

2021 ALL-SOURCE RFP

for Renewable and Peak Capacity Resources

June 30, 2021



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This All-Source Request for Proposals (" the All-Source RFP") seeks bids from qualified parties ("respondents" or "bidders") to supply up to 1,669 GWh of Clean Energy Transformation Act ("CETA") eligible resources and up to 1,506 MW of capacity resources to Puget Sound Energy, Inc. ("PSE" or "the Company"). It is an All-Source RFP, meaning that PSE will consider any electric resource or energy storage resource that can meet all or part of the Company's resource need, consistent with the requirements described herein. The All-Source RFP will be available on PSE's web site at the following link: <u>http://www.pse.com/RFP</u>.

While proposals for demand response ("DR") and distributed energy resources ("DER") are welcome to participate in this All-Source RFP, PSE will file a draft targeted DER RFP by November 15, 2021 and issue a final targeted DER RFP in early 2022 after developing technical and operational requirements for a virtual power plant platform in mid-2021. The targeted RFP will communicate PSE's virtual power plant requirements to bidders and should help reduce the costs to PSE customers associated with individual DR and DER bids (as bidders will not need to include a distribution platform with their proposals). See Section 2 for more information about the resources eligible to participate in this All-Source RFP procurement and the targeted DER RFP.

PSE will pursue a resource procurement process that is accessible and fair for all bidders. PSE encourages all bidders able to meet the requirements of this All-Source RFP to participate, including bidders representing minority-, women-, disabled- and veteran-owned businesses. PSE encourages bidders interested in partnering with PSE to support supplier diversity through inclusive, competitive procurement processes.

This All-Source RFP process may or may not result in one or more transactions by PSE. PSE reserves the right to modify and/or cancel this All-Source RFP to comply with changes to regulatory policy, or federal, state, or local laws.

1. Resource Need

The integrated resource planning analysis, which evaluates and establishes the Company's capacity (physical reliability) and renewable energy (policy driven)¹ needs, consistent with WAC 480-100-620, guides PSE's electric resource acquisition process. PSE's most recent Integrated Resource Plan (the "2021 IRP") includes a discussion of the electric planning standard and describes the methodology for analyzing the Company's resource needs. PSE filed the 2021 IRP in April 2021. The 2021 IRP includes an assessment of PSE's resource needs and can be found on PSE's web site at the following link: <u>http://www.pse.com/irp</u>.²

¹ PSE has a legal obligation to meet the requirements of the Energy Independence Act, Chapter 19.285 RCW and the Clean Energy Transformation Act ("CETA"), Chapter 19.405 RCW. The Energy Independence Act, also known as Washington state's renewable portfolio standards, requires PSE to acquire qualifying eligible renewable resources and/or renewable energy credits to meet 15 percent of its load. CETA sets statewide policy goals for the elimination of coal-fired resources by December 31, 2025, 80 percent carbon free generation and overall carbon neutral electricity by 2030, and 100 percent carbon free electricity by 2045. ² See also WUTC Docket Nos. UG-200305 (natural gas) and UE-200304 (electric).

Washington state's RPS and renewable energy requirements calculate the required amount of renewable resources as a percentage of megawatt hour (MWh) sales; therefore, when MWh sales decrease, so do the amount of renewables PSE needs. Achieving demand-side resource targets has precisely this effect. Demand-side resources, including conservation, decrease sales volumes, which then decrease the amount of renewable resources needed. Consistent with the 2021 IRP, demand-side resources include energy efficiency, the Washington State Energy Code ("WSEC") and federal and state equipment codes and standards, distribution efficiency and customer-owned solar PV. Figure 1 shows PSE's renewable needs before and after 2021 IRP demand-side resources levels.

The 2021 IRP demonstrates a need for additional resources to help meet PSE's peak capacity and Washington state's Clean Energy Transformation Act ("CETA") compliance needs. Given these objectives, PSE's analysis of proposals will focus on a resource's ability to meet all or part of its capacity, CETA, or both needs at the lowest reasonable cost to customers. PSE will evaluate any commercially viable electric generation, storage, or other resource type or technology, provided that the resource complies with all applicable laws and regulations, and meets the minimum qualification requirements described in Section 4 of this All-Source RFP. Resources that offer both (i) a material capacity contribution and (ii) attributes consistent with CETA needs will receive the benefit of both value streams in PSE's analysis.

As noted above and further described in Section 2 below (Eligible Resources), PSE plans to file a draft targeted DER RFP in November 2021. PSE anticipates that the types and amounts of resources to be solicited in the targeted DER RFP will generally be consistent with the demand response, distributed energy resource solar, and distribution-system interconnected distributed energy resource battery resource additions identified in the Electric Preferred Portfolio presented in the 2021 RFP (29 MW, 80 MW and up to 25 MW, respectively) for the period 2022 to 2025. PSE may modify these targets as a result of the Clean Energy Implementation Plan to be filed with the Commission in October 2021. When the targeted DER RFP is finalized and approved, PSE may revise the total CETA-compliant renewable energy and capacity need sought through this All-Source RFP, described below, to take into account the amount of demand response and distributed energy resources (solar and battery) to be sought through the DER RFP. PSE will provide stakeholders, potential bidders and other interested parties with a resource need update when more definitive information becomes available.

PSE has a need for CETA-compliant resources

Washington state has two renewable energy requirements. The first is the state's renewable portfolio standard ("RPS"),³ which requires PSE to meet specific percentages of its load with renewable resources or renewable energy credits ("RECs") by specific dates. Under the statute (RCW 19.285) Washington utilities must meet 15 percent of retail sales with renewable resources by 2020. PSE has acquired sufficient qualifying renewable resources to meet its forecast RPS obligations through the RFP period, including the ability to bank RECs. Existing hydroelectric resources may not be counted towards RPS goals except under certain circumstances for new run-of-river plants and efficiency upgrades to existing hydro plants. Given the size of the CETA need presented below, PSE does not expect to have an RPS need in addition to the CETA need.

The second renewable energy requirement is Washington state's Clean Energy Transformation Act.⁴ CETA requires that at least 80 percent of electric sales in Washington be met by nonemitting or renewable resources by 2030, and 100 percent by 2045. Whereas hydro resources and other non-emitting resources do not qualify as renewable resources for the purpose of meeting the requirements of Washington's RPS, certain hydro resources and other non-emitting resources the compliance requirements of CETA. For a full definition of CETA-compliant resources, see RCW 19.405.⁵

³ Energy Independence Act (aka. Washington state's "renewable portfolio standard"): RCW 19.285 (November. 7, 2006), <u>https://app.leg.wa.gov/rcw/default.aspx?cite=19.285</u>

⁴ Clean Energy Transformation Act: RCW 19.405 (May 7, 2019), <u>https://app.leg.wa.gov/RCW/default.aspx?cite=19.405</u>.

⁵ See footnote 3.

Figure 1. Renewable resource need



Table 1. *CETA need by year*

CETA Need in GWhs	2022	2023	2024	2025	2026
CETA qualifying resources	7,398	9,045	9,087	8,963	9,016
2021 IRP Draft CETA Energy Target - Mid with Conservation	7,398	8,345	9,297	10,059	10,958
CETA Need/(Surplus)	0	(699)	210	1,096	1,942
Net Hydro CETA energy additions	(499)	(499)	(442)	(275)	(273)
Adjusted CETA Need/(Surplus)	(499)	(1,198)	(232)	821	1,669
Need Assuming 36% Capacity Factor (WA Wind) (MW)				260	529
Need Assuming 24% Capacity Factor (East WA Solar) (MW)				391	794

* CETA need figures in Table 1 above may be revised to take into account resources sought through the targeted DER RFP when finalized and approved.

To align PSE's procurement approach with the IRP's ramping strategy to meet the Company's 2030 CETA requirement, PSE prefers to acquire enough CETA-eligible resources by the end of 2025 to meet the IRP's 2026 target. The total need for CETA-eligible clean energy resources is 1,669 GWh by 2026 growing to 5,369 GWh by 2030. Table 1 provides an approximate strategy,

or glide path, for meeting the CETA needs identified the 2021 All-Source RFP by 2026. All eligible resource types, wind, solar, DR, DER, and other CETA-eligible resources will be evaluated⁶ based on their ability to help meet this need and the capacity need identified below. The All-Source RFP does not include resource-specific targets.

PSE has a need for new capacity resources

PSE's demand forecast demonstrates a need for 369 MW of new electric capacity resources in 2026 that is expected to increase to 527 MW in 2027. This forecast reflects PSE's F2020 normal peak load forecast. It also includes the impact of the removal of PSE's interests in Colstrip units 3 and 4 from PSE's portfolio after 2025; the expiration of the Centralia Power Purchase Agreement ("PPA"); the addition of the resources PSE acquired through the 2018 All-Resources RFP; and the addition of intermediate-term hydro contracts.

