EXH. CJP-1T
DOCKETS UE-240004/UG-240005
2024 PSE GENERAL RATE CASE
WITNESS: CRAIG J. POSPISIL

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY,** **Respondent.**	**Docket UE-240004** **Docket UG-240005**

PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF

CRAIG J. POSPISIL

ON BEHALF OF PUGET SOUND ENERGY

FEBRUARY 15, 2024

PUGET SOUND ENERGY

PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF CRAIG J. POSPISIL

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PUGET SOUND ENERGY

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I. INTRODUCTION

Q. Please state your name, business address, and position with Puget Sound Energy.

A. My name is Craig Pospisil, and my business address is 355 110th Avenue NE, Bellevue, Washington 98004. I am the Vice President, Business Development and M&A for Puget Sound Energy ("PSE").

Q. Have you prepared an exhibit describing your education, relevant employment experience, and other professional qualifications?

A. Yes, I have. It is Exh. CJP-2.

Q. What are your duties as Vice President, Business Development and M&A?

A. I am responsible for the acquisition of electric generating resources and capacity for PSE, whether by utility ownership or medium to long-term contracting. My position is a new executive position expressly created in recognition of, and to effectively execute, the significant resource acquisitions that will be required by PSE in the coming decade, both to secure adequate resources and to meet the Clean Energy Transformation Act's ("CETA") ambitious clean energy requirements.

Q. What topics are you covering in your testimony?

A. My testimony will provide an overview of PSE's electric resource needs, including capacity, utility-scale and distributed electric generation, energy efficiency and demand response. I will also present a high-level overview of PSE's strategy for procuring new energy resources to meet these needs. Then, I will explain how dynamic market conditions are influencing that clean energy strategy. Finally, I will introduce demand response and generation projects PSE has initiated in light of the significant procurement needs PSE is confronting because of legislative obligations and the company's overall commitment to providing reliable clean energy service. As part of that discussion, I will introduce those witnesses who are testifying in more detail about such resources.

II. PSE'S PROCUREMENT NEEDS

Q. Please provide an overview of the factors contributing to PSE's need to procure additional renewable resources.

A. PSE has a continuing duty to serve[1] approximately 1.2 million existing electric customers, plus future residential and commercial customers, with reliable, safe, equitable electric service. As described in PSE witness Joshua Jacobs's Prefiled Direct Testimony, Exh. JJJ-1T, the electric use of these customers is expected to grow materially over the next twenty years. PSE must continue to serve this increasing electric need at the same time we are decreasing many of the sources of

[1] RCW 80.28.110.

capacity and electric generation PSE has relied on historically. This reduction includes, but is not limited to, the decrease of over 4,500 gigawatt-hours ("GWh") per year (2024 and 2025) provided by coal-fired generating facilities that will be phased out by the end of 2025, consistent with the CETA mandates.

As explained in the testimony of Joshua Jacobs, Exh. JJJ-1T, PSE's objective to provide safe, reliable, affordable, and equitable energy service to its customers and communities is based on effective management of forward-looking investments. These investments are driven by the need for resources derived from (1) customer growth and resulting system expansion; (2) executing on Commission-approved initiatives such as PSE's clean energy implementation plan ("CEIP"); (3) executing PSE's comprehensive reliability/grid modernization initiatives, and (4) complying with state mandated requirements such as CETA.

Q. What obligations must PSE comply with related to CETA?

A. Washington's CETA, codified as RCW Chapter 19.405, requires PSE and all Washington electric utilities to eliminate coal-fired resources from its allocation of electricity by December 31, 2025. Further, CETA requires PSE's sales of electricity to Washington retail electric customers be greenhouse gas neutral by 2030. Specifically, PSE must meet the first compliance period under CETA, calendar years 2030-2033 (inclusive), by using electricity at least 80 percent from renewable resources or non-emitting electric generation, covering the balance of electricity with alternative compliance options, which may include unbundled

renewable energy credits, among other options.[2] Moreover, CETA requires electricity from renewable resources and non-emitting electric generation supply 100 percent of PSE's electric sales to retail customers by January 1, 2045. CETA also requires utilities, among other things, to file CEIPs, which are the companies' comprehensive four-year plans to implement CETA and its clean energy objectives.

