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June 30, 2023

***Via Electronic Filing***

Public Utility Commission of Oregon  
Attention: Filing Center  
201 High Street Southeast, Suite 100  
Post Office Box 1088  
Salem, Oregon 97308-1088

**Re: UM 2166 – In the Matter of Portland General Electric Company, 2021 All-Source Request for Proposals**

Dear Filing Center:

Enclosed for filing today in the above-referenced docket is the Independent Evaluator's Final Report on Contract Negotiations for Portland General Electric's 2021 All-Source Request for Proposals, prepared by Frank Mossburg. Material within the IE's Final Report is **highly confidential and subject to Modified Protective Order No. 22-025**, as such a redacted version has been provided to be filed and publicly available.

Please direct any questions regarding this filing to Jimmy Lindsay at (503) 464-8311. Please direct all formal correspondence and requests to the following email address [pge.opuc.filings@pgn.com](mailto:pge.opuc.filings@pgn.com).

Thank you in advance for your assistance.

Sincerely,

A handwritten signature in blue ink that reads "Erin Apperson".

Erin Apperson  
Assistant General Counsel III

EA:dm  
Enclosure



**Confidential**

**THE INDEPENDENT EVALUATOR'S  
FINAL REPORT ON CONTRACT  
NEGOTIATIONS FOR PORTLAND  
GENERAL ELECTRIC'S  
2021 ALL SOURCE REQUEST FOR PROPOSALS**

**Presented to:  
OREGON PUBLIC UTILITY COMMISSION**

**Prepared by  
Frank Mossburg**

June 29, 2023

2001 K Street NW, Suite 500  
Washington, DC 20006  
202-652-2194

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## **I. PURPOSE AND SUMMARY**

### ***A. PURPOSE***

The purpose of this report is to document the negotiation process for contracts resulting from Portland General Electric (PGE)'s 2021 All Source Request for Proposals (RFP) and to provide a review of the signed final contracts resulting from the RFP.

The RFP was driven by the findings of PGE's 2019 Integrated Resource Plan (IRP). The IRP was acknowledged with conditions in May of 2020 and updated in January of 2021. Bates White was selected to be the Independent Evaluator (IE) for the RFP in July of 2021. As the IE we reviewed the draft RFP and provided comments. The RFP was approved by the Oregon Commission (Commission) with modifications in December of 2021 and issued to market the same month.

The RFP targeted an acquisition of approximately 375 MW of capacity split into two categories – dispatchable generation and renewables. An initial cap of 150 average megawatts (MWa) was set for the renewable category. Bids were received in January of 2022 and the final shortlist was filed with the Commission in May of 2022. The shortlist was acknowledged at a Special Public Meeting on July 14, 2022 and in Order 22-315 issued August 31, 2022. As part of that Order Bates White was to continue to serve as the IE through final resource selection, monitor contract negotiations and file a closing report no later than 30 days after final resource selection.

### ***B. SUMMARY***

The Company ultimately negotiated final contracts with four resources; (a) the 300 MW Clearwater wind facility, (b) the 200 MW Troutdale Battery Energy Storage (BESS) facility, (c) the 200 MW Seaside BESS facility and (d) the 75 MW Evergreen BESS facility. The Clearwater facility, and the Troutdale BESS facility, will be built by NextEra Energy Resources (NextEra), the Seaside BESS facility will be built under the direction of Eolian, and the Evergreen BESS facility will be built by M.A. Mortenson Construction.<sup>1</sup> All four resources were offered as benchmark bids in the RFP.

<sup>1</sup> The Troutdale facility was offered into the RFP by Eolian but subsequently acquired by NextEra.

We make the following findings:

The prices for the final contracts match the prices offered by the bidders in the most recent price update. For this RFP that update came in August of 2022 after the passage of the Inflation Reduction Act (IRA).

The non-price terms of the contracts generally match those offered by the bidders in their initial bid submission. While these do not always reflect the RFP's draft term sheets they still offer basic protections for ratepayers to protect against project delays, provide performance guarantees and more.