PSE's current transmission portfolio includes approximately 1,500 MW of firm transmission rights that deliver energy from the Mid-C trading hub to the PSE load center. <u>Chapter 7 of the 2021</u> <u>IRP</u>⁷ included a market risk assessment that evaluated the ongoing availability of the short-term power contracts associated with the transmission rights. PSE modeled a five- and ten-year resource adequacy assessment.⁸

As a result, PSE proposes to address market risk by gradually reducing the short-term market purchase limit, associated with the transmission rights from the Mid-C trading hub, from approximately 1,500 MW to about 500 MW by the year 2027. This reduction in market reliance increases the capacity need. To replace those short-term contracts, PSE will seek firm resource adequacy qualifying capacity contracts, compliant with CETA. Numerous regional entities, including PSE, are collaborating on the development of a regional resource adequacy ("RA") program.⁹ Should PSE determine the program meets the needs of PSE customers, it will be incorporated into future planning activities and operation. PSE will work with successful bidders to be designated as participating RA resources in the RA program, if appropriate. Table 2 outlines a strategy, or glide path, to address the capacity need. The total market reliance reduction and glide path proposed in Table 2 are not binding. PSE intends to conduct further analysis of the proposed market reliance reduction and hold a workshop in Q3 2021 to share its analysis with stakeholders. PSE may adjust its strategy, if it determines that doing so would be in the best interest of customers; for example, if PSE receives new information that suggests an alternate reduction or glide path would be optimal, or if selected resources with different proposed timing can help meet PSE's capacity need and reduce costs.

⁶ Glide path is indicative. The timing of actual resource acquisitions will maximize customer benefits.

⁷ 2021 IRP Chapter 7: https://oohpseirp.blob.core.windows.net/media/Default/Reports/2021/Final/07.IRP21_Ch7_032921.pdf

⁸ Puget Sound Energy, "2021 Integrated Resource Plan," issued April 1, 2021, <u>www.pse.com/irp</u>.

⁹"Resource Adequacy Program," Northwest Power Pool, <u>https://www.nwpp.org/about/workgroups/12</u>.





Table 2.Cumulative capacity need by year10

Need/(Surplus) and Additions in MW	2022	2023	2024	2025	2026	2027
2021 Draft IRP Need/(Surplus)	(230)	(350)	(306)	(257)	369	527
Reduced Market Reliance Need		185	372	574	776	979
Total Resource Need/(Surplus)	(230)	(165)	66	317	1,145	1,506
Net Hydro Capacity Additions	(101)	(106)	(71)	(71)	(71)	
Adjusted Total Resource Need/(Surplus)	(331)	(271)	(5)	246	1,074	1,506
Estimated Glide Path of Incremental Resource additions		300	300	300	300	306

* Capacity need figures in Table 2 above may be revised to take into account resources sought through the targeted DER RFP when finalized and approved.

Although PSE's resource need is expressed as a winter peak (Figure 2 above), PSE also has seasonal and daily capacity needs. PSE's effective load carrying capability ("ELCC") quantitative

¹⁰ Glide path is indicative. The timing of actual resource acquisitions will maximize customer benefits.

analysis will favor resources with production shapes that align well with PSE's load or that offer the ability to dispatch to meet load. Proposals that can help meet seasonal (Nov.-Feb., Dec.-Feb. or Nov.-Mar.), heavy load hour (HE 0700-2200), and super peak (HE 0700-1000 and 1800-2100, Nov.-Jan.) needs, while reducing surpluses off peak, will benefit in PSE's quantitative analysis. Figure 3 illustrates PSE's typical monthly load shape and its hourly load shape for a typical winter day.



Figure 3. *PSE's typical monthly and hourly shapes*

Evaluating the capacity contribution of resources

PSE's analysis expresses a resource's contribution to capacity as its effective load carrying capability ("ELCC"). ELCC is an approach to comparing the relative peak capacity contribution of resources with different operating characteristics. The ELCC, or peak capacity benefit, is the contribution of a resource to meeting a utility's coincident peak capacity need. Because ELCC values are highly dependent on the load characteristics and mix of resources in a utility's portfolio, they are unique to each utility.

PSE will calculate ELCC values consistent with the 2021 IRP methodology for generic resources.¹¹ The Phase 1 quantitative analysis will approximate the ELCC value of each proposed RFP resource using the ELCC value of a comparable generic resource from PSE's 2021 IRP analysis. Figure 4 presents the ELCC values for the generic resources from the 2021 IRP preferred portfolio. The Phase 2 quantitative analysis will be based on resource-specific ELCC values calculated for each Phase 2 resource.

¹¹ For the 2021 IRP, PSE started with the GENESYS model from the Northwest Power and Conservation Council ("NPCC") power supply adequacy assessment for 2023. The GENESYS model was developed by the NPCC and the Bonneville Power Administration (BPA) to perform regional-level load and resource studies. More information about PSE's resource adequacy modeling tools and approach are described in <u>Chapter 7 of the 2021 IRP</u>.

0		-
Resource Type	Resource	ELCC
Thermal Resources	CCGT ¹³ +Duct Firing	100.0%
	Peaker - Frame	100.0%
	Peaker - Reciprocating	100.0%
Renewable Resources	WA Wind Offshore	48.4%
	WY Wind East	40.0%
	WA Wind	17.8%
	MT Wind East	21.8%
	Biomass	95.0% ¹⁴
	MT Wind Central	30.1%
	East WA Solar	4.0%
Capacity-Only	Li-Ion 2-hour	12.4%
Resources	Li-Ion 4-hour	24.8%
	Flow 4-hour	22.2%
	Flow 6-hour	29.8%
	Pumped Storage	37.2%
Hybrid Resources	WA Solar, Li-ion, 25MW/50MWh, 82% RT efficiency	14.4%
	WA Wind, Li-ion, 25MW/50MWh, 82% RT efficiency	23.6%
	MT East Wind, pumped storage, 8-hr, 80% RT efficiency	54.3%

Figure 4. Generic ELCC values by resource type and location (RFP Phase 1)¹²

Evaluating the capacity contribution of RFP resources: Phase 1

In Phase 1 of the All-Source RFP evaluation process, PSE's quantitative analysis will approximate the ELCC value of each proposed RFP resource using the ELCC value of a comparable generic resource from PSE's 2021 IRP analysis (Figure 4 above). For variable energy resources, PSE will compare the 8760 generation profiles provided by bidders to verify general consistency with the associated generic resource assumption. If PSE identifies a proposal that significantly differs from the associated generic assumption and the bidder provides independently verified third-party support for their generation output profile, PSE would take that into consideration in its analysis.

¹² For a complete list and discussion of the generic ELCC values and associated assumptions used in PSE 2021 Integrated Resource Plan ("IRP"), see also <u>Chapter 7 (Resource Adequacy Analysis) of the 2021 IRP</u>, which can be found online at <u>https://pse-irp.participate.online/2021-irp/reports</u>.

¹³ Combined Cycle Gas Turbine ("CCGT") plant

¹⁴ The 2021 IRP assumes that biomass does not have a firm fuel supply, therefore, the ELCC would be 0 percent. The All-Source RFP will assume a generic ELCC of 95 percent for biomass proposals that meet the following minimum criteria described in Section 4 of the RFP: "Biomass, biofuel or other generation resources requiring fuel must provide in their proposals a fuel supply plan that demonstrates the firm availability of the fuel supply (either through an agreement or other equivalent means) to support the proposed capacity for the proposed term."

If a bidder cannot provide this support, the generic ELCC assumption would be used. The All-Source RFP requires a minimum of one year of wind resource or solar irradiance data.

At the end of Phase 1, PSE intends to select a candidate pool of resources for portfolio optimization analysis that represent the best-performing proposals from different resource types and technologies to test the performance of combinations of resources toward achieving a lowest reasonable cost portfolio. This means that the ELCC values of one resource type compared to another is less important in Phase 1 because PSE will select a representative sampling of resources for further consideration, subject to meeting the minimum criteria defined in the All-Source RFP.

Evaluating the capacity contribution of RFP resources: Phase 2

Because an individual project's ELCC will vary, the Phase 2 quantitative analysis will be based on resource-specific ELCC values calculated for each Phase 2 resource. Resource-specific ELCC values will take into account a resource's exact location, generation shape, characteristics of the resource (e.g., ability to dispatch, duration of output, etc.) and the availability of firm delivery to PSE's load center. PSE will also take into account resource-specific "fuel" supply for resources that can demonstrate a more favorable fuel supply than assumed in PSE's generic ELCC assumptions, such as a firm fuel supply for biomass, a more favorable wind resource or solar irradiance (via a third-party verified 8760 data), or a demonstrated ability to charge during a loss of load event for storage.

