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June 22, 2018

Via Electronic Filing

Oregon Public Utility Commission Attention: Filing Center 201 High Street, Suite 100 PO Box 1088 Salem OR 97308-1088

Re: UM 1856 – PORTLAND GENERAL ELECTRIC COMPANY, Draft Storage Potential Evaluation

Dear Filing Center:

Attached for filing in the above-referenced docket is an electronic copy of Portland General Electric Company's Opening Brief.

Thank you for your assistance.

Sincerely,

ERIN E. APPERSON Assistant General Counsel

EEA:bop

Enclosure

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1856

In the Matter of

PORTLAND GENERAL ELECTRIC COMPANY,

Draft Storage Potential Evaluation.

PORTLAND GENERAL ELECTRIC COMPANY'S OPENING BRIEF

I. INTRODUCTION AND SUMMARY

Portland General Electric Company ("PGE or Company") submits this opening brief to the Public Utility Commission of Oregon ("Commission") in support of its Energy Storage Proposal ("Proposal") and Revised Energy Storage Potential Evaluation ("Potential Evaluation"). PGE respectfully requests Commission authorization to proceed with development of projects in the Proposal and find that it "(a) is consistent with the guidelines; (b) reasonably balances the values for ratepayers and utility operations and the costs of construction, operation, and maintenance of the storage system; and (c) is in the public interest."¹ PGE further requests that the Commission authorize the Company to develop the proposed projects as outlined in the Proposal, Potential Evaluation, and as modified by the Partial Stipulation.

PGE asks the Commission to deny Alliance of Western Energy Consumers ("AWEC")² and the Northwest and Intermountain Power Producers Coalition's ("NIPPC") demand that PGE open its request for proposal ("RFP") process to allow for third-party ownership of the energy storage system ("ESS") located on Company-owned land and directly connected to PGE's

¹ In the Matter of Public Utility Commission of Oregon, Implementing Energy Storage Program Guidelines pursuant to House Bill 2193, Docket UM 1751, Order No. 16-504 at 2 (Dec. 28, 2016).

² AWEC was formerly known as the Industrial Customers of Northwest Utilities (ICNU).

Coffee Creek substation.³ AWEC and NIPPC's recommendations are based on the inaccurate assertions that other utilities have entered into these type of third-party ownership agreements for ESSs sited at utility substations.⁴ The Commission should reject AWEC and NIPPC's unreasonable demands for the following reasons:

- AWEC and NIPPC ignore the applicable competitive bidding requirements in this proceeding and attempt to impose additional requirements on PGE that are contrary to Commission policy and precedent.
- The Commission has repeatedly declined to follow AWEC and NIPPC's recommendation in the competitive bidding guideline proceedings. The Commission previously considered third-party ownership on utility-owned sites and determined that whether to make sites available to third parties is a utility-management decision. The Commission recently reaffirmed this position in the ongoing competitive bidding rulemaking.⁵
- AWEC and NIPPC incorrectly assert that other utilities have third-party owned ESSs sited at utility substations. Although AWEC and NIPPC filed an erratum to remove these inaccurate references, the remainder of their testimony should largely be disregarded because it is founded on incorrect information.
- The location of the Coffee Creek ESS at the Coffee Creek substation will lead to significant learning opportunities. This project will tap into different use cases including capacity, energy and ancillary services, and outage mitigation/avoided distribution investment by integrating the ESS directly into the substation controls.

³ See AWEC-NIPPC/300, Fitch-Fleischmann/2.

⁴ See AWEC-NIPPC/300, Fitch-Fleischmann/3.

⁵ In the Matter of Rulemaking Regarding Allowances for Diverse Ownership of Renewable Energy Resources, Docket AR 600, Order No. 18-087 at 1 (Mar. 19, 2018).

- Allowing third-party ownership of the Coffee Creek ESS would lead to significant safety, liability, cybersecurity, and financial risks to the Company and its customers.
- PGE will hold a competitive bidding process for the engineering, procurement and construction of the Coffee Creek ESS to minimize costs to customers.