PGE did engage in negotiations with other bidders but ultimately was not able to reach agreement, in large part due to the fact that other bidders increased their offer prices from the August price update. We believe this was a reasonable outcome given rapidly increasing market prices as well as the prospect of another RFP.

The Clearwater facility has secured long-term transmission for a portion **[begin highly confidential]** [REDACTED] **[end highly confidential]** of its 300 MW output, **[begin highly confidential]** [REDACTED] **[end highly confidential]**. Under RFP rules renewable off-system bidders were to have a plan to secure 80% of their output under long term firm transmission agreements. While PGE does have some options to cover the shortfall none of these options were available to bidders in the RFP. While the arrangement is acceptable given PGE's renewable and capacity needs the point is that the offer does not quite meet the letter of the law from the RFP. This suggests that future RFPs should be more flexible with this requirement.

Due to permitting and project economics the Seaside project is larger (by 75 MW) than the largest offer originally bid into the RFP and has a scheduled commercial operation date (COD) that is a few months after the December 2024 deadline in the RFP. This is acceptable given that the terms and conditions of the offer are otherwise similar to what was offered, the price per kW matches what was offered in the August price update, and, even with this purchase, PGE still has capacity needs going forward. However, this reflects the need for more space in future RFP timelines to allow for less than perfect project timing.

## II. POST FINAL SHORTLIST PRICE UPDATES

The RFP final shortlist was acknowledged in July of 2022. In August of 2022, the IRA was passed. Due to the new slate of benefits provided by the legislation PGE decided to return to bidders and ask if their prices could be improved. In addition, bidders had expressed concerns about the ability to hold their prices in the face of rising commodity costs and supply chain issues, so this provided them an opportunity to account for these factors. PGE received updated pricing from all shortlisted offers at the end of August. We provided the Commission with a memo at the end of September which examined the updated bid rankings.

The table below, from our September memo, shows the number of times a given bid was included in a top-performing (i.e. lowest cost) portfolio. PGE looked at three levels of renewable resource participation ranging from 180 MWa to 400 MWa. The top of the table shows the renewable offers and the bottom of the table shows dispatchable offers.

[begin highly confidential]

*Table 1 Bids in Top Portfolios*

Bid	Description	Size (Mwa/ELCC)	400 MWa	250 Mwa	180 Mwa	All Portfolios Total
[Redacted Content]						

[end highly confidential]

PGE looked at the cost of portfolios under many different scenarios, including variations in load, energy prices, construction costs, new entry, gas prices and more. They then looked for portfolios which were lower cost and less risk under a range of scenarios. In general, the top ranked bids above were also the top-performing bids under this analysis.

The top performing bids in the renewable category included;

- The Clearwater wind offer from NextEra (Bid 32.2.Base). This was a benchmark offer for a roughly 300 MW wind project with one third of the offer under a Power Purchase Agreement (PPA) and the rest under a Build Transfer Agreement (BTA).
- **[begin highly confidential]** [REDACTED] **[end highly confidential]** (43.2.Base, 43.1.Base). These were two solar projects (one 200 MW and the other 120 MW) offered as PPAs. The bidder also offered hybrid options with Battery Storage.
- **[begin highly confidential]** [REDACTED] **[end highly confidential]** (62.3 and 62.4). This was a small (41 MW) solar project from **[begin highly confidential]** [REDACTED] **[end highly confidential]** sold under a PPA, which included BESS options.

The top performing bids in the dispatchable category were three projects all from the same bidder. The Troutdale, Evergreen and Seaside standalone BESS offers were all submitted by Eolian as benchmark resources. The Troutdale project was a PPA while the others were BTA offers. All projects were four-hour batteries offered at several sizes.

Per these results, as well as considerations over in-service dates, PGE prioritized negotiations with the top projects on each list, starting with Clearwater and the Eolian battery projects.

### III. RENEWABLE PROJECT CONTRACT NEGOTIATIONS

#### A. CLEARWATER NEGOTIATIONS

PGE commenced negotiations with Clearwater in May of 2022 once the final shortlist was filed with the Commission. Once the final shortlist was acknowledged we were added to the discussions between parties. While we were not active participants, we did receive redlines of contract documents and listened in to negotiation calls. In addition, parties were available if we had questions.