Q. Has PSE filed a CEIP?

A. Yes, PSE submitted its first CEIP in December 2021,[3] and on June 6, 2023, PSE's CEIP was approved by the Commission with conditions after extensive review and a full adjudication that lasted almost a year and a half.[4] Table 1 below shows PSE's clean energy goals over the first four years of the CEIP, as approved by the Commission in its Final Order 08 of that proceeding.

Table 1: Clean energy goals and interim target

Document	2022	2023	2024	2025	Interim target (average)
2021 CEIP	43%	53%	59%	63%	54.5%

[2] RCW 19.405.040. Renewable or non-emitting resources means energy from qualifying resources including wind, nuclear, and renewable fuels such as biodiesel and hydrogen.
[3] Docket UE-210795.
[4] *See* Final Order 08 in Docket UE-210795 (June 6, 2023).

Q. Has PSE filed any updates to its CEIP? If so, what has changed?

A. Yes. On November 1, 2023, PSE submitted a biennial update to its first CEIP in Docket UE-210795, adjusting some targets and plans based on new information and additional data gained since PSE completed its 2021 CEIP.

PSE's CEIP biennial update also updated specific targets for customer resources. Table 2 compares the specific targets from PSE's 2021 CEIP with its biennial update specific targets.

Table 2: Specific targets for customer resources

Category	2021 CEIP	2023 Biennial Update	Notes
Energy efficiency	536,717 MWh (2022-23)	**397,620 MWh (2024-25)**	Updated based on 2024-2025 Biennial Conservation Plan
Demand response by 2025	23.7 MW	**86 MW**	Increased based on Commission order and cost-effective RFP resources
Renewable energy (%)	10.5% as a percent of **new** utility-scale renewable energy	11% as a percent of **new** utility-scale renewable energy	Updated to reflect the percentage of new utility-scale renewable energy to contribute to the updated targets.
Distributed energy resources – solar by 2025	80 MW	80 MW	Unchanged
Distributed energy resources –storage by 2025	25 MW	25 MW	Unchanged

To maintain this progress and meet future clean energy targets, there needs to be a continuing appreciable acceleration in both PSE's clean energy resource acquisition and the process by which these resources are approved for rate recovery.

Q. Is PSE accelerating its clean energy acquisition?

A. Yes, PSE has, and expects to continue accelerating its acquisition of clean energy resources. Importantly, PSE desires to enter into long-term agreements or construct for PSE ownership a majority of the CETA compliant energy resource and capacity needs. PSE believes this approach, as opposed to more heavily relying on short-term or market procurements, best addresses the large and growing resource need and desire for stable energy pricing.[5] For example, with respect to long-term agreements and PSE ownership, during the years 2021 and 2022, PSE signed one power purchase agreement totaling 350 MW for utility-scale clean energy resources and no contracts for demand response ("DR") or distributed energy resources ("DER"). During 2023 PSE signed three contracts for utility-scale clean energy resources totaling up to 782 MW and three turnkey DR contracts totaling nearly 86 MW. Further, PSE is currently engaged in mature negotiations involving supply-side wind, solar and battery energy storage resources representing over 800 MW, and multiple DER projects, further

[5] See the Prefiled Direct Testimonies of Ronald J. Roberts, Exh. RJR-1T, for a discussion of the short position created by PSE's exit from coal resources and Philip A. Haines, Exh. PAH-1CT, for more discussion of the more volatile short-term markets faced by PSE's trade floor.

diversifying the generation technology mix and building upon the DR foundation on customer sited programs.

III. PSE'S STRATEGY FOR MEETING ITS RESOURCE NEEDS

Q. Please describe PSE's electric resource acquisition strategy.

A. PSE is pursuing a diverse set of resources while considering the lowest reasonable cost, risk and equity, and other considerations. CETA allows for a diversity of renewable and non-emitting resources, and by mandating the need to procure and preserve reliable electric service, CETA is transforming PSE's electric generation resources and system assets unlike any other single factor in the company's history. Reliance on narrowly focused procurement strategies is not an option.

