

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1856

In the Matter of)	
)	
PORTLAND GENERAL ELECTRIC)	NORTHWEST AND
COMPANY,)	INTERMOUNTAIN POWER
)	PRODUCERS COALITION
Draft Storage Potential Evaluation)	OPENING BRIEF
_____)	

I. INTRODUCTION

The Northwest and Intermountain Power Producers Coalition (“NIPPC”) respectfully submits this Opening Brief in accordance with the Administrative Law Judge Prehearing Conference Memorandum issued on December 4, 2017. The Public Utility Commission of Oregon (the “Commission”) initiated this proceeding to evaluate the Energy Storage Proposals and Draft Storage Potential Evaluation submitted by Portland General Electric Company (“PGE”) pursuant to House Bill 2193 (“HB 2193”) and Commission Order Nos. 16-504, 17-118 and 17-375. A Partial Settlement was filed on May 22, 2018 resolving all of the issues in this proceeding, but for PGE’s reluctance to allow third-party ownership of at least its utility-scale pilot project (“Coffee Creek”).¹ PGE refuses to even entertain bids involving third-party ownership despite the fact that

¹ NIPPC, PGE, Commission staff (“Staff”), the Oregon Citizens’ Utilities Board (“CUB”), the Alliance of Western Energy Consumers (“AWEC” and formerly ICNU) and Renewable Northwest (“RNW”) were parties to the Partial Stipulation whereas the Community Renewable Energy Association (“CREA”) and Oregon Department of Energy (“ODOE”) declined to sign, but did not object to it.

both HB 2193 and the Commission's orders encourage PGE to consider different ownership options and do not include any rationales for requiring utility-ownership.

NIPPC recommends that PGE be directed to include third-party ownership options in its impending request for proposals ("RFP"). PGE has not presented an adequate explanation as to why it cannot accept bids with different ownership structures. Alternatively, if the Commission has concerns as to whether the Coffee Creek location provides a good opportunity for third-party ownership, the Commission could also direct PGE to find a different location for the proposed storage facility. There is no reason why ratepayers should be denied the benefits that will accrue from competition: lower cost resources and the potential for less risky development from companies that have experience constructing storage facilities. There are three main issues that must be addressed when considering this recommendation: 1) statutory compliance; 2) the Commission's emerging policies; and 3) PGE's contention that competition brings too much risk for its ratepayers. Each is discussed below in turn.

II. ARGUMENT

A. **PGE's Proposal to Limit Ownership Options for the Coffee Creek Pilot is Inconsistent With HB 2193's Vision and the Commission's Orders**

HB 2193 (from the 2015 Oregon Legislative Session)² requires PGE and PacifiCorp to begin procuring energy storage projects, but it does not include any limitations with respect to ownership structure. The Oregon Legislature sought to encourage energy storage procurement and expressly included non-utility owned projects. The Commission's orders implementing HB 2193 similarly require the utilities to

² HB 2193, *available at* <https://olis.leg.state.or.us/liz/2015R1/Measures/Overview/HB2193>.

evaluate third-party ownership options as well. PGE’s Energy Storage Proposal neither contemplates nor evaluates third-party ownership. By limiting the ownership options available to bidders, PGE exposes its ratepayers to higher prices, riskier self-build options, and limits the opportunity for learnings from the Coffee Creek pilot.

1. Statutory Direction

HB 2193 expressly permits third-party ownership for the new energy storage projects and implicitly suggests the Commission require competitive bidding. First, it defines procurement to include contractual acquisitions of “the right to use the capacity of or the energy from a qualifying energy storage system.”³ Second, it states “the commission may require an electric company to develop [a Commission-authorized] project in accordance with any competitive bidding guidelines prescribed by the commission.”⁴ The Oregon Legislature’s vision for HB 2193 therefore appears to be vastly different from PGE’s proposal.