Because of the way in which the offer was structured the parties had to negotiate two major agreements, a PPA for 100 MW and a roughly 200 MW BTA.<sup>2</sup> [begin highly confidential]

[end highly confidential] Negotiations proceeded in a relatively smooth fashion and concluded in October of 2022.

Below we highlight some key features of the contracts. We start with the Clearwater PPA. This is a PPA between NextEra and PGE for 100 MW for a 30 year term.

[begin highly confidential]

<sup>2</sup> The PPA is for 103 MW and the BTA for 208 MW, but the project is limited to 300 MW total at the interconnection.

<sup>3</sup> Wholesale Renewable Purchase Power Agreement between Portland General Electric Company and Clearwater Wind II, LLC, (Clearwater PPA), Article 1.1.68.

<sup>4</sup> [begin highly confidential]

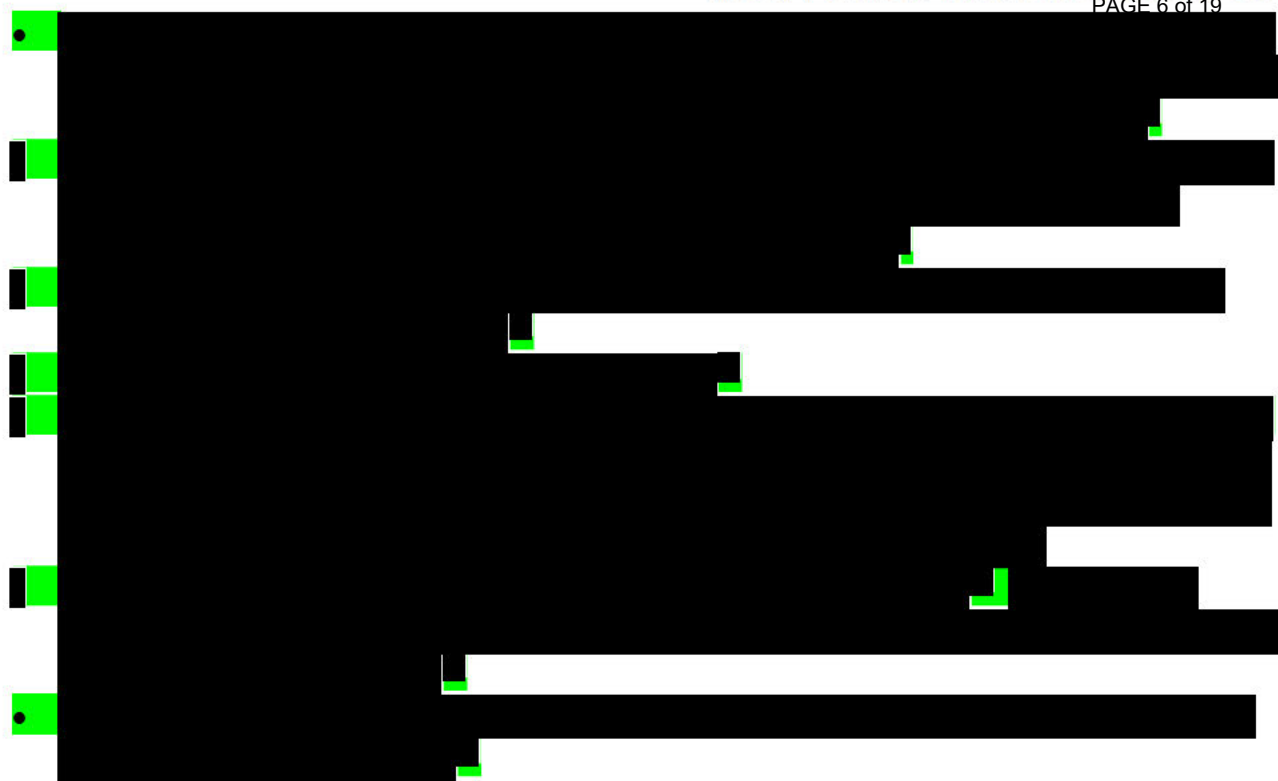
[end highly confidential]

<sup>5</sup> Clearwater PPA Article 1.1.40.

