Living Trust		
24805 SW Gage Rd.	22720 SW Stafford Rd.		
Wilsonville, OR 97070	Tualatin, OR 97062		
Gerald E. Ryser	Desy Wilson		
Marlene J. Ryser	Bruce Wilson		
22560 SW Stafford Rd.	22409 SW Newland Rd.		
Tualatin, OR 97062	Wilsonville, OR 97070		
Eugene K. Davis	David V. Lopez		
Barbara A. Davis	19600 SW Stafford Rd.		
4340 Parker Rd.	West Linn, OR 97068		
West Linn, OR 97068			

Stafford Roundabout Investors LLC	Jason Lee
2 Centerpointe Dr., 6th Floor	22400 SW Stafford Rd.
Lake Oswego, OR 97035	Tualatin, OR 97062
Henry Patterson Ritz	James M. Bresee
Trudy Elizabeth Ritz	Nicole Hainley
21580 SW Stafford Rd.	21998 SW Stafford Rd.
Tualatin, OR 97062	Tualatin, OR 97062
Thanh Thomas Tieu	
23418 SW Stafford Rd.	
Tualatin, OR 97062	

DATED: April 17, 2024

/s/ Megan Billinger
Megan Billinger, Senior Legal Assistant