See also Section 3 (Schedule and Process) of the All-Source RFP for a description of PSE's RFP evaluation process and tools.

ELCC workshop

PSE received a number of comments from stakeholders on its draft All-Source RFP with questions about the Company's ELCC assumptions and how they will be reflected in the 2021 RFP evaluation process. The Company would like to offer an opportunity to stakeholders and bidders to learn more about the modeling approach and assumptions used to derive its generic resource ELCC assumptions, how the generic and resource-specific ELCC values will be used in the RFP analysis, and how the resource-specific ELCC values are different than the generic ELCC assumptions.

To that end, PSE will host an ELCC workshop in August 2021. PSE plans to circulate reference materials for stakeholder consideration prior to the workshop to allow interested parties to formulate comments and questions ahead of time, and to ensure a robust discussion. Stakeholders will be invited to comment on PSE's ELCC assumptions at that time. PSE will post information about the workshop on its <u>RFP web site</u> and notify stakeholders as more information becomes available. To be added to PSE's stakeholder distribution list, please contact the <u>AllSourceRFPmailbox@pse.com</u>.

2. Eligible Resources

In order for a proposal to be considered, the bidding entity must demonstrate that it currently owns or has legally binding rights to develop or market the project(s). The bidder must also demonstrate an ability to meet the minimum requirements for eligibility, which can be found in Section 4 of this All-Source RFP.

Resource characteristics

PSE will consider power purchase agreements and ownership agreements for CETA-compliant electric generation, capacity-only resources, storage resources and demand side resources from any commercially proven technology.¹⁵ PSE requires delivery of as-generated renewable energy on a firm hourly schedule with all associated environmental attributes.

PSE has a dual need for resources to help meet the CETA requirement to achieve an 80 percent renewable or non-emitting resource portfolio by 2030, and to help meet the capacity need described in Section 1. PSE's capacity needs are greatest in winter; therefore, PSE will evaluate resources based on their ability to fill winter deficits while minimizing off-peak surpluses. Resources that are dispatchable, are shaped to meet winter peak needs, or with generation profiles that align well with PSE's load shape (Section 1) will perform best in PSE's analysis. PSE will consider the seasonality of the generation, the ability to control the project's output to match PSE's resource needs (up to and including real-time dispatch and displacement), and contractual mechanisms to shape project output to need. CETA-compliant non-emitting resources that can also meet capacity needs are most preferred. Proposals must be consistent with the proposal requirements described in Section 4 (Minimum Proposal Requirements), and Exhibit B (Proposal Requirements Forms) to this All-Source RFP. PSE encourages qualified respondents representing small projects (≥5 MW)¹⁶ or large-scale projects to participate in this All-Source RFP.

¹⁵ PSE is not seeking REC-only products in this All-Source RFP because the company currently has sufficient renewable resources and banked RECs to meet its RPS obligations through the RFP period, and RECs will not be needed for CETA compliance until 2030.

¹⁶ Qualified facilities with nameplate capacities of 5 MW or less may sell power to PSE pursuant to electric tariff rate Schedule 91.

Table 3. *Eligible resources*

Resource	Description (including but not limited to)	Ownership	Notes
CETA-eligible energy	Renewable resources including new and existing wind, biomass, hydroelectric, etc.	PPA and ownership	Resource must meet RCW 19.405.040
Baseload generation	Hourly, daily, or seasonally shaped or block products and unit contingent bids	PPA and ownership	System purchases must meet RCW 80.80
Capacity products	Capacity call options, dispatchable resources, storage (BESS, pump hydro, etc.)	PPA and ownership 17	BESS products have use case requirements (pages 14-16)
Temporal exchanges	Temporal exchanges (e.g., year round, seasonal), November-February; 7x16, 7x24, or 6x16 product with delivery to PSE on west side of Cascades	ΡΡΑ	System exchanges must meet RCW 80.80
Hybrid resources	A combination of renewable resources, storage, or capacity products such as solar + BESS, wind + BESS, wind + solar, etc.	PPA and ownership	
Demand-side resources	Aggregated distributed resources, demand response, other customer located resources, etc.	РРА	See pages 16- 18
Other resource not specified above	Any commercially available resource that meets or partially meets PSE's identified CETA and capacity needs.		

Energy delivery

This All-Source RFP seeks incremental capacity and renewable energy to meet PSE's projected capacity and CETA needs. PSE will only consider resources that provide firm delivery to PSE's system or to a delivery point identified in Table 4 at the end of this section. PSE will only assign a capacity value to resources that (i) are located within PSEI's balancing area authority ("BAA") (at PSE's load center, PSEI.System, and west of the Cascades), (ii) demonstrate that the project has an achievable plan to secure long-term firm transmission that will deliver to PSE's system at

¹⁷ Due to the unique risks associated with ownership of battery energy storage systems, PSE prefers PPA agreements for such resources.

BPAT.PSEI¹⁸ prior to the project's commercial operation date ("COD"), or (iii) are consistent with the POD capacity eligibility in Table 4. In general, resources that meet both PSE's renewable and capacity needs will evaluate better than resources that only meet one of these needs. A bidder proposing to interconnect a resource on PSE's system will need to demonstrate that it has included all incremental costs to deliver energy from the resource to PSE's load. The bidder can do this by requesting interconnection and transmission service from PSE's Transmission Provider, subject to the terms of its Open Access Transmission Tariff ("OATT"). Bidders can determine these costs by requesting from PSE's Transmission Provider network resource interconnection service ("NRIS"), or bidders can request energy resource interconnection service ("ERIS") and long-term firm, point-to-point transmission service. These requests will allow PSE's Transmission Provider to study the need for system upgrades to accommodate interconnection and transmission service for the proposed resource. Preference will be given to developers seeking full deliverability to PSE's system, including a preference to bidders with NRIS interconnection service. Bidders with long-term, point-to-point service will also be considered. Energy storage proposals must demonstrate that they have been studied as a resource and a load and provide their state of charge and discharge assumptions in order to meet the use case specified on pages 14 to 16.

Additionally, bidders who are certified with the Federal Energy Regulatory Commission ("FERC") as qualified facilities ("QFs") are encouraged to participate in this RFP. Such bidders should submit bids under the FERC interconnection process, as detailed above. PSE is currently developing an agreement and associated procedures for interconnection and transmission of QF resources. If approval for such a QF interconnection, transmission agreement and procedures is granted to PSE during the process of this RFP, eligible bidders may switch to the QF interconnection and transmission process and study parameters, provided that the bidder is already certified with FERC as a QF. In such case, PSE will notify all bidders of the opportunity to make that switch.

Table 4 identifies PSE transmission assets that are available to bidders for the delivery of renewable energy and capacity products to PSE in response to this All-Source RFP. The details around this transmission can be found in Exhibit H. In addition to the points of delivery ("POD") identified in Table 4, bidders may, at their own expense, deliver on PSE's system west of the Cascades or at BPAT.PSEI. All proposals must include delivery costs, transmission and integration, to PSE's system or to one of the PODs in Table 4. Additionally, since PSE actively markets unscheduled transmission rights to reduce costs, proposals delivering to the PODs below will be evaluated with the transmission costs from the POD to PSE's system as a cost adder to the proposal. See Exhibit H for further details.

¹⁸ BPAT.PSEI is a transmission scheduling point in BPA Transmission Service's ("BPAT") Open Access Same-time Information System ("OASIS"), which represents 24 separate interconnections between the balancing authority areas of PSE ("PSEI") and BPAT.

Click <u>Bonneville Power Administration ("BPA") OATT rates</u>¹⁹ to be redirected to the current transmission rates posted on the BPA's website. Click <u>PSE OATT rates</u>²⁰ to be redirected to PSE's OASIS website. From the home page, open the "TARIFF" folder and then open the "PSEI Current OATT Prices 2020 06 01" Excel file.

Table 4.	Summary of PSE transmission assets available for delivery of proposed
resou	rces

Location/ Resource	Amount	Date of first availability	Point of delivery	Eligibility for capacity credit	Notes	Transmission OATT cost included in evaluation? ²¹
MIDC	Up to 1000 MW	1/1/2024	MIDCREMOTE (BPA)	Yes; however, VERS not eligible for capacity credit		Yes
California Oregon Intertie (COI)	Up to 300 MW, Mar 1 - Oct 31	1/1/2024	COB/MALIN (PSEI) Alternately JOHNDAY (BPA)	No capacity credit for winter months. Capacity contribution during summer season consistent with IRP ELCC assumptions.	Bidder responsible for alternative Nov-Feb delivery plan	Yes
Centralia	Up to 100 MW	1/1/2026	PAUL (BPA)	Yes, per IRP ELCC assumption		Yes
Lower Snake River (Central Ferry)	Up to 150 MW	3/1/2024	CENTRAL FERRY (BPA)	Yes, per IRP ELCC assumption		Yes

¹⁹ BPA OATT Rates, last updated Oct., 1, 2019, <u>https://www.bpa.gov/Finance/RateInformation/RatesInfoTransmission/FY20-</u> 21/2020%20Transmission%20Rates%20Summary.pdf.