The Commission's bidding requirements are discussed in more detail below, but it is important to note that HB 2193 grants the Commission separate statutory authority to require PGE to use either “*any*” competitive bidding guidelines it deems appropriate. The Commission should use this authority to direct PGE to allow third-party ownership to protect PGE’s ratepayers, because competition lowers prices and PGE’s captive customers should not be forced to pay inflated prices absent compelling justification. PGE also has little experience with storage, and both PGE and its ratepayers may be

³ HB 2193 at Section 1 (3)(b) (“Procure means to acquire by ownership a qualifying energy storage system or to acquire by contract the right to use the capacity of or the energy from a qualifying energy storage system.”).

⁴ HB 2193 at Section 3(4).

better served and have lower risks if Coffee Creek is owned by a third party with experience. PGE should at the very least consider a wide variety of bids that allow for different types of ownership structures.

Moreover, PGE should be piloting projects that match its long-term vision for energy storage. Here, PGE claims that it is willing to allow third-party ownership of future projects, but seems to only want to learn about storage now by owning it.⁵ PGE's claims about future ownership undermine its arguments about its current proposal because if PGE intends to allow third-party storage in the future it should consider learning about storage from vendors that are already in the storage market and likely to be the very vendors PGE claims it will work with later. As Mr. Fitch-Fleischmann⁶ points out, "PGE's proposal would only teach it about contracting for utility-owned resources."⁷ PGE's proposal unnecessarily limits the learnings available under HB 2193.

PGE cannot credibly claim that it must learn about storage on its own because working with experienced vendors is too risky while simultaneously claiming it wants to work with those more experienced vendors later. In Mr. Crotzer's experience "it takes

⁵ PGE/400, Bekkedahl/5-6 ("We are confident that costs will decrease and over time, more storage will be developed and procured with opportunities for third-party ownership"); PGE/500, Murtaugh-Riehl-Cloud/4 ("we anticipate we will see more ESSs owned by third-parties as the market develops").

⁶ NIPPC submitted joint testimony with the Alliance of Western Energy Consumers ("AWEC" and formerly INCU), including testimony from Ben Fitch-Fleischmann, a senior economist with Ecosystem Research Group and Daniel Crotzer, the President at Fractal Energy Storage Consultants. Fractal is a specialized energy storage and renewable energy consulting firm that provides technical design and financial analysis of energy storage and renewable energy projects.

⁷ AWEC-NIPPC/300, Fitch-Fleischmann/8; see also ICNU-NIPPC/200, Crotzer/9 (indicating that tolling/lease agreements are often used for energy storage procurements and that "most of the storage procured by the three California investor owned utilities were procured through a tolling/lease agreement.").

two to three years before new developers and owners of storage have a grasp on operations and costs ... [meaning] utilities may benefit from interacting with storage on a contractual basis while learning technology and O&M from an experienced storage developer and operator.”⁸ If working with third-party owners is acceptable in the future, why isn’t it acceptable now? PGE should use the opportunity HB 2193 presents to learn about what kinds of energy storage products the competitive market can offer. This would allow PGE to learn from those who already have the knowledge rather than seek to exclude them from the Oregon storage market. PGE will be able to learn more about storage if it allows bidders to propose more creative ownership structures rather than confining the market to utility-ownership models.

2. OPUC Orders

The Commission set guidelines and requirements to implement HB 2193 in UM 1751, but those requirements may not sufficiently address the size and scope of PGE’s proposal. The Commission’s implementation of HB 2193 encourages proposals of multiple projects with an aggregate capacity close to each utilities’ statutory cap, but did not seem to anticipate the scale and costs associated with PGE’s Energy Storage proposals. The Coffee Creek project alone amounts to 3% of the utility-scale battery storage currently installed across the nation.⁹ Given the size and costs associated with the Coffee Creek pilot, the Commission should reconsider its competitive bidding options to ensure that ratepayers benefit from a fully competitive process.

⁸ ICNU-NIPPC/200, Crotzer/10.