II. BACKGROUND

PGE filed its Proposal and Potential Evaluation on November 1, 2017, in accordance with Order Nos. 16-504, 17-118, and 17-375 and in response to House Bill (HB) 2193.⁶ PGE's Proposal included five projects that meet the intent of HB 2193 by supporting the development of regulatory, technical, and operational experience with energy storage by electric companies and stakeholders in Oregon and to best prepare the state for broad-scale development of storage over time.

In Order No. 16-504, the Commission outlined seven guidelines to implement HB 2193. These guidelines encourage utilities to:

- Submit multiple projects with an aggregate capacity close to the cap allowed by HB 2193;
- (2) Submit a range of projects differentiated by use case, application, or other differentiating factors;
- (3) Submit a portfolio of projects that balance technology maturity, technology potential, short- and long-term project performance and risks, and short- and longterm potential value;
- (4) Submit projects that can serve multiple applications;

⁶ Oregon Laws 2015, chapter 312, sections 1-5.

- (5) Submit projects that are strategically located to help defer or eliminate the need for system upgrades, provide voltage control or other ancillary services, or supply some other location-specific service that will improve system operation and reliability;
- (6) Learn more about storage vendors and technologies through a request for information ("RFI") process; and
- (7) Use established models that are transparent and auditable to estimate the value of energy storage applications.

The Commission expressly stated that the current competitive bidding guidelines would not apply to this proceeding.⁷ Instead, the Commission adopted minimum competitive bidding requirements for projects within this program. The requirements state that the utility may award a contract without competition if it provides adequate justification.⁸ Where the sole source justification is not satisfied, electric companies must use a competitive process to award contracts.⁹ Utilities will have the burden to show that the process was competitive and fair, and must provide the Commission and stakeholders the opportunity to review the RFP design and offer nonbinding input.¹⁰ Utilities are then required to file a report on the solicitation process and scoring.¹¹ Finally, the utility bears the burden of demonstrating that the costs incurred for these projects were prudently incurred when seeking recovery through customer prices. Importantly, the competitive bidding requirements do not direct utilities to hand over utilityowned land to facilitate third-party ownership of projects.

⁷ In the Matter of Public Utility Commission of Oregon, Implementing Energy Storage Program Guidelines pursuant to House Bill 2193, Docket No. UM 1751, Order No. 16-504 at 10 (Dec. 28, 2016) ("The energy storage procurements contemplated under this program would not meet the threshold for the guidelines for major resource acquisitions in docket UM 1182.").

⁸ Id.

 $^{^{9}}$ *Id*.

 $^{^{10}}_{11}$ Id.

¹¹ Id.

PGE proposes five projects, which are diverse in size, system, location, and application. Investing in these five projects will enable PGE and stakeholders to best understand the approaches to storage to inform future strategic investments in storage. PGE's initial Proposal includes:

- (1) Customer & Community Microgrid Resiliency Pilot—A microgrid pilot to improve the region's energy resilience and enable PGE to leverage existing distributed energy resources ("DERs") and new energy storage to create at least one customer microgrid and one community microgrid (up to five total microgrids).
- (2) Power System Integration (Coffee Creek Substation)—A 17-20 MW substationsited, distribution interconnected, large-scale storage project to gain experience developing, controlling, contracting for, constructing, operating, and maintaining utility-scale energy storage.
- (3) Power System Integration (Baldock Mid-feeder)—A mini-feeder-sited storage asset co-located and integrated with an existing 1.75 MW solar array to gain experience integrating large-scale solar with storage and to test the integration of energy storage with distribution automation to increase reliability.
- (4) Residential Energy Storage Pilot—Up to 500 residential, behind-the-meter, PGEcontrolled storage projects to pilot the development of a residential storage program and develop the ability to operate a distributed, aggregated fleet of storage assets.
- (5) **Generation Kick-Start**—A four to six MW transmission-connected storage device to create a "hybrid plant." This project provides a unique use case to use a relatively small storage device to realize the full value of spinning reserves of an

off-line turbine (18.9 MW), reducing fuel use and emissions at the plant or otherwise allowing another plant (e.g., hydro) to operate at full capacity.