Therefore, PSE has planned for CETA's execution across multiple channels. PSE is reducing load with energy efficiency and other demand-side programs. PSE is procuring DR solutions to reduce load during system peaks and other critical system condition. More specifically, DR is a part of the larger DER approach, aimed to site solutions, including electric generation resources, close to where customers are consuming their electricity. These reduce reliance on larger transmission system improvements. Together, these demand-side solutions are intended to reduce electrical energy demand or generate electric power on the customer-side of the meter.

Given the magnitude of the resource need, however, the combination of demand-side projects and programs will not be sufficient to meet customer requirements.

PSE expects most of its resource needs to be provided by supply-side generation resources. The term supply-side refers to resources originating on the utility side of the meter. Supply-side resources are also sometimes referred to as utility-scale resources.

Q. What process does PSE follow to acquire supply-side resources?

A. Much of PSE's procurement of long-term supply-side resources is conducted through competitive requests for proposals. Requests for proposal ("RFPs") may be called for as a result of a utility integrated resource plan, such as PSE's 2021 All-Source RFP,[6] or called for voluntarily such as PSE's voluntary RFP issued in 2023, which sought proposals to expand PSE's existing Lower Snake River wind project. Whether mandated or voluntary, PSE's RFP processes are phased evaluations and analyses regulated by the Commission in WAC Chapter 480-107.

PSE's evaluation of resources is based on a combined quantitative and qualitative assessment of all proposals submitted in response to an RFP that meet the minimum requirements of the solicitation. In Phase 1 of an RFP, PSE performs a preliminary cost and risk analysis to screen for the most promising resources for further consideration. This phase uses a combination of quantitative and qualitative scores. At the end of Phase 1, those proposals with the highest combined scores from each resource category are identified for further evaluation in Phase 2.

[6] Docket UE-210220.

In Phase 2, PSE performs a portfolio optimization and qualitative due diligence to verify and identify key commercial issues and project risks. PSE also performs a sensitivity analysis to produce a portfolio that meets the capacity and renewable need, while considering customer benefits.

Q. Do all PSE long-term resource acquisition efforts involve RFPs?

A. No. Given the large resource need under CETA, PSE's resource adequacy requirements, and the company's need to procure resources at the lowest reasonable costs considering risk, PSE may also procure resources outside of a formal RFP process. As an example, Colin Crowley discusses the acquisition of the Beaver Creek wind project in his Prefiled Direct Testimony, Exh. CPC-1HCT. In another example, Zacarias Yanez presents a prudence case, in Exh. ZCY-1CT, for a 20-year contract with the Public Utility District No. 1 of Chelan County ("Chelan PUD") for a share of the output of the Rocky Reach and Rock Island hydroelectric projects. Beaver Creek and the contract with Chelan PUD are both examples of resources acquired outside of PSE's formal RFP process.

Whether within the context of PSE's RFP or outside of a RFP process, PSE procurement follows the same standards of decision making: resources are sought following an identified need, then procured at the lowest reasonable cost, considering risk and taking equity into consideration as part of the evaluation process.

Q. What is meant by PSE considering risk in its resource acquisition efforts?

A. Consistent with CETA, PSE considers long-term purchases from existing resources that mitigate the development risk the company might face in procuring from an unbuilt resource. However, purchasing from existing resources is not always available or may not result in a lowest reasonable cost, considering risk.

In the many circumstances where CETA compliance requires acquisitions from new, yet unbuilt resources, PSE faces risk that projects could be delayed for reasons outside the control of the company. I will describe some of these risks later in my testimony. To evaluate such development risks, PSE engages with an internal or external team of subject matter experts with the qualifications to assess how risks should be weighed in the procurement process. Colin Crowley will expand further on the role of subject matter experts in his Prefiled Direct Testimony, Exh. CPC-1HCT.