⁹ AWEC-NIPPC/300, Fitch-Fleischmann/9 (citing 2018 data from the US Energy Information Administration).

a. The Commission’s Orders Implementing HB 2193

PGE’s Coffee Creek proposal is inconsistent with the Commission’s existing guidelines and requirements for energy storage proposals, which require PGE to consider different ownership structures as part of the Storage Potential Evaluation.¹⁰ The Commission requires PGE to include its “[r]easoning for selecting [the] chosen technology, grid location, application, *and ownership structure*, with supporting analysis” for each project proposal.¹¹ PGE’s proposal includes severe ownership limitations without providing the reasoning required by Order No. 16-504.¹² PGE’s testimony in this proceeding demonstrates that PGE did not even evaluate different ownership structures, which means the Coffee Creek proposal is inconsistent with the Commission’s directive.

PGE’s Draft Storage Potential Evaluation also did not evaluate different ownership structures, or include much of an, and was therefore rejected by the Commission.¹³ The Commission noted that “neither utility draft storage potential evaluation has met the standards set by this Commission in Order No. 17-118.”¹⁴ PGE filed a revised Storage Potential Evaluation on November 1, 2017 that also failed to consider diversity of ownership. Prior to the Partial Settlement, Staff had determined that it could not recommend its approval.¹⁵ In fact, the Partial Stipulation still requires PGE to submit an analysis to Staff demonstrating that Coffee Creek is the best site for PGE’s

¹⁰ AWEC-NIPPC/300, Fitch-Fleischmann/14 (citing Order No. 17-118); Staff/200, Wiggins/4 (explaining that PGE has not evaluated third-party options).

¹¹ Docket No. UM 1751, Order No. 16-504 at Appendix A at 2 (Dec. 28, 2016) (emphasis added).

¹² See PGE’s Energy Storage Proposal (Nov. 1, 2017).

¹³ Order No. 17-375 at appendix A at 16 (Sept. 28, 2017).

¹⁴ Id.

¹⁵ Staff/100, Wiggins/2.

pilot.¹⁶ This kind of analysis should have been properly completed more than a year ago so that it could have driven PGE's proposals. As is, PGE appears to have put the proverbial cart before the horse: first it decided what it wanted to build, and now it is trying to find a justification to do so to comply with the Commission's directive.

b. The Commission's Competitive Bidding Orders

The Commission has two separate sets of bidding requirements that are relevant to this proceeding. First, the Commission adopted minimum bidding requirements for the new storage proposals contemplated in HB 2193, noting that it did not anticipate seeing the types of investments that would trigger its competitive bidding rules for major resource acquisitions.¹⁷ The Commission has simultaneously been turning its competitive bidding guidelines for major resource acquisitions into rules, and included storage projects in the new draft rules.¹⁸ The Commission's bidding requirements, guidelines and rules are discussed in more detail below. However, as described above, the Commission still has a separate statutory authority to impose more robust requirements on these storage acquisitions. Given the dramatic size of PGE's storage proposal and its unwillingness to evaluate different ownership opportunities the Commission should reevaluate which competitive bidding guidelines are more appropriate for the Coffee Creek project.

¹⁶ Partial Stipulation at 7 (“To be able to proceed with this project, PGE must first present an analysis to Staff, supported by adequate evidence, that Coffee Creek is the best site for the ESS based on the universe of available substation sites within PGE's system.”).

¹⁷ Docket No. UM 1751, Order No. 16-504. The existing competitive bidding guidelines were set out in UM 1182 in Order No. 14-149 (Apr. 30, 2014).

¹⁸ See Docket No. AR 600.

In the predecessor to this docket, the Commission declined to incorporate either its existing competitive bidding guidelines for major resource acquisitions or adopt new storage-specific competitive bidding guidelines specific to HB 2193 projects. Instead, the Commission set what it referred to as “minimum competitive bidding requirements” for these projects.¹⁹ The Commission pointed to what it described as a context of “exploratory legislation” in HB 2193 and noted that due to the statutory size limit, it did not expect initial storage projects to meet the threshold for its existing competitive guidelines.²⁰ The Commission did acknowledge, however, that additional competitive bidding guidelines for storage may become necessary in the future. The Commission noted, “[a]s technology matures, project scale increases, and the market expands, future energy storage procurements may start to meet the threshold for our existing guidelines or trigger the need for new guidelines.”²¹ PGE’s Coffee Creek Pilot is commensurate with projects that would typically trigger the Commission’s existing guidelines and the Commission should therefore take immediate action to ensure PGE’s RFP identifies the least cost and risk options available to PGE’s ratepayers.