Parties in this proceeding appear to support much of PGE's Proposal. On May 22, 2018, PGE filed a Partial Stipulation and Joint Testimony in Support of the Stipulation to resolve nearly all of the issues in this proceeding. The Partial Stipulation also modified PGE's Proposal and Potential Evaluation.¹² Parties to the Partial Stipulation are PGE, Commission Staff, the Oregon Citizens' Utility Board (CUB), AWEC, Renewable Northwest (RNW), and NIPPC.¹³ The Partial Stipulation was circulated to the Community Renewable Energy Association (CREA) and the Oregon Department of Energy (ODOE) for review—both parties declined to join the Partial Stipulation, but both indicated that they did not object to it.¹⁴

The single issue in dispute in this proceeding concerns third-party ownership of the Coffee Creek ESS. AWEC and NIPPC claim that PGE should be required to open its RFP process to allow for third-party ownership of the ESS located on Company-owned land and directly connected to PGE's Coffee Creek substation. Although Staff initially did not raise this issue in its reply testimony, Staff later asserted in its surrebuttal testimony that PGE could either lease or sell PGE-owned land directly adjacent to its Coffee Creek substation to enable third-party ownership of the Coffee Creek ESS.¹⁵

III. ARGUMENT

A. Assertions that PGE Must Sell or Lease its Own Land are Contrary to Commission Policy and Precedent.

¹²In the Matter of Portland Gen. Elec. Co. Energy Storage Proposals and Revised Energy Storage Potential Evaluation, Docket UM 1856, Partial Stipulation at 1 (May 22, 2018).

 $^{^{13}}$ *Id*.

 $^{^{14}}_{15}$ Id. at 3.

¹⁵ Staff/200, Wiggins/7.

AWEC and NIPPC's proposal to require third-party ownership of the Coffee Creek ESS would present many risks to PGE and its customers because it would be located on utility-owned property that directly connects with the Coffee Creek substation. Staff suggests that PGE could simply sell or lease this property to facilitate third-party ownership.¹⁶ In addition to the host of safety, liability, cybersecurity, and financial risks associated with third-party ownership of property directly adjacent to PGE's Coffee Creek substation, Commission precedent indicates that this is a management decision within PGE's discretion.

The competitive bidding requirements applicable in this proceeding do not require utilities to make utility-owned property available for third-party ownership. Neither the energy storage guidelines adopted by the Commission in Order No. 16-504, nor the underlying authority of HB 2193, specifically require third-party ownership of the initial ESS pilots. The Commission expressly stated that the competitive bidding guidelines do not apply to storage procured under HB 2193.¹⁷ Despite the fact that the competitive bidding guidelines do not apply, Staff pointed to the current rulemaking at the Commission to support its argument that PGE should make its property available for third-party ownership.¹⁸ While the Commission's competitive bidding guidelines are inapplicable in this proceeding, it may be informative to look to the policies in the current competitive bidding guidelines as well as the Commission's recent direction in the competitive bidding rulemaking. In those proceedings, the Commission has repeatedly declined to direct utilities to do exactly what AWEC, NIPPC, and Staff are advocating for in this proceeding.

 ¹⁶ Staff/200, Wiggins/7.
¹⁷ Order No. 16-504 at 10.

¹⁸ Staff/200, Wiggins/8.

1. The competitive bidding requirements applicable in this proceeding do not require utilities to turn over utility-owned property to third-party developers.

Staff acknowledges that "the Commission adopted two competitive bidding requirements specific to HB 2193 ESS projects, explaining that energy storage procurements under this bill would not meet the threshold for the competitive bidding guidelines for major resource acquisitions in docket UM 1182."¹⁹ These competitive bidding requirements do not direct PGE to hand over its own property for third-party ownership. In accordance with the applicable requirements, PGE will bear the burden of demonstrating that it "followed a fair, competitive solicitation process to identify all vendors with the requisite expertise, experience, and capability to install viable projects."²⁰

The Commission held an open process to adopt comprehensive guidelines and requirements to implement HB 2193. AWEC and NIPPC are now attempting to circumvent that thorough process in docket UM 1751 and unilaterally add new competitive bidding requirements. AWEC and NIPPC should not be able to circumvent the Commission's process and attempt to redraft the requirements in this PGE-specific docket.