Q. Do supply-side procurement efforts always consist of long-term agreements?

A. No. PSE complements its long-term acquisition process with near and intermediate-term bridging agreements to cover periods where PSE faces needs that cannot be met with long-term acquisitions. As described in Joshua Jacobs' and Colin Crowley's testimonies, PSE faces a large, and growing, need for resources to meet both resource adequacy needs and CETA goals. Additionally, as detailed in Colin Crowley's testimony, Exh. CPC-1HCT, during the 2021 All-Source RFP process it became clear that the interconnection, transmission, and supply chain constraints describe in my testimony would impact many of the

proposals' commercial online dates. Throughout the RFP process PSE monitored its capacity and CETA needs, evaluated opportunities, and executed several bridging contracts to help meet resource needs that are expected before long-term resources are available. These bridge agreements help meet CETA requirements and interim targets identified in the CEIP. Additionally, bridge agreements are required to assure resource adequacy is met, especially during this period of rapid system transformation, and may involve fossil fuel generating resources. Importantly, bridge agreements complement long-term acquisition efforts by meeting interim needs; they do not replace, delay, or compete with long-term acquisition activities. For a detail discussion on PSE's bridging resources, please see the testimony of Philip Haines, Exh PAH-1CT, and the testimony of Steven St. Clair, Exh SJS-1CT.

Q. Please summarize PSE's approach to incorporating equity and the equitable allocation of clean energy burdens and benefits.

A. PSE's approach to including equity in its evaluation process has, and continues to, evolve. Troy Hutson explains in his Prefiled Direct Testimony, Exh. TAH-1T, how PSE's current decision-making process is evolving towards applying the four tenets of energy justice described by the Commission in its Final Order 09 in Docket UG-210755, Cascade Natural Gas Corporation's 2021 general rate case, among other practices. The Commission's characterization of energy justice in this order follows:

> Energy justice is focused on: (1) offering individuals access to energy that is affordable, safe, sustainable, and affords them the ability to sustain a decent lifestyle; and (2) providing an opportunity to participate in and have meaningful impact on decision-making processes.
>
> - Distributional justice, which refers to the distribution of benefits and burdens across populations. This objective aims to make sure that marginalized and Vulnerable Populations do not receive an inordinate share of the burdens or are denied access to benefits.
>
> - Procedural justice, which focuses on inclusive decision-making processes and seeks to ensure that proceedings are fair, equitable, and inclusive for participants, recognizing that marginalized and Vulnerable Populations have been excluded from decision-making processes historically.
>
> - Recognition justice, which requires an understanding of historic and ongoing inequalities and prescribes efforts that seek to reconcile these inequalities.
>
> - Restorative justice, which is using regulatory government organizations or other interventions to disrupt and address distributional, recognitional, or procedural injustices, and to correct them through laws, rules, policies, orders, and practices.[7]

In addition to the Commission's direction in the above-referenced Final Order 09, PSE incorporates some of the definitions of energy equity based on existing literature, such as The Energy Equity Project of the University of Michigan, Pacific Northwest National Laboratories, The American Council for an Energy-Efficient Economy, and Lawrence Berkeley National Laboratory.

After identifying the appropriate definition of energy equity, PSE then builds on the tenets and dimensions of justice expressed by the Commission in Final Order

[7] *WUTC v. Cascade Natural Gas Corp*., Docket UG-210755, Final Order 09 at ¶ 56 (Aug. 23, 2022).

09 of Cascade's 2021 general rate case: (1) recognition, (2) procedural, (3) distributional, and (4) restorative justice.

IV. IMPACT OF EVOLVING MARKET DYNAMICS ON PSE'S RESOURCE ACQUISITION STRATEGY

Q. How do market considerations influence PSE's acquisition process?

A. I will cover the impact of market considerations in four key categories including: (1) the federal Inflation Reduction Act of 2022 ("IRA"); (2) supply-chain constraints; (3) recent inflationary pressures, and (4) interconnection and transmission scarcity and lengthy advancement processes.

A. Inflation Reduction Act of 2022

Q. Does PSE factor in potential tax credits in its resource acquisition decisions?

A. Yes. Many CETA compliant renewable energy resources have historically been eligible to benefit from federal production tax credits ("PTC") and investment tax credits ("ITC"). Both forms of tax credit effectively reduce the cost of energy and capacity from resources that are able to utilize the benefits of PTCs or ITCs. Matthew Marcelia discusses the technical aspects of the PTCs and ITCs in his Prefiled Direct Testimony, Exh. MRM-1T, whereas my testimony identifies the practical outcomes PSE has observed to date and expects over the foreseeable future from the IRA.