During this same time period, the Commission has also been converting its competitive bidding guidelines into rules, and the Commission must determine whether the new rules should be applied to the Coffee Creek project. While the new draft competitive bidding rules may ultimately largely be seen as a continuation of the

¹⁹ Docket No. UM 1751, Order No. 16-504 (Dec. 28, 2016) (requiring utilities to demonstrate a fair RFP and summarize their solicitation process, scoring approach, provide limited opportunity to review RFP design and offer nonbinding input, and report to the Commission at a special public meeting).

²⁰ Docket No. UM 1751, Order No. 16-316 at 5 (Aug. 19, 2016) (noting several parties’ comments regarding competitive bidding).

²¹ Id.

guidelines, they are very likely to impose more strenuous requirements on storage acquisitions. The draft rules apply to energy storage acquisitions greater than 25 MWh and expressly prohibit utilities from requiring utility-ownership.²² The Coffee Creek project is estimated by PGE to be a 68-80 MWh project.²³ Thus, the Commission should consider whether it appropriate to apply similar limitations to the Coffee Creek RFP before the new rules are adopted.

Importantly, the new draft rules are likely to go into effect well before PGE releases its RFP for the Coffee Creek project. The formal comment period closed on June 15, 2018, meaning that rules are likely be adopted sometime in early July. Because the Coffee Creek RFP would trigger the new rules, once adopted, the Commission should confirm whether the Coffee Creek RFP will be subject to the new rules. Even if the Commission determines that they are not subject to the new rules, it should consider implementing similar safeguards during PGE's RFP.

It is important to consider that the Coffee Creek pilot project represents approximately 70% of the total costs of its Energy Storage Proposals. Because PGE has a financial incentive to favor utility ownership when considering large capital investments, PGE's RFP deserves careful scrutiny. It is commonly acknowledged that storage prices are declining rapidly, and even PGE admits that the cost estimates from its Energy Project Proposals were inflated.²⁴ Although PGE has accepted significant cost

²² See AWEC-NIPPC/300, Fitch-Fleischmann/13-14 (discussing the new draft rules in Docket No. AR 600).

²³ PGE/100, Riehl-Brown/13.

²⁴ ICNU-NIPPC/200, Crotzer/11 (“Storage costs continue to decrease while performance continues to improve”); PGE/400, Bekkedahl/5 (“We are confident that costs will decrease”).

caps in the Partial Stipulation, the prices ultimately paid by PGE’s customers should be checked against the broadest pool of potential bidders. As Mr. Crotzer testimony states, “if the solicitation were open to tolling/lease agreements, PGE could procure the storage with less cost and risk to its customers.”²⁵ Competition lowers prices and PGE should not be permitted to shield itself from competitive forces.

If the Commission allows PGE to thwart competition for the Coffee Creek project, it should expect more frequent vague and unsupportable security claims from its regulated monopolies in the future. Mr. Fitch-Fleischmann’s testimony highlights that, “[a]s technological progress continues to erode the historic economic characteristics of the electric industry—namely, economies of scale—it will be rational for utilities to increasingly turn to arguments of security and cyber security, based on access to information, to protect themselves from competitive pressures.”²⁶ NIPPC is not asking PGE to compromise its security, it is simply asking PGE to allow non-utility ownership bids in its upcoming RFP.