Not only do the relevant competitive bidding requirements fail to require third-party ownership on Company-owned sites—neither the project guidelines nor the proposal guidelines contains such a requirement.²¹ Project guideline six states that the utility "are encouraged to identify qualified vendors and variable energy storage technologies through [an RFI] process."²² However, the project guidelines do not even come close to directing utilities to hand over utility-owned land to enable third-party ownership of ESSs. Additionally, proposal guideline four

¹⁹ Staff/100, Wiggins/14 citing Docket No. UM 1751, Order No. 16-504 at 10 (Dec. 28, 2016).

²⁰ Order No. 16-504 at 10.

²¹ See id. at 4-6, 10.

 $^{^{22}}$ *Id.* at 4.

states that the electric company's proposals must include "reasoning for selecting chosen technology, grid location, application, and ownership structure, with supporting analysis..."²³ PGE has provided reasoning for its decision in compliance with guideline four in its Proposal and supporting testimony. AWEC and NIPPC are attempting to circumvent these established guidelines by adding a completely new directive regarding third-party ownership.

2. The Commission previously considered third-party ownership on utilityowned sites and determined that whether to make sites available to third parties is up to the utility's management discretion.

The Commission has considered whether utilities must make sites available to prospective bidders and determined that this is a management decision subject to a later prudency review. The Commission in Order No. 06-446 considered the issue and decided that it would "not require a utility to offer its site locations for development by independent power producers."²⁴ The Commission noted that a utility could allow third-party development on utility property, but such a decision was within the utility's discretion.²⁵ The Commission stated that a utility would only be encouraged to offer its sites to third-parties, but based on concerns raised by the Department of Justice regarding the Commission's legal authority, stated that it would not adopt AWEC and NIPPC's recommendation in that proceeding.²⁶

In PGE's 2011 RFP proceeding, both AWEC and NIPPC argued that PGE should be required to allow third parties to submit bids for projects at PGE's Port Westward site.²⁷ In that proceeding, Staff pointed out that the Commission had already decided that it would not require

 $^{^{23}}$ *Id.* at 6.

²⁴ *In the Matter of an Investigation Regarding Competitive Bidding*, UM Docket 1182, Order No. 06-446 at 5 (Aug. 10, 2006).

 $^{^{25}}$ *Id.* at 5-6.

 $^{^{26}}_{27}$ *Id.* at 6.

²⁷ In the Matter of Portland Gen. Elec. Co., Request for Proposals for Capacity Resources, UM Docket 1535, Order No. 11-371 at 6 (Sep. 27, 2011).

a utility to offer its sites to bidders in Order No. 06-446, but that PGE could choose to do so.²⁸ The Commission held that whether to offer sites to bidders was ultimately a PGE-management decision subject to a future prudency review.²⁹

3. The Commission recently reaffirmed its policy and declined to direct energy companies to turn over company-owned sites to third-parties.

Staff notes that although the Commission's current competitive bidding guidelines do not require utilities to turn over utility-owned land to third parties, there is an open rulemaking at the Commission to consider some of these issues. Staff noted one potential change could be to require "that all proposed ESSs with power greater than 25 MWh consider [third-party ownership]."³⁰ While it is true that the *draft* competitive bidding rules would apply to the procurement of energy storage resources greater than 25 MWh and with a duration of more than five years,³¹ the Commission is in fact not departing from its current stance to encourage utilities to turn over utility-owned assets.

As a threshold matter, the competitive bidding rulemaking is ongoing and it would be premature to speculate on the exact language in the final rules at this stage in the proceeding. However, the Commission recently issued an order declining to require exactly what NIPPC and AWEC are requesting in this proceeding. The Commission in Order No. 18-087 rejected a more stringent proposal—one that is very similar to AWEC and NIPPC's proposal here—directing utilities to turn over utility-owned assets to third parties. The Commission directed Staff to "eliminate the requirement that an explanation of customer interest be provided where an electric

²⁸ Id.

²⁹ *Id*.

³⁰ Staff/200, Wiggins/8. PGE would note that Staff referenced AR 610 as the docket that is currently open to consider changes to the competitive bidding guidelines, but the correct reference is AR 600.

³¹ In the Matter of Rulemaking Regarding Allowances for Diverse Ownership of Renewable Energy Resources, Docket AR 600, Notice of Proposed Rulemaking Including Statement of Need and Fiscal Impact, Draft OAR 860-089-0100(3) at 7 (Apr. 19, 2018).

company will not allow the use of elements of its benchmark bid by third-parties, and replacement with a clear encouragement to electric companies to make these benchmark elements available to third party bidders as part of an RFP.³² The Commission is now only considering language that would *encourage* utilities to turn over Company-owned property to third-parties in RFP proceedings.