Q. Please describe how the IRA has influenced PSE's resource acquisition decisions.

A. The IRA has opened several key resource opportunities. Importantly, the IRA expanded the time horizon for projects to qualify for tax credits, extending the time where PSE customers pay less for the energy and capacity than would be required without the tax credits. The expanded time horizon of tax credit eligibility has also encouraged the renewable energy development community to allocate additional development funding to areas where permitting, interconnection, transmission, or other long-lead activities result in long development cycles. Other benefits from the IRA expand PSE's resource acquisition prospects. For example, transferability of tax credits allows PSE to utilize tax credits more efficiently.

Further, through direct-pay provisions, the IRA expanded the ability of a wider group of owners to predictably benefit from tax credits, including Native American Tribes, non-profit organizations, and other tax-exempt entities, potentially enabling a more equitable diversity of asset owners.

Through designation of special geographical areas eligible for bonus tax credits, the IRA promotes clean-energy development in Low Income Communities and Energy Communities, further helping to implement equitable considerations and solutions to resource procurement decisions.

Additionally, the IRA expands the eligibility for the ITC to technologies identified in PSE's CEIP such as stand-alone battery storage, which, prior to the IRA, was not eligible for ITCs.

Q. Does the IRA present any resource acquisition challenges for PSE?

A. Yes, unfortunately. It presents several challenges. Foremost, the IRA's far-reaching changes created novel transaction scenarios without precedent, leading to uncertainty and ambiguity. With ambiguity, many investors (including importantly tax equity investors) may not finance certain projects, at least during the period of uncertainty. To assuage concerns over ambiguity, the U.S. Treasury Department ("Treasury") has provided "guidance" in the form of Internal Revenue notices, revenue procedures, proposed regulations and announcements, which I provide as Exh. CJP-3. From the enactment of the IRA through January 2024, Treasury issued over four dozen guidance documents. However, the list of remaining issues under the IRA in which parties are seeking further Treasury guidance is extensive. This uncertainty has, and will, result in project delays. Lack of clear guidance may also reduce the potential for developers and PSE to realize the full bonus value of PTCs and ITCs, resulting in less-than-optimal reduction in delivered energy price. For example, a tax equity investor or purchaser may reject risking that a project qualifies for a bonus tax credit, and thus may be unwilling to invest the additional equity or pay for the incremental credit, leading to fewer credits monetized and higher energy prices.

In addition, Washington State has few locations identified as an Energy Community, or eligible Energy Community, which means there are relatively fewer opportunities for Washington located projects to benefit from some of the associated bonus tax credits which can be material, lowering the cost of energy. For example, Washington state has two counties listed in Appendix B of IRS Notice 2023-29, which lists metropolitan or non-metropolitan statistical areas ("MSA" or "non-MSA") that may qualify as an Energy Community subject to unemployment data, and five counties listed in Appendix C, identifying MSAs and non-MSAs that do qualify as Energy Communities. In comparison, Virginia the next most-populous U.S. state has MSAs and non-MSAs in twenty-four counties listed in Appendix B, and twenty-five counties listed in Appendix C.[8] This can be meaningful as the U.S. Treasury observed clean energy investments growing "especially quickly" in Energy Communities following passage of the IRA.[9]

Finally, few entities will qualify for direct-pay. This leaves the clean energy industry dependent on tax credit transactions and predictable tax capacity of tax credit investors and buyers. The tax capacity of these investors and buyers may be limited and unable to satisfy the unprecedented demand in new renewable energy projects. Compounding this point is the potential impact of Basel III rule changes on large banks (more than $100 billion in assets), some of the most active tax equity investors. Basel III rule changes would require large banks set aside four

[8] Exh. CJP-3, pages 194, 195, 301-306.
[9] Exh CJP-4 at 1.

times as much capital as required pre-Basel III enactment associated with tax equity investments. If Basel III rule changes are enacted as proposed, some speculate tax equity investments, the method by which most PTCs and ITCs are monetized historically, could become uneconomic for large banks. In response, some tax equity investors are pausing new investments which may impact the number or projects available for contracting.[10] The concern over Basel III has been raised by legislatures on both sides of the aisle, most recently by 106 U.S. Congressional lawmakers in a letter to Federal Reserve Chairman Jerome Power, among others.[11] In addition to this uncertainty, and the market challenges is presents, PSE faces other challenges, including supply chain constraints.