Importantly, HB 2193 allows for recovery of above-market pricing. But, as our testimony explains, there is already enough installed storage to understand its value.²⁷ As an expert in storage procurement, Mr. Crotzer “would advise the commission to require utilities to study the feasibility of storage, but [] would not recommend encouraging uneconomical projects as a result of mandates.”²⁸ If PGE determines that some lower-cost projects are not suitable, it should be forced to explain its reasoning on the record

²⁵ ICNU-NIPPC/200, Crotzer 2.

²⁶ AWEC-NIPPC/300, Fitch-Fleischmann/10.

²⁷ ICNU-NIPPC/200, Crotzer 11.

²⁸ Id.

rather than shield itself from competition entirely. Foreclosing bids with alternative ownership structures will lead to higher prices in Oregon’s new market and will ultimately only harm PGE’s customers. Under no circumstances should PGE be allowed to recover higher than market costs, if this is caused because PGE actively sought to insulate itself from the market.

PGE’s high operating and maintenance (“O&M”) costs further underscore this problem. Mr. Fitch-Fleischmann’s testimony explains that high administrative costs associated with third-party ownership would tend to favor utility ownership.²⁹ In this case, however, PGE’s administrative costs are likely to be *higher* than third-party bidders. According to Mr. Crotzer, “[i]n our experience in operating and managing procurements, we have found that [O&M] is considerably less than PGE estimates.”³⁰ Mr. Crotzer’s testimony includes calculations that demonstrate “the annual [O&M] for Coffee Creek should be approximately \$890,000 per year[, which is] exponentially different than PGE’s ‘Low Cost Estimate’ of \$6.7 million.”³¹ While PGE agreed to price caps for Coffee Creek’s capital costs, the Partial Stipulation does not cap O&M costs. PGE’s very high O&M costs and could be passed along to bidders rather than absorbed by PGE’s ratepayers. The Commission should take these estimates into consideration too when considering whether PGE should allow third-party ownership options. Under no circumstances should PGE be allowed to recover higher than market costs, if this is caused because PGE actively sought to insulate itself from the market.

²⁹ AWEC-NIPPC/300, Fitch-Fleischmann/12.

³⁰ ICNU-NIPPC/200, Crotzer/6-8.

³¹ Id.

B. PGE’s Rationale for Limiting Ownership Options for the Coffee Creek Pilot is Unfounded and Should Not be Adopted by the Commission

The potential risks PGE cites as reasons against non-utility ownership are overstated, not supported by evidence, and undermined by other examples in the utility industry. PGE’s arguments against third-party ownership of the Coffee Creek RFP are based on generalized safety, financial and cybersecurity risks.³² PGE suggests that managing these types of risks would be too complex for PGE to manage contractually. But, given PGE’s history with contractual negotiations (through resource acquisitions, other pilot programs and its recent natural gas reserve proceeding) the level of complexity PGE should expect in this case required by working with third-party owners is relatively small and does not outweigh the financial and security benefits competition has to offer.³³

As Mr. Fitch-Fleischmann explained, PGE’s arguments on security are mainly circular and often nonsensical. For example, PGE claims to have “internal processes in place to mitigate” the kinds of risks that it believes third-party ownership would pose, but also concedes that it “does not have specific internal process to mitigate risks for an [ESS], which is why the learnings from this pilot project are crucial.”³⁴ PGE’s ratepayers should not be expected to pay extra for PGE to learn what others already know. PGE’s inexperience with energy storage should not be used to justify its anti-competitive

³² Ironically, PGE dismissed similar concerns that were raised by stakeholders in UE 308 as reasons that PGE should *not* become a part owner of a natural gas reserve.

³³ AWEC-NIPPC/300, Fitch-Fleischmann/6-7.