²⁰ PSE OASIS website, <u>http://www.oatioasis.com/psei/</u>.

²¹ Subject to an opportunity cost allocation methodology, which PSE will share with bidders at the All-Source RFP bidders' conference in July 2021. See also Exhibit H.

Questions about the OATT processes of PSE and BPA should be directed to the relevant Transmission Provider. Contact information for PSE's Transmission Provider can be found on the home page of PSE's OASIS website at <u>http://www.oatioasis.com/psei/</u>. Contact information for BPA's Transmission Provider can be found at <u>https://www.bpa.gov/Contact/Pages/Contact-Information-Transmission.aspx</u>.

PSE land available for bidder use in this RFP

Bidders with proposals that contemplate the use of PSE land may find publicly available information about PSE-owned land through the County assessor/recorder/auditor's offices of the respective counties where property is located. A bidder who has conducted due diligence as to siting and permitting feasibility (including zoning and environmental considerations) for a particular project on PSE-owned land can contact PSE through the AllSourceRFPmailbox@pse.com. It should be noted that bidders must demonstrate a percentage of site control and that permitting for long lead-time studies must have begun in order to meet the minimum requirements of this RFP (please see the non-price scoring rubric in Exhibit A for details on site control and permitting progress scoring).

PSE intends to make certain Lower Snake River ("LSR") development rights available to RFP bidders for the purpose of preparing bids that may help PSE meet its resource need at the lowest reasonable cost. PSE is currently preparing the necessary technical details to allow bidders to design bids associated with this asset. PSE anticipates that it will share this information with bidders on <u>PSE's RFP web site</u> prior to the RFP bidders' conference in July 2021.

Operational status

PSE will accept project proposals for new or existing resources. For capacity resources, deliveries must begin no later than December 31, 2026. To align with PSE's first CEIP, PSE is seeking renewable resources beginning no later than December 31, 2025. Project COD may occur after this date; however, the bidder will be responsible for including interim firm supply arrangements to bridge the gap ("power bridging agreement"). PSE will evaluate any interim supply arrangements as part of the entire proposal and will not bifurcate the evaluation of the interim supply arrangements and the project. All resources, including interim supply agreements, must meet all applicable laws and the minimum requirements of this All-Source RFP.

Storage resources

Energy storage encompasses a wide range of technologies capable of storing energy in one time period for use in another (among other potential benefits).²² PSE will evaluate all proposed energy storage technologies on a lowest reasonable cost and best-fit basis, consistent with PSE's

²² For more information, please see the Commission's Report and Policy Statement on Treatment of Energy Storage Technologies in Integrated Resource Planning and Resource Acquisition, Docket UE-151069 and U-161024.

most recent IRP analysis,²³ and based on the evaluation process described in Section 3 and Exhibit A (Evaluation Criteria and Scoring) of this All-Source RFP.

PSE's resource acquisition team engaged Power Systems Consultants to perform a qualitative and quantitative analysis to identify potentially favorable locations within PSE's contiguous system (west of the Cascades) for siting energy storage. The report is designed to be a starting point for bidders in determining potential lower risk locations (with respect to network upgrade costs) for interconnection of energy storage resources into PSE's transmission system. See Exhibit I (Energy Storage System Location Study) for a copy of the report.

As described in Section 6 of this RFP (see Table 8), each RFP proposal may include up to three offer configurations. To allow for consistent evaluation, PSE is asking battery energy storage systems ("BESS") to include a "Base Configuration". Bidders are also free to propose two alternate configurations with operating characteristics they feel best balance costs and performance during peak events.

The Base Configuration (pricing, O&M costs, lifecycle, and warranties) should reflect the following operating characteristics:

• Full cycle – PSE may charge and discharge all usable energy²⁴ two times per day up to 60 days per year.

Table 5.**BESS base configuration characteristics**

Full Cycles Per Year	Maximum Annual MWh Discharged
2 cycles/day & 60 days/year	1,752 MWh per installed MW

Due to the unique risks associated with ownership of battery energy storage systems, PSE prefers PPA agreements for such resources. PSE prefers lithium ion or lithium iron phosphate battery technology for ownership proposals. Proposals for PSE ownership of battery energy storage resources must meet the following minimum requirements:

- Proposals should include a conceptual site layout.
- Proposals should include only batteries and associated equipment (transformers, inverters, controllers, etc.) from industry-recognized top-tier battery suppliers and integrators.²⁵

²³ Evaluation will be consistent with IRP methodologies. For more on the IRP analysis that informs PSE's All-Source RFP evaluation process, see IRP Chapters 5 and 8. Storage characteristics and assumptions are further detailed in IRP Appendix D. The IRP can be viewed online at <u>http://www.pse.com/irp</u>.

²⁴ Usable energy will be evaluated as the total energy available to be discharged, without voiding the warranty or minimum state of charge requirements, and is defined as rated MW capacity multiplied by hours of run time at rated capacity.

²⁵ Some examples of top-tier battery manufacturers include Samsung, BYD, LG Chem, Tesla, A123, Beacon Power, NEC, Saft, NGK and Toshiba.

- Proposals should include a full description of the battery technology proposed including history of successful implementation for the application proposed.
- Proposals should indicate the names of the manufacturers of all the major system components along with their history in providing equipment in similar applications.
- Proposals should state the design life of the batteries selected and detail plans for operation as they degrade in performance, as well a plan for ultimately replacing and recycling the batteries upon end of life.
- Proposal should include a fire protection system and address fire and explosive gas detection, prevention, and mitigation.
- Proposals should include a description of the manufacturer warranties/guarantees for all major equipment in the system including batteries, inverters, control systems, generator step-up ("GSU") transformers, etc.
- Proposals should include a conceptual description of the proposed cooling system.
- Proposals should include documentation including system and equipment compliance with appropriate governing agencies and standards including Federal Energy Regulatory Commission ("FERC"), North American Electric Reliability Corporation ("NERC"), Western Electric Coordinating Council ("WECC"), Underwriters Laboratories ("UL"), Institute of Electrical and Electronics Engineers ("IEEE"), National Electrical Code ("NEC"), Industry Foundation Classes ("IFC"), etc., as applicable.
- All proposed design engineering firms and project constructors should have proven expertise and experience in projects of similar scope and size.

If available at the time of bid submittal, provide comprehensive engineering design documents and drawings well in advance of project construction. If available, bidders should also provide one-line diagrams, three-line schematics, communication plans and protocols used, and a list of tags and alarms used in the battery management system ("BMS"). If unavailable at the time of bid submittal, PSE will request this information during the evaluation or negotiation process. Projects will be required to meet all PSE requirements and specifications.

Demand side resources

On April 1, 2021, PSE will issue a Request for Information ("RFI") for distributed energy resources ("DERs"), including demand response ("DR"). The RFI will be the first step in a separate targeted RFP process for DERs that will address a significant increase in the need for such resources identified in PSE's 2021 IRP preferred portfolio published on April 1, 2021. The IRP shows PSE adding 634 MW of distributed batteries, solar and demand response in its service territory by 2030, with 156 MW between 2022 and 2025. To prepare for this significant amount of DERs, PSE has accelerated its plans for developing a virtual powerplant platform ("VPP") upfront, which is necessary for the operational integration of such a sizeable DER presence on PSE's system as dispatchable network resources.

PSE plans to develop the technical and operational requirements for the VPP over the next four to six months, followed by filing with the Washington Utilities and Transportation Commission ("WUTC") a draft targeted DER RFP by November 15, 2021. This targeted DER RFP will clearly communicate to bidders the VPP requirements and platform the Company will need, and allow DR and DER proposals to be structured optimally within a common PSE-provided VPP environment. PSE is also working on a new state interconnection process for DERs of up to 80 MW, which potentially will streamline the interconnection process to PSE's transmission system for resources that otherwise would interconnect under the FERC process. Bidders submitting proposals in the targeted DER RFP will have the benefit of information provided in that RFP specifying the VPP development work and integration with the resulting platform.

Both the All-Source RFP and the forthcoming targeted DER RFP evaluations are expected to conclude in mid-2022.²⁶ Each RFP would be separately evaluated through short list selection. At the end of the evaluation process, the short list from the targeted DER RFP could be included in a combined portfolio analysis with the short list from the All-Source RFP. PSE further describes its approach in Section 3 (Schedule and Process).