B. Supply-Chain Constraints

Q. Please explain how PSE has confronted supply chain constraints.

A. For many of the same reasons the IRA improved the outlook and generally increased the anticipated penetration rate of clean energy projects in the U.S., it helped spur the demand for renewable energy system components that are required to construct new projects. This includes, without limitation, long-lead high-voltage equipment that is critical to connect a utility-scale project to the transmission grid. Many balancing authorities in the Western Electric Coordinating Council have reported supply chain issues. Some indicate developers are reportedly incurring 75- to 80-week delivery times for high-

[10] Exh CJP-5 at 1.
[11] Exh CJP-6.

voltage transformers and circuit breaker equipment. See, for example, the 2023 Long-Term Reliability Assessment by the North American Electric Reliability Corporation in December 2023, which is provided as Exh. CJP-7. "Supply chain issues continue to be a major factor affecting the delivery of new resources, such as utility-scale solar PV and transmission line upgrades."[12] This increased demand comes at a time when suppliers are still recovering from the impact of COVID, resulting in unprecedented long-lead times for project components, leading to delayed commercial operations dates. Further complicating supply chain issues are trade policy impacts, including importantly, tariff and other trade restrictions in the solar supply chain. These issues are discussed in "Expectations for Renewable Energy Finance in 2023-2026", published by the American Council on Renewable Energy and provided as Exh. CJP-8. These have, and may in the future, delay project advancement towards commercial operations. Supply chain issues contribute to delays in projects and potentially higher energy pricing.

C. Inflationary Pressures

Q. Has PSE experienced other factors contributing to higher energy pricing?

A. Yes. Recent inflationary pressures have had a profound impact on the clean energy economy. Utility-scale projects in particular, are large infrastructure efforts that require years to plan and develop, and many months, if not years to construct. If developers commit to pricing in a power purchase agreement

[12] Exh. CJP-7 at 117.

("PPA") without contemporaneously locking in major component pricing, they may be exposed to unexpected inflationary pressures on input pricing, which could result in the inability of the developer to perform under the agreed upon PPA pricing. Skyrocketing, unpredictable inflationary spikes eroded the viability of projects and were the basis for a recent petition for a contract adjustment mechanism before the New York Public Service Commission. That related petition is provided as Exh. CJP-9. Clean energy projects are also relatively more capital-intensive than traditional generation sources, meaning a larger portion of the cost of energy stems from the upfront capital costs to build the project as compared to ongoing operating costs. Recent inflationary pressures directly translate to higher build costs, and higher costs of energy. Clean energy projects often also rely heavily on debt financing. High inflation has also contributed to higher lending interest rates. Higher lending rates have led to higher costs of providing energy, and in turn, required higher PPA prices.

D. Interconnection and Transmission Constraints

Q. Please describe your concerns related to interconnection and transmission delays.

A. Backlogged interconnection queues, scarcity of transmission capacity, and the lengthy timelines to build new transmission capacity have and will continue to create difficulties for developers to interconnect and be in position to transfer electricity to locations accessible to PSE. In response, the Federal Energy Regulatory Commission recently issued a final rule implementing improvements

to generator interconnection procedures and agreements ("FERC Order 2023").[13] Although FERC has recognized these difficulties and attempted to alleviate many of these issues with FERC Order 2023, it is highly likely interconnection and transmission challenges will persist. At the end of 2022, active interconnection queue capacity in the non-ISO West surpassed queues in all other organized transmission regions, including Midcontinent Independent System Operator, PJM Interconnection, the California Independent System Operator, the Electric Reliability Council of Texas and others.[14] New interconnection requests to Bonneville Power Administration's system in 2023 totaled over 106 GW, a level more than 16 times the amount submitted in 2019.[15] For PSE and its customers, this translates to resource availability being pushed out in time, among other factors. PSE evaluates project commercial readiness, including viable interconnection and transmission plans, assets, contracts, and advancement towards contracts in its selection criteria. But, in general, most projects have faced delays related to interconnection and transmission.