The rulemaking in docket AR 600 is ongoing, and in comments submitted jointly by PGE, PacifiCorp, and Idaho Power Company, the utilities expressed concerns regarding including language encouraging utilities to make elements such as transmission or fuel arrangements available for use in third-party bids in an RFP. If the Commission decides to keep this language, the utilities suggested that the rules also provide that the utilities will be fully compensated for the use of the utility property, and in determining whether to make such property available to third parties, the utility may consider safety, reliability, and contractual issues that may mitigate against such use by third-parties of utility property.³³

4. AWEC and NIPPC's arguments regarding third-party ownership are founded on inaccurate information.

The foundation for AWEC and NIPPC's joint testimony supporting third-party ownership at a utility-owned location is the assertion that "other utilities have been able to reach such agreements for third-party owned ESSs sited at substations."³⁴ AWEC and NIPPC assert that PGE completely overlooks the fact that substation-sited ESSs currently exist under third-party ownership.³⁵ AWEC and NIPPC originally cited two examples as the basis for their argument—

³² Order No. 18-087 at 1.

³³ Docket AR 600, Joint Utilities' Rulemaking Comments, Attachment 1 at 10 (May 14, 2018).

³⁴ AWEC-NIPPC/300, Fitch-Fleischmann/2.

³⁵ AWEC-NIPPC/300, Fitch-Fleischmann/3.

Tesla's 80 MWh facility sited at Southern California Edison's ("SCE") Mira Loma Substation, and Tesla's 2 MW facility sited at Pacific Gas and Electric's ("PG&E") Rio Oso Substation.³⁶

These examples form the basis of AWEC and NIPPC's assertions that allowing this type of third-party ownership structure should not be too difficult because other utilities have been able to mitigate any associated risks.³⁷ This is simply incorrect. This type of ownership does not exist with these projects and the batteries are owned by the utilities. PGE confirmed with SCE and PG&E that the utilities each contracted with Tesla to develop the ESS at their respective substations, which the utilities would then own.³⁸ AWEC and NIPPC filed an erratum removing references to these two examples, but inexplicably did not amend any of their arguments that are founded on these examples.³⁹

PGE noted that it is not aware of any instances of state utility commissions requiring third-party ownership of storage facilities on utility property, such as substations.⁴⁰ In fact, PGE discovered that PG&E has decided that a utility must own ESSs on utility-owned property, which is consistent with PGE's proposal for Coffee Creek.⁴¹ Despite the incorrect assertions made by AWEC and NIPPC, PG&E has only contracted with third-parties to construct ESSs at their substations as turnkey, but has not turned over its property to third-parties.⁴² Tesla developed the Brown's Valley ESS at the PG&E Rio Oso substation, but it is not owned by Tesla or any other third-party.⁴³ Instead, this was developed as a turnkey project for utility ownership,

³⁶ AWEC-NIPPC/300, Fitch-Fleischmann/4.

³⁷ AWEC-NIPPC/300, Fitch-Fleischmann/3.

³⁸ PGE/500, Murtaugh-Riehl-Cloud/10.

³⁹ Errata to AWEC-NIPPC/300, Fitch-Fleischmann/2 (April 24, 2018).

⁴⁰ PGE/400, Bekkedahl/4.

⁴¹ *Id*.

 $^{^{42}}$ *Id*.

⁴³ *Id*.

which is consistent with PGE's proposal in this proceeding.⁴⁴ Similarly, PGE learned that SCE does not have any third-party owned ESSs on utility property.⁴⁵ Therefore, the references initially used by AWEC and NIPPC actually support PGE's position and undermine NIPPC's and AWEC's recommendation.