The All-Source RFP and targeted DER RFP are separate RFPs; bidders may choose to submit proposals into one or both of the RFPs. Bidders who choose to submit proposals into the All-Source RFP must meet the minimum requirements outlined below and in Section 4 of the All-Source RFP. PSE anticipates that the targeted DER RFP would include many of the same general requirements as the All-Source RFP, though, it may contain some additional requirements specific to distributed energy resources or the CEIP development process.

Demand response

Demand response programs are resources that control customer load. To be eligible for the All-Source RFP, DR resources, whether stand alone or aggregated programs²⁷, must exceed the 5 MW (AC) nameplate threshold. In addition to the minimum requirements in Section 4, DR proposals must meet the following requirements:

- Winter events will occur during weekday peak hours, between 7 a.m. to 10 a.m., and 5 p.m. to 9 p.m., from November 1 through February 28 (29).²⁸ PSE may call DR events outside these time windows, but bidders will not necessarily be expected to provide the same level of curtailment.
- The combined total duration of events from November 1 through February 28/29 shall be no more than 42 hours per individual product, and PSE shall call up to 10 events.

²⁶ PSE will provide more information about the targeted DER RFP as it becomes available.

²⁷ Aggregated resources must fill out customer acquisition plans on Tab 3d (DR_DER_System) of Exhibit B.

²⁸ PSE uses a daily forecast high below 40 degrees Fahrenheit and/or a forecast low below 30 degrees Fahrenheit to trigger a higher state of readiness for peak load. DR events can also be triggered at any time to address system emergency conditions within the program parameter constraints.

- Capacity must be dispatchable with one of the following notification options: (1) hour ahead, (2) day ahead, or (3) a combination of hour ahead and day ahead.
- Bidder will incur damages for failing to deliver contracted capacity during dispatch event.
- Bidder must provide measurement and evaluation plan. See Exhibit K for an overview of PSE's preferences.
- Bidder must provide a marketing plan or demonstrate the ability to enroll customers.
- Bidder must demonstrate a plan to achieve interconnection (if applicable).
- Bidder must be able to provide data to PSE in the format identified in Exhibit K.

As described in Section 6 of this RFP (see Table 8), each RFP proposal may include up to three offer configurations. To allow for consistent evaluation, PSE is asking demand response to include a base offer with a maximum program duration of up to 5 years (ending in year 2027). Bidders may also propose two alternate configurations, which may extend through year 2032.

Distributed Energy Resources

Distributed Energy Resources ("DERs") are resources that plan to interconnect on PSE's distribution system. To be eligible for the All-Source RFP, DERs, whether standalone or aggregated programs,²⁹ must exceed the 5 MW (AC) nameplate threshold.³⁰ In addition to the minimum requirements in Section 4, DER bidders must choose how they wish to be evaluated, and meet the associated minimum requirements specified below (in parenthesis):

- Variable energy resources (Exhibit B, Tab 3a),
- Flexible capacity (Exhibit B, Tab 3b),
- Energy storage (Exhibit B, Tab 3c),
- As a DR resource (Exhibit B, Tab 3d), or
- A combination of the above types.
- Additionally, for all DER types bidder must demonstrate a plan to achieve interconnection (if applicable).

Contract types

PSE will consider the acquisition of resources from proposals under the following mechanisms:

(1) ownership arrangements, including co-ownership arrangements in which PSE retains dispatchability and rights of control;

²⁹ See footnote 24

³⁰ Qualified facilities with nameplate capacities of 5 MW or less may sell power to PSE pursuant to electric tariff rate Schedule 91.

(2) power purchase agreements ("PPAs") of varying lengths;

- resource-specific PPAs up to 20 years,³¹
- \circ standalone system PPAs with terms between four (4) and five (5) years,³² or
- power-bridging agreements up to five (5) years, defined as short-term "bridges" tied to a long-lead resource with a COD after 2025 (long-lead resource may be offered as a PPA or ownership); or
- (3) temporal exchange agreements.

With regard to either an ownership arrangement or a power purchase agreement, PSE is interested in alternatives wherein the respondent fully assumes the risk of fuel supply, fuel price, environmental cost and deliverability, and which quantify the cost for assuming those risk factors.

All proposals must comply with Washington's Emissions Performance Standards.³³ Additionally, Chapter 480-100 WAC prevents electric utilities in Washington state, including PSE, from entering into contracts of five (5) or more years when the supply is from unspecified sources, coal generation, or other resources that emit above the greenhouse gas limit.

All proposals must be compliant with the requirements of CETA³⁴, which sets statewide policy goals for the elimination of coal-fired resources by December 31, 2025, 80 percent carbon-free generation and overall carbon neutral electricity by 2030, and 100 percent carbon-free electricity by 2045.

Ownership

The PSE ownership mechanism anticipates a proposal pursuant to which upon achieving commercial operation, or some subsequent date, PSE would ultimately own the resource or a significant interest therein. These mechanisms include development by the respondent followed by transfer to PSE, initial purchase of power by PSE with transfer of ownership occurring later, or other approaches that may be mutually beneficial and result in PSE's ownership of the resource.³⁵ Although PSE is willing to consider a wide range of arrangements, the prototype term sheet

³¹ PSE will also consider contract terms longer than 20 years if the developer can demonstrate the asset has a useful life greater than 20 years.

³² Washington's Emissions Performance Standards (Chapter 173-407 WAC, updated September 19, 2018) require new and modified baseload electric generation to meet a greenhouse gas limit of 925 pounds per megawatt hour (lbs/MWh). The Emissions Performance Standards apply to all baseload electric generation for which electric utilities enter into long-term financial commitments on or after July 1, 2008.

³³ See footnote 29.

³⁴ Clean Energy Transformation Act: RCW 19.405 (May 7, 2019), <u>https://app.leg.wa.gov/RCW/default.aspx?cite=19.405</u>.

³⁵ To minimize risk to customers and ensure that capacity resources will be online when needed, PSE prefers relatively mature development and construction stage resources for this All-Source RFP.

included as Exhibit E to this All-Source RFP presumes that PSE would acquire its ownership interest on the commercial online date and would fund its ownership share on a pro rata basis.

Power purchase agreements

Any proposal for a power purchase agreement ("PPA")³⁶ must specify the generation asset(s) underlying the agreement, and provide assurances of its commercial availability consistent with the resource needs defined in Section 1. PSE will consider contracts with terms greater than four (4) years and up to 20 years for power from a specific generation facility. PSE will also consider contract terms longer than 20 years if the developer can demonstrate the asset has a useful life greater than 20 years. PSE will consider non-unit contingent capacity products with terms less than five (5) years. Exhibit F to this All-Source RFP is a prototype term sheet for capacity and/or energy agreements, and Exhibit G to this All-Source RFP is a prototype term sheet for clean energy PPAs.

Temporal exchange agreements

PSE's obligations pursuant to any temporal exchange agreement will be subject to Federal Energy Regulatory Commission ("FERC") acceptance. Additionally, any transmission service component of the exchange would be pursuant to the applicable transmission provider's Open Access Transmission Tariff or reciprocal agreement and would be payable by the respondent.

The prototype term sheets appended to the RFP do not contemplate every type of resource or proposal that may be bid into this RFP. Bidders should view the term sheets as presenting provisions that PSE generally expects in a contractual arrangement. Bidders are invited to propose term sheet edits with their bid submissions, which may also include proposed language particular to the project resource type.

³⁶ For a PPA with an option to purchase the asset during or at the end of the contract life, if contracted, ASC 842 accounting standard will require PSE to consolidate the financial information of the asset.

3. Schedule and Process

RFP schedule

The following schedule is subject to adjustment based on Washington Utilities and Transportation Commission ("WUTC") review and the actual pace of the evaluation process. Updates will be posted online at <u>http://www.pse.com/RFP</u>.

Table 6.**2021 All Source RFP Schedule**³⁷

Date	Milestone
April 1, 2021	Draft All-Source RFP filed with WUTC
May 17, 2021	Public comment period ends ³⁸
June 15, 2021	WUTC review period ends; decision anticipated
June 30, 2021	PSE issues final All-Source RFP to bidders
July 29, 2021	PSE hosts bidders' conference ³⁹
August 2021	PSE hosts workshop to discuss ELCC assumptions ⁴⁰
August or September 2021	PSE hosts workshop to review further analysis of market reliance reduction ⁴¹
September 1, 2021	Offers due to PSE
October 1, 2021	PSE posts to its RFP web site compliance report consistent with the requirements of WAC 480-107-035(5)
January 2022	PSE provides opportunity for bidders to revise/augment their Customer Benefit Plans by January 31, 2022 once PSE's CEIP is finalized

³⁷ Consistent with the Final Order of WUTC Docket No. UE-200413, PSE will file a draft targeted DER RFP on or before November 15, 2021. As explained in PSE's March 15, 2021 petition filed in WUTC Docket No. UE-200413, the DER targeted RFP evaluation process is expected to be shorter than the All-Source RFP evaluation process. PSE anticipates that it would complete its evaluation of these resources around the time the All-Source RFP short list is expected to be selected.