Q. What is your overall impression of the challenges you present here?

A. To be successful in a very complex and quickly evolving environment, it is essential that PSE adopt a diversified approach as outlined in this testimony to pursue an ever-increasing acceleration of deployment of strategies, both as a

[13] Exh. CJP-10.

[14] See Exh. CJP-11 for a study presented by Lawrence Berkeley National Laboratory regarding utility interconnection queues.

[15] *See* Exh. CJP-12 for the Bonneville Power Administration's Interconnection Request Queue as of January 23, 2024.

company and with agencies and regulators that can significantly impact the speed with which PSE pursues strategies on behalf of our customers.

While PSE faces numerous challenges in procuring sufficient clean energy resources to meet CETA mandates and resource adequacy requirements, the attractiveness in the U.S. clean energy economy is high. In part due to the IRA, many investors view the U.S. as the most attractive market for new clean energy development and products.[16] This should translate to additional third-party development capital committed in geographic areas where PSE may be able to acquire new resources through ownership, PPAs, or other contract mechanisms. In addition, IRA helps mitigate many of the cost pressures related to recent inflationary pressures that would have been more detrimental to customers than without IRA.

V. PSE'S RESOURCE ACQUISITIONS PRESENTED IN THIS CASE

Q. What intermediate-to-long term resources has PSE acquired for prudence consideration in this proceeding?

A. Colin Crowley, Steven St. Clair, Gilbert Archuleta, and Zacarias Yanez will provide details on the prudence case supporting the acquisition of intermediate-to-long term resources presented in this rate proceeding. Colin Crowley will address acquisitions related to the Beaver Creek and Vantage wind projects in his Prefiled Direct Testimony, Exh. CPC-1HCT; Steven St. Clair will address the

[16] *See* Exh. CJP-8.

Frederickson 1 Tolling Agreement in his Prefiled Direct Testimony, Exh. SJS-1CT; Gilbert Archuleta will cover demand response contracts with AutoGrid, Enel X, and Oracle DR in his Prefiled Direct Testimony, Exh. GA-1T, and Zacarias Yanez describes the Chelan Power Sales Agreement ("Chelan PSA") in detail in his Prefiled Direct Testimony, Exh. ZCY-1CT.

A. 2021 All-Source RFP Acquisitions

Q. Please summarize the results of PSE's 2021 All-Source Request for Proposals.

A. In 2021 PSE issued the 2021 All-Source Request for Proposals ("All-Source RFP") to meet all or part of PSE's CETA needs.[17] The All-Source RFP sought bids from commercially proven and CETA-eligible resources five megawatts or larger to supply CETA energy resources by 2026. PSE analyzed resources through a qualitative and quantitative evaluation. In 2022 PSE incorporated resource adequacy improvements into its RFP analysis, including but not limited to, updating its load forecast to include temperature data reflective of climate change and updating its effective load carrying capability values to be consistent with PSE's 2023 Electric progress report.[18]

At this time, PSE has executed one contract with a participant in the All-Source RFP and continues to negotiate over a shortlist of other resources, many of which

[17] Docket UE-210220.
[18] *See* PSE's Informational Filing Notifying the Commission of 2021 All-Source RFP Resource Adequacy Updates, Docket UE-210220 (Oct. 4, 2022).

PSE anticipates being signed under contract by the end of the second quarter of 2024. PSE executed a contract for the Vantage wind project, an existing 90 MW wind project in Washington that will supply PSE under a fifteen year PPA starting in October 2025.

B. Beaver Creek Wind Project

Q. Were other resources evaluated and acquired contemporaneously with the All-Source RFP?

A. Yes. In additional to the Vantage wind project, the 248 MW Beaver Creek wind project in Montana was evaluated contemporaneously with the All-Source RFP and determined cost effective. PSE acquired the development rights to the Beaver Creek project and anticipates commencing construction of the wind project in 2024, with completion in 2025. Colin Crowley addresses both projects and the All-Source RFP in his Prefiled Direct Testimony, Exh. CPC-1HCT. See also the Prefiled Direct Testimony of Jim Hogan, JPH-1CT, for a discussion of PSE's involvement in the construction of the Beaver Creek project.