B. The Location of the Coffee Creek ESS Would Lead to Significant Learning Opportunities for PGE and its Customers.

The location of the Coffee Creek ESS directly connected with the Coffee Creek substation is important for the learnings that PGE hopes to gain. PGE anticipates that this project will "tap into different use cases include capacity, energy and ancillary services, and outage mitigation/avoided distribution investment."⁴⁶ PGE hopes to gain experience from: (1) contracting with an ESS developer in procuring, engineering, and constructing an ESS; (2) understanding the ability of an ESS to support the entire substation load during different transmission outage scenarios; (3) developing, managing, operating, and maintaining a substation-located ESS; (4) integrating the ESS into substation controls, and effectiveness in replacing and supplementing other substation design; (5) understanding how a centralized ESS can simultaneously benefit the transmission and distribution systems; and (6) identifying which benefits and issues could be scalable.⁴⁷ For these reasons, it is important to have a project that is directly connected to a substation, which does limit third-party ownership opportunities for this single project.

⁴⁴ PGE/400, Bekkedahl/4-5.

⁴⁵ PGE/500, Murtaugh-Riehl-Cloud/11.

⁴⁶ PGE/400, Bekkedahl/8.

⁴⁷ PGE/400, Bekkedahl/8-9.

Staff agreed that the learnings from the Coffee Creek ESS are beneficial to PGE customers at large.⁴⁸ Staff noted that "a large sub-station facility would provide an excellent learning opportunity. Measuring which use cases are valuable at what times over such a large area would be valuable."⁴⁹ Staff further stated that "developing operational efficiencies in such a significant deployment of storage would be beneficial for future projects."⁵⁰ Staff did question why PGE selected Coffee Creek specifically, noting that PGE has over 150 substations and that learnings could come from multiple locations.⁵¹ In the Partial Stipulation, PGE agreed to provide additional information to support the choice of location at the Coffee Creek substation.

AWEC and NIPPC state that if PGE refuses to turn open its RFP process to allow for third-party ownership of the ESS to third parties, the Company should be required to eliminate the Coffee Creek ESS and choose another location to facilitate third-party ownership.⁵² However, this would significantly intrude on PGE's discretion and would eliminate the unique and important learning opportunities based on the site's multiple use cases.⁵³ Additionally, PGE's knowledge of its transmission and distribution system combined with the anticipated learning about operating the ESS on its system will allow PGE to "proactively identify areas where ESSs could be most valuable to customers."⁵⁴

C. Third-Party Ownership of Coffee Creek Would Lead to Significant Safety, Liability, Cybersecurity, and Financial Risks.

As discussed above, it is a PGE-management decision whether to allow third parties access to utility-owned land for the Coffee Creek ESS. PGE management determined that

⁴⁸ Staff/100, Wiggins/32.

⁴⁹ Id.

⁵⁰ Id.

⁵¹ *Id*.

⁵² AWEC-NIPPC/300, Fitch-Fleischmann/2.

⁵³ PGE/400, Bekkedahl/9.

⁵⁴ PGE/300, Murtaugh-Riehl/2.

allowing third-party ownership of ESSs on PGE property would open PGE and its customers to significant risks.⁵⁵ PGE must think holistically about balancing both costs and risks for the Company and its customers. PGE must protect customers from potentially significant and unknown risks during this pilot-project stage while still providing customers the benefit of a competitive bidding process to select the ESS developer.

PGE is generally not opposed to third-party ownership of ESSs. Third-parties can currently develop and own ESSs that interconnect to PGE's system.⁵⁶ For example, as of March 23, 2018, there were two requests in PGE's transmission interconnection queue on Open Access Same-time Information System ("OASIS") by parties to develop and own an ESS and interconnect it to PGE's system.⁵⁷ Additionally, there is a great deal of diversity among the five project proposals—in the residential ESS proposal, PGE will offer third-party (customer) ownership opportunities. However, third-party ownership of the Coffee Creek ESS on PGE-owned property directly connected to the Coffee Creek substation would lead to significant safety, liability, cybersecurity, and financial risks. For these reasons, PGE generally does not lease property in the immediate vicinity of generation or substation facilities to third-parties.⁵⁸

1. PGE identified serious safety and liability risks associated with thirdparty ownership of the Coffee Creek project.

PGE has serious safety concerns regarding third-party ownership of the Coffee Creek project on PGE's land in part due to the Coffee Creek ESS's physical proximity to the substation. Safety of employees, customers, and the public is of paramount importance to PGE. If the Coffee Creek ESS was owned by a third party, this would mean that PGE would not have

⁵⁵ See PGE/500, Murtaugh-Riehl-Cloud/9.