<sup>6</sup> Ibid, Article 1.1.144 and 1.1.77.

<sup>7</sup> Ibid, Article 1.1.117.





**[end highly confidential]**

When looking back at the offer made in the RFP we see that, in addition to the contract price matching the August refresh the terms and conditions of the offer are fairly similar to those proposed by NextEra in their original offer. These are shown in Attachment One which is the bidder-provided redline to PGE's original term sheet. From this we can see that the delay damages and project timing, credit, excess and test energy and performance payments are in line with what was originally bid. It's also worth noting that, even as the benchmark offer, the bidder did not totally agree to PGE's standard terms and conditions.

We next review the BTA. This is for the construction of a roughly 200 MW facility which will be turned over to PGE ownership at completion. Below are some of the key provisions of the agreement.

**[begin highly confidential]**

<sup>8</sup> Ibid, Article 1.1.37.

<sup>9</sup> Ibid, Exhibit M, Section 3.

<sup>10</sup> Ibid, Article 2.3.2.

<sup>11</sup> Ibid, Article 2.2.

<sup>12</sup> Ibid, Article 1.1.35.

<sup>13</sup> Ibid, Article 9.1.1.

<sup>14</sup> Ibid, Article 9.2.

<sup>15</sup> Ibid, Article 2.5.

[REDACTED]

<sup>16</sup> Build Transfer Agreement by and between Clearwater Wind East, LLC as Seller, and Portland General Electric Company as Purchaser, October 23, 2022 (Clearwater BTA), Article 2.2.1.

<sup>17</sup> [begin highly confidential] [REDACTED] [end highly confidential]

<sup>18</sup> Clearwater BTA Article 1.1.

<sup>19</sup> Ibid. Article 1.

<sup>20</sup> Ibid, Article 5.9.2

<sup>21</sup> Ibid, Article 5.9.1.

<sup>22</sup> [begin highly confidential] [REDACTED] [end highly confidential]

<sup>23</sup> Ibid Article 1.1 (see Seller's Parent Guaranty and Seller's Closing Guaranty).

<sup>24</sup> Ibid, Article 5.9.3.

<sup>25</sup> Ibid, Exhibit O, Section 2.3.

<sup>26</sup> Ibid, Exhibit M, Section 6.1 and Appendix A.

[REDACTED]

**[end highly confidential]**

Again, if we refer to the original term sheets offered by the bidder (provided here as Attachment Two) we can see that the terms agreed to here are similar to what was offered by NextEra in the original bid. **[begin highly confidential]**

[REDACTED]

**[end highly confidential]**

Unlike the BESS units, the Clearwater project is not on PGE's system. The project itself is located near the Colstrip generating station in Montana. Bidders in the 2021 RFP had to provide a reasonable plan to transmit energy from off system to PGE. Renewable resources had to provide at least 80% of their project offer under firm, (or conditional firm) offer.<sup>30</sup>

The plan for delivery of power includes several steps. **[begin highly confidential]**

[REDACTED]

[REDACTED]

**[end highly confidential]**

<sup>27</sup> Ibid, Exhibit M, Appendix F.

<sup>28</sup> Ibid, Exhibit M, Appendix C.

<sup>29</sup> Ibid, Exhibit M, Section 5.3.

<sup>30</sup> Bidders could also offer conditional firm bridge supply.

While this is reasonable we do think that it bears mentioning that the project plan here technically did not meet PGE’s RFP requirements. The RFP required renewable resource bidders to have a plan to secure long-term firm transmission for 80% of the project’s output. While the project falls slightly short of this goal even with **[begin highly confidential]** [REDACTED]

**[end highly confidential]**

Given PGE’s renewable needs it does not make sense to reduce the overall buy in this transmission to meet the 80% threshold. However, we think the lesson here is for more leniency to off-system bidders in future RFPs. As has been noted many times, transmission is a scarce resource. If PGE’s own bids can’t live up to the RFP standards it does not make sense to hold other parties to a higher standard.<sup>31</sup>