³⁸ WAC 480-107-017(3) allows interested parties to submit comments within 45 days after a draft RFP is filed. Based on an April 1, 2021 filing date, this period would close on Sunday, May 16, 2021. The schedule above assumes the comment period would close on the next business day.

³⁹ The All-Source RFP bidders' conference details and registration instructions will be posted at <u>www.pse.com/rfp</u> as they become available.

⁴⁰ PSE will host a workshop to discuss the methodology and assumptions used to derive its generic resource ELCC assumptions, how the generic and resource-specific ELCC values will be used in the RFP analysis, and how the resource-specific ELCC values are different than the generic ELCC assumptions. PSE plans to circulate reference materials for stakeholder consideration prior to the workshop.

⁴¹ PSE will conduct further analysis of its proposed market reliance reduction and share this analysis with stakeholders in a workshop in Q3 of 2021.

Q1 2022	PSE completes Phase 1 screening process and selects Phase 2 candidates, notifies bidders
Q2 2022	PSE selects All-Source RFP short list, notifies bidders
To follow	Post-proposal negotiations
To follow	PSE files with the WUTC compliance report consistent with the requirements of WAC 480-107-145(2)

Evaluation process

PSE will follow a structured evaluation process designed to screen and rank individual proposals based on an evaluation of costs, risks, and benefits. These include resource cost, market-volatility risks, demand-side uncertainties and benefits, resource dispatchability, effects on system operation, credit and financial risks to the utility, the risks to ratepayers, public policy, and Washington state and federal government requirements. PSE will consider a number of quantitative and qualitative factors to compare proposals with diverse attributes. PSE will evaluate each proposal based on its compliance with this All-Source RFP and according to the criteria described in Section 4 (Minimum Requirements) and Exhibit A (Evaluation Criteria and Scoring) to this All-Source RFP.

Intake process

PSE's evaluation process will begin with the automated intake of proposals through a newly designed web platform. Bidders will download the RFP forms from PSE's RFP web site (<u>www.pse.com/rfp</u>), and submit the completed forms and attachments through the platform. The platform will be accessible by a link from the RFP web site when the final RFP is issued.

Proposals will be tested for completeness and adherence to minimum criteria requirements (described in Section 4) in two ways during the intake process. First, the automation process will perform a real-time validation of proposal completeness and adherence to certain minimum criteria. If the automated system determines that a proposal is incomplete or fails to meet required criteria, it will generate an error-specific response, allowing the bidder to adjust the proposal and resubmit it by the due date. Second, because certain minimum criteria may be difficult to confirm with a simple algorithm, PSE's resource acquisition team will perform a preliminary eligibility screening to verify that all proposals accepted by the system appear to meet the minimum requirements. If a proposal is determined to be ineligible based on the screening, PSE will notify the bidder and the bidder will be given three business days to remedy the proposal (the "cure period").

Phase 1: Screening phase

Once the intake process is complete, PSE will divide its RFP evaluation into two phases. In Phase 1, PSE will conduct a preliminary cost analysis and qualitative risk screening to produce a list of the most promising resources for further consideration. PSE will use its Excel-based portfolio screening model ("PSM"), the Aurora model and the scoring approach for price and non-price factors presented in Exhibit A (Evaluation Criteria and Scoring) to screen and rank proposals based on the bidder's responses to Exhibit B (Proposal Requirements Forms). The qualitative review will include an assessment of the risks, benefits and viability factors set forth in the qualitative evaluation rubric provided in Exhibit A, including: counterparty and project viability, status of site control, status of permitting, deliverability (interconnection and transmission), and contribution to CETA customer benefit and equity considerations. PSE will score proposals based on the information provided by bidders and any further due diligence required to verify that the information provided is accurate and complete. In conducting due diligence and risk assessment, the resource acquisition team will consult as necessary with subject matter experts from specific functional areas throughout the company. Upon completing its evaluation, the resource acquisition team will combine its quantitative and qualitative screening results to produce a Phase 1 ranking for each proposal. See Exhibit A for the ranks and weights associated with price and non-price factors considered by PSE, and a description of PSE's approach to scoring individual proposals.

At the end of Phase 1, PSE will select a candidate list of proposals that will proceed to Phase 2 for portfolio optimization analysis (the "Candidate List"). PSE will select a pool of resources that represents the best-performing proposals from different resource types generally consistent with the resource type categories presented in the effective load carrying capability ("ELCC") discussion in <u>Chapter 7 of the 2021 Integrated Resource Plan ("IRP"</u>). PSE may further refine those categories based on the actual proposals received and other factors, such as whether the resources proposed are delivering to PSE's system or to Mid-C. Portfolio optimization will test the performance of combinations of resources toward achieving a lowest reasonable cost portfolio. PSE will stack resource stack. In determining price-competitiveness, PSE will look for scoring gaps and establish cut-off points, such that the resources included in Phase 2 amount to at least 150 percent of the resource need. PSE may also hold in reserve a certain number of proposals that fall short of the cut-off point, in the event that one or more of the selected proposals are subsequently withdrawn or eliminated for any reason, including unacceptable risks or fatal flaws identified during the course of additional due diligence.

Proposals that fail to substantiate a viable resource, lack credible detail,⁴² involve unacceptable risks or prohibitive costs, or otherwise fail to meet the minimum proposal requirements defined in Section 4 of the All-Source RFP will not be further considered. Any proposal that does not meet

⁴² All respondents will be required to submit a completed Exhibit B to the All-Source RFP to qualify for consideration in this RFP.

the minimum requirements of this RFP in the preliminary eligibility screening will be disqualified and will not receive a Phase 1 price or non-price score.

All bidders will be notified of their selection status at the end of Phase 1. Bidders whose proposals have been selected to proceed to Phase 2 will be given an opportunity to submit an updated best and final offer price ("BAFO"). The BAFO may not be higher than the original price, and no other aspect of the proposal may be changed. If no BAFO is submitted, the original bid price will be used in Phase 2.

Phase 2: Optimization phase

During Phase 2 of the RFP evaluation process, PSE will continue to use its PSM financial model and the Aurora model to analyze combinations of proposals to determine the best resource solution to meet PSE's capacity need at the lowest reasonable cost⁴³, subject to certain modeling constraints (e.g., transmission constraints). Lowest reasonable cost is defined in WAC 480-107-007 and 480-100-605, and is determined through analysis of a number of specified costs and risks, including the costs and risks associated with compliance with CETA and other applicable state laws and regulations. The costs and risks associated with compliance with CETA include the customer benefit and equity considerations outlined in RCW 19.405.040(8). PSE's evaluation process and the information respondents are required to provide in the bid forms, as well as through further data requests and due diligence as needed, are intended to identify the lowest reasonable cost resource solutions. PSE will compare different portfolio mixes to determine how each portfolio performs in a range of potential future pricing scenarios. The model creates optimal, integrated portfolios for each scenario considered in the analysis. In Phase 2, PSE may also perform analyses aimed at producing a resource portfolio that meets the capacity and renewable need while maximizing customer benefit indicators ("CBIs") prioritized by the ongoing public participation and advisory group process with stakeholders (please visit www.cleanenergyplan.pse.com for a timeline and description of the customer benefit and equity stakeholder process). This analysis could help identify the resource mix that best aligns with CETA customer benefit and equity goals, consistent with the considerations outlined in RCW 19.405.040(8). Exhibit A to this All-Source RFP provides further details on how PSE will qualitatively evaluate the customer benefit plans submitted by respondents and associated CBIs. PSE intends to provide more information and updates on the ongoing CBI work, as available, at the bidders' conference.