⁵⁶ PGE/300, Murtaugh-Riehl/3.

⁵⁷ Id.

⁵⁸ There are limited exceptions to this practice such as cell tower leases which are inapplicable to the circumstances here.

full control over the asset, which includes control over the operation and decision-making for the project. This type of ownership structure would lead to serious safety risks because any incident that occurs on PGE's property would pose a liability risk to PGE and its customers.⁵⁹ For example, any equipment malfunction from a third-party owned asset during PGE's operation and maintenance of adjacent utility-owned assets such as the Coffee Creek substation would put PGE personnel at risk.⁶⁰

In addition, any safety, environmental, or other incidents that occur on PGE's property would certainly pose a liability risk to PGE and its customers. For example, an environmental issue such as Polychlorinated biphenyl ("PCB") contamination would mean that any third party associated with the impacted property may be held jointly liable by the United States Environmental Protection Agency ("EPA") under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), commonly known as Superfund.⁶¹

2. There are significant cybersecurity risks associated with a third-party directly connecting into PGE's substation.

Staff admits that "the cybersecurity aspects of [third-party ownership] are concerning,"⁶² but brushes off this concern as something to be handled through the RFP process. PGE does not believe the answer is that simple, particularly for a pilot program. Third-party access to the Coffee Creek substation Supervisory Control and Data Acquisition ("SCADA") would allow the ESS owner to manipulate PGE's substation assets and data streams, which could adversely impact power quality and service reliability.⁶³ This could potentially be mitigated by connecting the ESS to a centralized control system with no physical connection to the localized substation

⁵⁹ PGE/300, Murtaugh-Riehl/3.

⁶⁰ Id.

⁶¹ PGE/300, Murtaugh-Riehl/3-4.

⁶² Staff/200, Wiggins/7.

⁶³ PGE/300, Murtaugh-Riehl/4.

SCADA, but this type of design would be subject to communication circuit latency issues and service interruptions.⁶⁴ Therefore, it would be unable to support voltage optimization with other substation assets such as capacitor banks and transformer load-tap chargers.⁶⁵ These limitations would impede learnings that could influence how PGE designs and builds substations and related controls in the future.⁶⁶

Due to the cybersecurity risks, PGE would not be able to fully integrate a third-party owned ESS into the Coffee Creek substation, which would remove learnings associated with local control of the asset. Additionally, PGE and its customers would not be able to benefit from operational learnings from PGE owning and operating the asset.⁶⁷

3. Allowing a third-party owned asset to site on PGE-owned property would expose PGE and its customers to potentially serious financial burdens.

If PGE allowed a third-party asset to site on PGE's land, this could lead to potentially significant financial risks to PGE and its customers. For example, if the third-party owned asset became stranded on PGE's property, perhaps due to bankruptcy or insolvency of the third party, then PGE's customers would be responsible for possible decommissioning, disposal, or remediation costs related to the abandoned ESS.⁶⁸ Importantly, this could include proper disposal of the metals such as lithium-ion from the battery.⁶⁹ PGE has internal processes to address these risks, and therefore customers would be protected if PGE owned the asset.

Additionally, third-party ownership of the asset on PGE land directly connected to the Coffee Creek substation would create significant complexities in the contracting process, which

⁶⁴ PGE/300, Murtaugh-Riehl/4.

⁶⁵ Id.

⁶⁶ Id.

⁶⁷ PGE/500, Murtaugh-Riehl-Cloud/14.

⁶⁸ PGE/300, Murtaugh-Riehl/4.