***B. [begin highly confidential]*** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>31</sup> It is worth stating that PGE did say in RFP Q&A that it would “consider alternative transmission plans provided bidders provide a clear and executable path to procuring transmission service” so the bid was evaluated under this standard and that PGE has exhibited some flexibility regarding transmission plans.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

		BAFO	January
Bid	Description	Score	Score
[REDACTED]			

[REDACTED]

[REDACTED]

[REDACTED]


[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



**[end highly confidential]**

## IV. DISPATCHABLE PROJECT CONTRACT NEGOTIATIONS

Eolian offered a suite of three BESS projects as benchmarks bid in this RFP under various transaction types. These were the top ranked offers in the dispatchable capacity category by a wide margin. In late August they offered the following prices as part of the BAFO update process.

**[begin highly confidential]**

*Table 3 Updated Eolian BAFO Offers*

Project Name	MW	MWh	COD	Updated Response
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

**[end highly confidential]**

In late September, PGE restarted negotiations with Eolian for all three projects. One issue was the size of each project since the bidder had offered multiple sizes. The RFP needed a total target of 375 MW of capacity resources. Some of this could be provided by the acquired renewable resources. The Clearwater contracts were signed in October, providing approximately 108 MW of capacity, leaving a target of 267 MW. The three offered projects, at their largest sizes, would provide, per PGE analysis, about 259 MW of capacity. Therefore, it made sense to target the larger offers initially. In addition, as can be seen from the table above, the **[begin highly confidential]** [REDACTED] **[end highly confidential]** offers were comparatively better-priced.

Negotiations began to pick up steam in November, after the execution of the Clearwater contracts. Parties exchanged redlines of the contracts (which included a tolling/PPA agreement for the Troutdale project and BTA agreements for the Seaside and Evergreen projects). Issues included



[begin highly confidential] [REDACTED] [end highly confidential]

Another issue was [begin highly confidential] [REDACTED]

[end highly confidential]

Negotiations for Troutdale and Evergreen progressed through February of this year. In March, [begin highly confidential] [REDACTED]

[end highly confidential]

In April PGE officially communicated to the bidder that it would be open to such an arrangement. To us, this was acceptable for several reasons. First, PGE still needed the capacity, with just the Troutdale and Evergreen bids (and Clearwater) they would be acquiring about 250 MW of capacity per their own measurements, well short of the 375 MW target. Second, the price was already vetted in the RFP. Third, the delay would be short – ultimately 6 months.

We do believe that a key takeaway from this (and from the struggles of other renewable projects to meet the December 2024 COD) was that the RFP timelines were likely too restrictive. As noted in our initial report for the proposed 2023 RFP this RFP featured a shorter timeframe (i.e. time from bid submission and approval to required COD) than past RFPs. More time for bids to develop would a) potentially allow more bidders to participate and b) allow for delays such as this to occur without technically violating RFP rules.

Parties continued to negotiate and finalized contracts for Troutdale and Seaside in late April. The Evergreen contract took slightly longer to finish, wrapping negotiations at the end of May. In the following sections we review key terms of each agreement.

## ***A. TROUTDALE***

The Troutdale Storage Capacity Agreement (SCA) is for a 200 MW BESS system with a 4-hour storage capability. The price for the supply is [begin highly confidential] [REDACTED], [end

**highly confidential]** which matches the BAFO submitted in August.<sup>32</sup> The contract has a 20-year term.<sup>33</sup>

The scheduled COD for the project is 12/31/2024.<sup>34</sup> **[begin highly confidential]** [REDACTED]  
**[end highly confidential]**

The project can be subject to delay damages if the scheduled COD is not hit. Specifically, **[begin highly confidential]** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>32</sup> Storage Capacity Agreement between Portland General Electric Company and Troutdale Grid, LLC dated as of April 26, 2023. (Troutdale SCA) Article 1.1.

<sup>33</sup> Ibid Article 2.1.

<sup>34</sup> Ibid, Article 1.1.

<sup>35</sup> Ibid, Article 4.3.

<sup>36</sup> Ibid, Article 4.4.

<sup>37</sup> Ibid, Article 1.1.

<sup>38</sup> Ibid, Article 5.10.