In Phase 2, PSE reserves the right to conduct additional due diligence, as necessary, on the Candidate List proposals. This may include engaging with respondents regarding various aspects

⁴³ Lowest reasonable cost is defined in WAC 480-107-007 and 480-100-605 to mean "the lowest cost mix of generating resources and conservation and efficiency resources determined through a detailed and consistent analysis of a wide range of commercially available resources. At a minimum, this analysis must consider re-source cost, market-volatility risks, demand-side resource uncertain-ties, resource dispatchability, resource effect on system operation, the risks imposed on the utility and its customers, public policies regarding resource preference adopted by Washington or the federal government, and the cost of risks associated with environmental effects, including emissions of carbon dioxide. The analysis of the lowest reasonable cost must describe the utility's combination of planned resources and related delivery system infrastructure and show consistency with chapters 19.280, 19.285, and 19.405 RCW."

of the proposals to verify proposal claims with supporting data and documents from the respondent, engaging third-party consultants to independently verify resource performance, or using other publicly available information. PSE will assess proposed edits to the term sheets submitted from bidders by screening for terms and conditions that present unreasonable or excessive risk to PSE or its customers. PSE will assess such risk on a pass/fail basis. If PSE determines that a proposal contains such unacceptable terms or conditions, the bidder will be given three business days to remedy, consistent with the cure period allowed for the correction of other non-conforming criteria or fatal flaws. Term sheet redlines that pass the screening should not be deemed as having been accepted by PSE in any subsequent negotiation with a shortlisted bidder; final terms will be determined through negotiations with selected counterparties. PSE reserves the right to suspend negotiations with any bidder and initiate discussions with an alternate Phase 2 candidate at its sole discretion and in the best interests of the Company and its customers.

At the end of Phase 2, PSE will place on a short list proposals that best align with the Company's overall objective to select a resource or portfolio of resources that best meet PSE's resource needs and can be delivered to its system at the lowest reasonable cost considering risk, in compliance with all applicable laws and regulations, and consistent with the public interest. Short list proposals are those identified for further discussions, which may lead to negotiations of the terms and conditions of definitive agreements. Proposals that PSE determines present unacceptable risks, or that otherwise fail to meet the minimum proposal requirements defined in Section 4 of the All-Source RFP will not be selected for the short list. Proposals that are not cost-competitive with other alternatives will not be selected for the short list. All bidders will be notified of their selection status at the end of Phase 2.

Coordination and co-optimization of the All-Source and DER RFPs

PSE anticipates the analysis of the All-Source and targeted DER RFPs could be coordinated in the following way. Each RFP would be separately evaluated through short list selection. During Phase 2 of the All-Source RFP evaluation, the analysis may include a sensitivity that considers optimized portfolio scenarios in which the DER RFP targets are and are not fully met. At the end of the evaluation process, the short list from the targeted DER RFP could be included in a combined portfolio analysis with the short list from the All-Source RFP.

This approach would allow for a fair comparison of distributed resources in both RFPs, and concurrent evaluation to identify the best resources from both RFPs. Because distributed resources and demand response would have two opportunities to propose (through the All-Source RFP and the targeted DER RFP), the resources would be considered to meet specific requirements identified in the CEIP (and subsequent targeted DER RFP) and to help meet the broader electric portfolio need identified in the All-Source RFP, regardless of the RFP into which the resources were bid. Specific needs associated with CEIP programs and targets cannot be known until the CEIP is approved.

Quantitative modeling

The RFP will use modeling tools and methodologies that are consistent with the 2021 Integrated Resource Plan ("IRP"). PSE will use the Aurora model in both phases for the All-Source RFP quantitative analysis. Aurora is a production cost model that will be used for optimal resource selection (also known as long-term capacity expansion modeling) and hourly economic dispatch. In phases 1 and 2 of the All-Source RFP, Aurora will be used to evaluate all proposals in conjunction with the baseline generic portfolio based on the 2021 IRP resource strategy. Consistent with RCW 19.280.030(3)(a)(iii) and the 2021 IRP, the social cost of greenhouse gases ('SCGHG") is included as a cost adder to emitting resources in the long-term capacity expansion model.

PSE plans to use the results of the sub-hourly Plexos flexibility analysis for generic resources that was published in PSE's final 2021 IRP report. PSE will also use a portfolio screening model ("PSM"), which is an Excel-based financial model, to compile the fixed and variable costs of proposals. See Exhibit A to this All-Source RFP for additional details about the quantitative modeling. PSE's All-Source RFP evaluation process is informed and guided by the integrated resource planning process ("IRP process"), and includes methodologies and assumptions that are generally consistent with those used in the IRP process.

Respondents should be aware that the quantitative cost screening of proposals received in response to the All-Source RFP will include costs associated with delivering the energy to PSE's system as well as the costs associated with financial and accounting regulations.

Independent evaluator

In early February 2021, subsequent to receiving approval from the WUTC in Docket No. UE-210037, PSE hired Bates White to provide independent evaluator ("IE") services for the 2021 All-Source RFP. For information about PSE's IE selection process and the qualifications of Bates White, please see PSE's petition dated January 19, 2021 in Docket No. UE-210037 on the WUTC web site (www.utc.wa.gov).

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Role and scope of the IE

Consistent with the requirements in WAC 480-107, the following sections describe the role and scope of the IE: (i) Role and expectations, (ii) Responsibilities and tasks, and (iii) Deliverables.

Role and expectations

The function of the IE is to consult with PSE, as needed, on the procurement activities in the 2021 RFPs as described below. The IE will:

- ensure that PSE's 2021 RFP process is conducted fairly, transparently, and properly;
- participate in the design of the 2021 RFPs;
- evaluate the unique risks, burdens, and benefits of each bid;
- provide to PSE the IE's minutes of meetings and the full text of written communications between the IE and PSE and any third-party related to the IE's execution of its duties;
- verify that PSE's inputs and assumptions, including capacity factors and capital costs, are reasonable;
- assess whether PSE's process of scoring the bids and selection of the initial and final shortlists is reasonable;
- prepare a final report to the WUTC after reconciling rankings with PSE in accordance with WAC 480-107-035(3) that must:
 - include an evaluation of the competitive bidding process in selecting the lowest reasonable cost acquisition or action to satisfy the identified resource need, including the adequacy of communication with stakeholders and bidders; and
 - explain ranking differences and why the IE and PSE were or were not able to reconcile the differences.

The IE will participate in meetings with the WUTC and PSE, on an as-needed basis, to discuss its findings. If called upon to testify, the IE may serve as an expert witness in proceedings.

The IE will be given reasonable access to information, meetings and communications related to offers submitted by all respondents. The IE will immediately report to PSE and the WUTC any perceived attempt by any individual or party, including any PSE self-build or affiliate bidders, to improperly influence any findings determined by the IE, or to challenge or interfere with their independent role in the solicitation process. See also Section 4 subsection Eligibility and Conflict of Interest Disclosure for more information about self-build and affiliate bids.

Responsibilities and tasks

In support of the functions discussed above, the IE responsibilities and tasks will include the following:

• Review and provide feedback and recommendations on PSE's draft 2021 RFPs, including stakeholder comments. Assess the 2021 RFPs' design, including review of the adequacy, accuracy and completeness of solicitation materials to ensure compliance with the WUTC's Purchase of Electricity Rules and consistency with accepted industry standards

and practices. The IE will participate in the design of the RFP and provide feedback to PSE on the draft 2021 RFPs prior to their release.

- Advise on the consistency of solicitation activities with the WUTC's rules and procedures and PSE's WUTC-approved 2021 RFPs.
- Advise on the evaluation process, including recommending data requests, as needed, to supplement the information requested from bidders in the 2021 RFPs to allow for a full and fair evaluation of proposals.
- Assess whether the quantitative and qualitative bid evaluation criteria and methodologies are applied to all bids in a fair and non-discriminatory manner and whether PSE's process of scoring the bids and selection of the initial and final shortlists is reasonable. The IE will be provided reasonable access to the evaluation meetings and documentation of PSE's Business Initiatives and cross-functional teams, in order to credibly assess the bid evaluation and selection processes.
- Verify that PSE's inputs and assumptions, including capacity factors and capital costs, are reasonable. The IE will be provided with a description of how the evaluation models function, including the inputs and outputs of all models used during the evaluation process.
- Assess whether PSE's process of scoring the bids and selection of the initial and final shortlists is reasonable The IE will score and rank qualifying bids based on PSE's modeling output and an independent qualitative assessment using the RFP's ranking criteria and methodology and consult with PSE to reconcile any ranking differences. If a bidder makes material changes to its bid after shortlist selection, PSE and the IE will rerank bids according to the revised bid.
- Monitor the evaluation processes and promptly submit recommendations to PSE's resource acquisition manager to ensure that no bidder has an information advantage and that all respondents or counterparties, if applicable, receive access to relevant communications in a non-discriminatory manner.

<u>Deliverables</u>

- Prepare a final written report as to whether or not PSE's competitive bidding process, evaluation process and decisions were reasonable and appropriate and were applied in a transparent, fair and non-discriminatory manner for all offers received. The report will explain why the IE and PSE were (or were not) able to reconcile any ranking differences. The IE will protect confidential bidder information subject to the terms of the confidentiality agreement included in the IE RFP and consistent with the terms of the confidentiality agreement included in the 2021 RFPs.
- Provide to PSE the IE's minutes of meetings and the full text of written communications between the IE and the utility and any third-party related to the IE's execution of its duties.