⁶⁹ Id.

would almost certainly delay implementation of these pilot projects. AWEC and NIPPC assert that the contracting process can be used to allocate risks associated with third-party ownership on property adjacent to a PGE substation.⁷⁰ Despite AWEC and NIPPC's inaccurate statements that this type of third-party ownership structure has already been done by other utilities such as PG&E and SCE, having a third-party owned asset on PGE-owned land directly connected to PGE's substation would actually be a completely novel and untested ownership structure. It would be unreasonable to require PGE to engage in cutting-edge, never-done-before and untested contracting practices that cannot be guaranteed to adequately protect customers against unanticipated costs or risks.⁷¹

D. PGE Will Hold a Competitive Bidding Process for Coffee Creek to Minimize Costs to Customers.

Staff asserts that without the option of third-party ownership for the Coffee Creek ESS, customers may lose potential benefits associated with the expertise, experience, and potentially lower costs through economies of scale.⁷² Staff acknowledges that it "does not necessarily expect the pilots to be reliably cost effective at this stage in the market, [but] Staff should of course evaluate every measure to ensure that ratepayers do not pay more than necessary."⁷³ Staff seems to disregard PGE's plan to run a RFP process to receive bids from the competitive marketplace. Through the competitive RFP process, PGE could receive bids for turn-key ESSs through a third-party engineering, procuring, and constructing the project that the utility would then own and operate.⁷⁴ As part of the RFP process, PGE will develop site-specific

⁷⁰ AWEC-NIPPC/300, Fitch-Fleischmann/6.

⁷¹ This type of lease or transfer may also require Commission approval under ORS 757.480, which would almost certainly cause additional delays in implementation.

⁷² Staff/200, Wiggins/5-6.

⁷³ Staff/200, Wiggins/9.

⁷⁴ PGE/300, Murtaugh-Riehl/2.

requirements, project specifications, bid evaluation criteria, among other things, and will then solicit feedback on the draft RFP from stakeholders and the Commission.⁷⁵ Customers will benefit from the RFP process—the competitive pressures associated with the solicitation will drive down costs and lead to efficiencies for customers.⁷⁶

Because PGE's RFP process will competitively solicit bids from third-parties, it seems unlikely that there would be a large difference in cost between PGE and a third-party receiving bids from an ESS developer.⁷⁷ Staff is merely speculating that third-party ownership "could potentially" save customers a significant amount.⁷⁸ AWEC and NIPPC's analysis that it would cost more for PGE-ownership of the ESS versus ownership by Fractal Energy Storage Consultants ("Fractal") is flawed.⁷⁹ That analysis is based on recent RFP results, and then applying a 20 percent reduction to battery costs, whereas PGE's indicative pricing is based on an RFI process and reflects ESS vendors internal cost curve assumptions for a project constructed in 2020.⁸⁰ As PGE has repeatedly stated in its testimony, these cost estimates may not reflect current market prices or the competitive prices that could be obtained through the RFP process.⁸¹

Staff, stakeholders, and the Commission will have an opportunity to review and provide input on the RFP design and process.⁸² After the competitive bidding process, PGE will file a final report with the Commission.⁸³ Additionally, the Commission can ultimately analyze PGE's acquisition decisions during a future prudency review.

⁷⁵ PGE/500, Murtaugh-Riehl-Cloud/4.

⁷⁶ PGE/500, Murtaugh-Riehl-Cloud/15.

⁷⁷ See PGE/500, Murtaugh-Riehl-Cloud/5.

⁷⁸ Staff/200, Wiggins/6.

⁷⁹ PGE/300, Murtaugh-Riehl/6-7.

⁸⁰ PGE/300, Murtaugh-Riehl/6; PGE/500, Murtaugh-Riehl-Cloud/5.

⁸¹ See PGE/300, Murtaugh-Riehl/6.

⁸² PGE/500, Murtaugh-Riehl-Cloud/7.

⁸³ PGE/500, Murtaugh-Riehl-Cloud/7.

In addition to the safeguards provided by the competitive bidding process, PGE already agreed to cost caps in the Partial Stipulation. Specifically, the Partial Stipulation provides that "for cost recovery purposes, the overnight capital cost for this project is \$30.14M."⁸⁴ This agreement in the Partial Stipulation provides additional protections for customers.

IV. CONCLUSION

PGE respectfully requests that the Commission approve PGE's Proposal, including development of the Coffee Creek ESS. The Commission should maintain its policy to decline to direct PGE to allow third parties to own assets on PGE-owned property. PGE requests Commission authorization to develop the proposed ESS projects as outlined in the Proposal, Potential Evaluation, and as modified by the Partial Stipulation.

DATED this 22nd day of June, 2018.

Respectfully submitted,

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⁸⁴ Docket UM 1856, Partial Stipulation at 6 (May 22, 2018).