C. Fredrickson Tolling Agreement

Q. Please describe the status of the Fredrickson Tolling Agreement.

A. On September 20, 2023, PSE executed a five-year tolling agreement with Frederickson Power L.P. to secure 132.5 MW of capacity from a natural gas-fired electricity generation facility located in Pierce County, Washington. Generally, a tolling agreement is a contract between an electric power generator (here,

Frederickson Power L.P.) and a purchaser (here, PSE) wherein the purchaser provides the fuel supply and the generator converts that fuel into electrical energy for delivery to the purchaser. PSE already owned 49.85 percent of the generation facility, and the Frederickson Tolling Agreement secures the energy and capacity from the remaining 50.15 percent. The term of the agreement is October 1, 2025, to September 30, 2030. More details regarding the Frederickson Tolling Agreement are provided in the Prefiled Direct Testimony of Steven St. Clair, Exh. SJS-1CT.

Q. How does this agreement support PSE's resource adequacy given the limited term of this agreement?

A. As discussed in Steven St. Clair's testimony, Exh. SJS-1CT, the Frederickson Tolling Agreement will add dispatchable, reliable, and cost-effective capacity to PSE's electric supply portfolio. The agreement is a short-term bridge or transitional resource to meet immediate capacity needs as PSE transitions its supply portfolio to zero-carbon resources.

Q. How does the Fredrickson Tolling Agreement contribute to PSE's energy transition?

A. Although Frederickson is a gas-fired facility, this limited five-year tolling agreement supports and complements PSE's clean energy goals by (1) reducing peak capacity needs in the short-term so PSE can continue to maintain safe, reliable operations; (2) reducing PSE's reliance on unspecified and volatile

market purchases; (3) allowing PSE to dispatch the Frederickson facility more efficiently once the tolling agreement takes effect (by controlling both halves of the facility), and (4) providing a five-year bridge to the deployment of new energy storage technologies for the benefit of customers.

D. Demand Response

Q. Has PSE considered or incorporated demand response into its procurement program?

A. Certainly. Demand response ("DR"), as a subset of distributed energy resources, is a critical aspect of PSE's strategy in meeting its procurement need and managing its system, most importantly during periods of peak demand. Demand response allows consumers to play a significant role in the operation of the energy grid by enabling them to reduce or adjust their energy usage during peak periods in response to curtailment requests, times-based rates, or other forms of financial incentives. PSE's DR portfolio is managed by a dedicated group using a virtual power plant platform to dispatch DR resources. Gilbert Archuleta describes specific demand response actions that PSE has taken since 2021 leading to the three DR contracts. Please see his testimony, Exh. GA-1T, for further details.

Q. What total peak capacity will these new generation resources provide?

To summarize, Table 3 below shows the total peak capacity expected from the recent generation resource additions.

Table 3: Capacity for New Generation Resources

Resource	Peak Capacity (MW)
Vantage Wind PPA	90
Frederickson Tolling PPA	132.5
Demand Response PPAs	86
Beaver Creek Wind Development	248
Total	**556.5**

E. Chelan PUD Power Sales Agreement

Q. Please provide an overview of PSE's resource acquisition known as the Chelan PSA.

A. As mentioned earlier in my testimony and in addition to the above-referenced generation resources, PSE has entered into a power sales agreement with Chelan PUD for a 25 percent share of the output of Chelan PUD's Rocky Reach and Rock Island Hydroelectric Projects. PSE has a long relationship with Chelan PUD, and PSE currently purchases a 25 percent share of the output of these projects. The term of the existing contract expires in 2031, and the Chelan PSA essentially extends the term of that existing contract. Zacarias Yanez describes the Chelan PSA in detail in his Prefiled Direct Testimony, Exh. ZCY-1CT.

VI. CONCLUSION

Q. Does that conclude your prefiled direct testimony?

A. Yes, it does.