<sup>39</sup> Ibid, Exhibit P.

<sup>40</sup> Ibid, Article 5.10.

<sup>41</sup> Ibid, Article 11.1.

<sup>42</sup> Ibid, Article 5.10.

<sup>43</sup> Ibid, Article 11.1.

<sup>44</sup> Ibid, Article 8.1.

[end highly confidential]

### ***B. SEASIDE***

The Seaside BTA was signed in late April. As noted above, there are some changes from the bid itself in terms of size and COD. In the contract the seller pledges to build a 200 MW BESS with four-hour storage capability. The purchase price [begin highly confidential]

<sup>45</sup> Ibid, Article 8.3.

<sup>46</sup> Build Transfer Agreement by and between Seaside Grid, LLC as seller, and Portland General Electric Company as Purchaser, April 26.2023. (Seaside BTA), Article 2.2.1.

<sup>47</sup> Ibid.

<sup>48</sup> Ibid, Article 5.9.3.

<sup>49</sup> Ibid, Article 5.15.

<sup>50</sup> Ibid, Article 1.1.

<sup>51</sup> Ibid.

<sup>52</sup> Ibid, Article 5.9.2.

<sup>53</sup> Ibid, Article 7.1.5.



**C. EVERGREEN**

The Evergreen contract was signed in late May. Because PGE owned the land it was decided that rather than sign a BTA with the project the contract would be Build-Deliver Agreement (BDA) with the main contractor (Mortenson). The contract is for a 75 MW BESS facility with a four hour storage capacity for a price of [begin highly confidential] [REDACTED], [end highly confidential] which matches the price offered in the Eolian BAFO in August.<sup>59</sup> [begin highly confidential] [REDACTED] [end highly confidential]

The guaranteed COD is December 31, 2024. [begin highly confidential] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>59</sup> Turnkey Build-Deliver Agreement for Evergreen Energy Storage Project by and between Portland General Electric Company and M.A. Mortenson Company, (Evergreen BDA), Article 1.1.

<sup>60</sup> Ibid, Article 1.

<sup>61</sup> Ibid, Article 3.6.4.

<sup>62</sup> Ibid, Article 3.4.1.

<sup>63</sup> Ibid, Article 7.1.2. [begin highly confidential] [REDACTED] [end highly confidential]

<sup>64</sup> Ibid, Article 7.8.

<sup>65</sup> Ibid, Article 10.5.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**[end highly confidential]**

<sup>66</sup> Ibid, Article 15.1.3.  
<sup>67</sup> Ibid, Exhibit G.  
<sup>68</sup> Ibid, Article 16.2.  
<sup>69</sup> Ibid, Article 16.3.

**Attachment One**  
**HIGHLY CONFIDENTIAL PURSUANT TO**  
**MODIFIED PROTECTIVE ORDER NO. 22-025**

**Attachment Two**  
**HIGHLY CONFIDENTIAL PURSUANT TO**  
**MODIFIED PROTECTIVE ORDER NO. 22-025**



**Attachment Three**  
**HIGHLY CONFIDENTIAL PURSUANT TO**  
**MODIFIED PROTECTIVE ORDER NO. 22-025**

**Attachment Four**  
**HIGHLY CONFIDENTIAL PURSUANT TO**  
**MODIFIED PROTECTIVE ORDER NO. 22-025**

**Attachment Five**  
**HIGHLY CONFIDENTIAL PURSUANT TO**  
**MODIFIED PROTECTIVE ORDER NO. 22-025**

**Attachment Six**  
**HIGHLY CONFIDENTIAL PURSUANT TO**  
**MODIFIED PROTECTIVE ORDER NO. 22-025**

## CERTIFICATE OF SERVICE

I certify that I filed a true and correct copy of **Portland General Electric Company's Final Report on Contract Negotiations for Portland General Electric's 2021 All-Source Request for Proposals, prepared by Frank Mossburg** was served on the parties listed below via electronic mail and/or overnight delivery in compliance with OAR 860-001-0180.

### Service List UM 2166

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Dated this 30<sup>th</sup> of June 2023.

*Danielle McCain*

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Danielle McCain  
Office Administrator