³⁴ AWEC-NIPPC/301, Fitch-Fleischmann/5 (comparing PGE/300, Murtaugh-Riehl to PGE’s Reply to AWEC Data Request 026).

aspirations.³⁵ It certainly did not stop PGE from proposing a new venture to become a joint owner of a natural gas reserve via a contractual relationship with an affiliated interest and a third party.³⁶

With respect to on-site security, PGE claims to know how to deal with contractors and non-PGE personnel at its facilities when it does not affect PGE's bottom line, but does not seem to know how to handle these same security issues when they also happen to preclude PGE from making large capital investments. PGE concedes that it has processes and arrangements in place to allow contractors on its sites—including 40% of its labor budget for construction work on substations. Yet, PGE suggests that having a non-PGE owner at the Coffee Creek substation would (somehow) open the site to security risks. PGE ignores the simple fact that it can set any kinds of security requirements it likes, and instead suggests it just does not really know enough about storage to set adequate security measures. Given PGE's experience with a myriad of local vendors, this is just not credible.

PGE also considers the physical proximity to the substation a "major" concern, but has not conducted any studies or reviewed any analysis on risks related to the physical proximity to a substation.³⁷ PGE's ratepayers should not be expected to pay extra so PGE can avoid looking into a "major" concern.

³⁵ PGE/400, Bekkedahl/2 ("Unknown risks cannot be allocated"); PGE/500, Murtaugh-Riehl-Cloud/13 ("As these projects are pilots, we have not identified all potential and real risks.").

³⁶ AWEC-NIPPC/300, Fitch-Fleischmann/6-7 ("the 'risks' associated with third-party ownership of an ESS at a PGE-owned substation should be both more manageable and more familiar to PGE than those presented by its proposed joint venture in natural gas wells").

³⁷ AWEC-NIPPC/300, Fitch-Fleischmann/5.

Finally, Mr. Crotzer's testimony demonstrates that PGE's claims about cybersecurity are similarly unfounded. PGE does not explain why allowing third-party ownership, which PGE currently allows and expects to increase, would somehow increase the likelihood of a cyber-attack due to the Coffee Creek location. To the contrary, Mr. Crotzer believes third-party ownership would "help PGE develop a better understanding of procuring ESS projects owned by third parties, including how to improve cybersecurity and protect its systems from cyber-attacks more generally."³⁸ Mr. Crotzer explains that most utility storage projects are third-party owned and details the kinds of steps typically taken to mitigate cybersecurity risks.³⁹ Moreover, even if the storage system is owned and operated by PGE, the software controls and communications will be provided by a third party.⁴⁰

Thus, there is no independent rationale for limiting competition in this case and PGE's ratepayers will be subjected to increased risks if the Commission allows PGE to use vague threats of risks to quash competition. As such, should the Commission determine that some unique aspect of the Coffee Creek pilot project is incompatible with third-party ownership, NIPPC suggests the Commission direct PGE to identify a more suitable location that would allow for third-party ownership and provide similar benefits to PGE's ratepayers.⁴¹

³⁸ AWEC-NIPPC/400, Crotzer/2.

³⁹ AWEC-NIPPC/200, Crotzer/9 ("most of the storage procured by the three California investor owned utilities were procured through a tolling/lease agreement."); AWEC-NIPPC/400, Crotzer/2.

⁴⁰ AWEC-NIPPC/400, Crotzer/3.

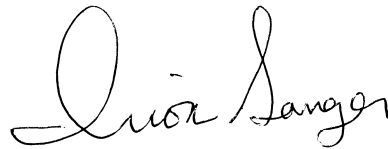
⁴¹ See AWEC-NIPPC/300, Fitch-Fleischmann/8 (noting the size of PGE's property should allow for flexibility in siting and control, since "[t]he proposed lot totals 8.33 acres and the Coffee Creek Substation occupies only 1.25 acres of the total").

III. CONCLUSION

For the foregoing reasons, NIPPC respectfully requests the Commission direct PGE to allow third-party ownership options during the competitive bidding for the Coffee Creek pilot project.

Dated this 22nd day of June 2018.

Respectfully submitted,



Irion Sanger
Sidney Villanueva
Sanger Law, PC
1117 SE 53rd Avenue
Portland, OR 97215
Telephone: (503) 756-7533
Fax: (503) 334-2235
irion@sanger-law.com

Attorneys for the Northwest and Intermountain
Power Producers Coalition