• Participate as an independent witness or in an advisory capacity during administrative hearings, as required, before the WUTC in any associated proceedings.

Negotiations and contracts

PSE may elect to negotiate price and non-price factors with any bidder whose proposal has been shortlisted. During negotiations, PSE will continue to update its economic and risk analysis on an as-needed basis to reflect any additional or revised factors that may impact the total cost of a proposed resource.

PSE has no obligation to enter into definitive agreements with any respondent to this All-Source RFP and may terminate or modify the All-Source RFP at any time without liability or obligation to any bidder. This All-Source RFP shall not be construed as preventing PSE from entering into any agreement that it deems appropriate at any time before, during, or after the All-Source RFP process is complete. PSE reserves the right to negotiate only with those bidders and other parties who propose transactions that PSE believes, in its sole opinion, to have a reasonable likelihood of being executed substantially as proposed.

4. Proposal Requirements

Confidentiality agreement

Each bid submittal shall include a signed and scanned copy of the Mutual Confidentiality Agreement (Exhibit C to this All-Source RFP), which is due no later than September 1, 2021. PSE will return one fully executed scanned Mutual Confidentiality Agreement to the respondent.

Consistent with the requirement in WAC 480-107-023, PSE must provide the IE with all data and information necessary to perform a thorough investigation of the bidding process and responsive bids. Consistent with the requirements of WAC 480-107-035, PSE will make available on its website a summary of all proposals received within 30 days of the close of the bidding period.⁴⁴ PSE will also file a final summary report with the WUTC pursuant to WAC 480-107-145.

Additionally, in accordance with the requirements of WAC 480-107-145, PSE will retain all information pertinent to this All-Source RFP process for a period of seven (7) years or until PSE concludes its next general electric rate case, whichever is later. Except to the extent required by law or regulatory order, PSE shall have no obligation under this All-Source RFP to provide the models and data used in its evaluation process to respondents or other third parties.

All-Source RFP Proposal Requirements

PSE expects respondents to provide complete information in their original submittals. PSE will not consider proposals that provide insufficient information to substantiate the project or offer. Minimum qualifying criteria are defined later in this section.

To ensure that all proposals are thorough and complete, PSE has developed Exhibit B (Proposal Requirements Forms), which includes a checklist for respondents to complete in Tab 1. See also Figure 5 below. All respondents must complete a set of Exhibit B forms, including any required attachments identified therein, for each proposal submitted.⁴⁵ Additional information, such as a cover letter or other attachments not specifically required in Exhibit B, may be provided as part of a respondent's proposal and will be considered supplementary information to the required Exhibit B forms.

⁴⁴ PSE will post a non-confidential summary of proposals consistent with the requirements of WAC 480-107-035. Past proposal summaries have included a PSE-assigned Project ID#, the state in which the proposed resource is located, the resource type, the operating status of the resource, project COD, term start/end, commercial structure (contract type) and nameplate capacity. For storage resources, PSE includes both capacity (MWh) and duration (hours). For DR resources, PSE typically includes a capacity range (over the program life) and the customer class. Unless otherwise required by law or regulatory order, PSE will not include any specific confidential information (e.g., bid price, owner/developer name, project name, or specific project location) in any non-confidential summary of proposals.

⁴⁵ Bidders may submit one proposal, which may contain up to three offers, per set of Exhibit B forms. See Section 6, subsection Evaluation Fees, for the definition of "proposal" and the definition of "offers" for the purposes of this All-Source RFP.

Exhibit B shall be considered the primary proposal document. While it is the bidder's responsibility to ensure that all information provided in Exhibit B is true and accurate, if PSE identifies an inconsistency between the Exhibit B forms and other proposal contents, PSE will seek to clarify the discrepancy with the respondent with a data request. The respondent will be given three (3) days to correct the discrepancy.

PSE has designed the Exhibit B Excel file to be an automated key input to PSE's All-Source RFP proposal database and models. Respondents may not add, remove or modify tabs in Exhibit B. PSE will reject Exhibit B forms, if respondents add, remove or modify tabs in the Exhibit B file. Any changes to the integrity, or failure to complete the required fields of Exhibit B will result in a validation error response and the web platform will not accept the proposal until the error is corrected.

1. Proposal Content Checklist			
Required for all RFP proposals. (Do not remove tab.)			
Proposal element	Required for	Section	Select response from drop-down list
Required proposal contents	All proposals	Exhibit B	
Proposal Content Checklist	All proposals	Tab 1	1
Commercial Details	All proposals	Tab 2a	2
Offer Details	All proposals	Tab 2b	3
Facility	All proposals	Tab 3	4
Variable Energy	Variable energy (also DERs, if applicable)	Tab 3a	5
Flexible Capacity	Flexible capacity (also DERs, if applicable)	Tab 3b	6
Energy Storage	Energy storage (also DERs, if applicable)	Tab 3c	7
DR_DER_System	DRs, DERs, system resources	Tab 3d	8
Energy Output (8760)	Variable resource proposals	Tab 4	9
Integration and Transmission	All proposals	Tab 5	10
Development - Projects Detail	Development or construction project proposals	Tab 6	11
Ownership - Capital Costs	Proposals including asset sale offers	Tab 7	12
Ownership - Operating Costs	Proposals including asset sale offers	Tab 8	13
Bid Certification and contacts	All proposals	Tab 9	14
Mutual Confidentiality Agreement	All proposals	Exhibit C	15
Prototype Term Sheet (by offer structure)	All proposals (or specify Schedule C)	Exhibit E, F and G	16
PSE Customer Consent Letter	Proposals for projects with a pending request for or agreement for PSE transmission or integration	Exhibit J	17
Proposals must be substantially complete consistent with the requirements of this RFP. Proposals that do not provide sufficient information to substantiate a project or offer will not be considered in this RFP.			

Figure 5. Proposal content checklist (Exhibit B, Tab 1)

Minimum qualifying criteria

PSE considers a variety of evaluation criteria when making resource decisions, as described in Exhibit A (Evaluation Criteria and Scoring) to this All-Source RFP. PSE has also identified a set of minimum qualifying criteria to help respondents craft proposals designed to best meet the objectives of this solicitation. Proposals must meet minimum criteria for consideration in this RFP.

For all proposals (as applicable)

- Bidders must submit a complete proposal by the due date specified in Section 6 of the All-Source RFP, including the Proposal Requirements Forms (Exhibit B to this All-Source RFP)⁴⁶ and all required attachments indicated therein, the Mutual Confidentiality Agreement (Exhibit C to this All-Source RFP) and the term sheet (Exhibit E, F or G to this All-Source RFP) with proposed edits (if any). PSE has provided respondents with a proposal contents checklist (Exhibit B, Tab 1 to this All-Source RFP). PSE will not consider proposals that do not provide sufficient information to substantiate a project or offer.
- Bidder must submit by the proposal due date the appropriate bid fee, as specified in Section 6 of the All-Source RFP.
- Each proposal (if applicable) shall acknowledge and state that PSE disclaims and shall not assume any risk associated with the potential expiration of (or the respondent's or other project entity's ability to utilize) any then applicable federal or state tax incentives, cash grant programs, or similar programs meant to support a relevant resource.
- All proposals shall state that there will be no assignment of proposals during the evaluation or negotiation stage of this All-Source RFP and that, in the event the respondent and PSE negotiate and execute definitive agreements based on the respondent's proposal, the definitive agreements and obligations thereunder shall not be sold, transferred, or assigned, or pledged as security or collateral for any obligation, without the prior written permission of PSE. Any project lender who takes an assignment of the definitive agreements for security and exercises any rights under such agreements will be bound to perform such agreements to the same extent.
- PSE will not accept conceptual projects in this RFP. At a minimum, all qualifying bids must:
 - Have a nameplate capacity greater than 5 MW⁴⁷
 - Demonstrate site control consistent with guidance in the non-price scoring matrix in Exhibit A (Evaluation Criteria and Scoring) for both the project and any other project-related infrastructure (e.g., generation tie-line, etc.). At a minimum, provide non-binding letters of intent for the site.
 - If applicable, start the interconnection process by September 1, 2021 (date by which the proposal is due subject to a cure period (three business days), as described in Section 3 on page 22), and provide an interconnection queue number.
 - Bidder must provide proposed transmission plan. See Tab 5 in Exhibit B (Proposal Requirement Forms).

⁴⁶ Bidders may not modify the contents or structure of the Exhibit B forms in any way. The forms are designed to be inputs to our modeling process. Validation errors in the submission process will result from attempting to modify the forms or a failure to complete the forms, and the proposal will not be accepted by PSE's online platform until the errors are corrected.

⁴⁷ Qualified facilities with nameplate capacities of 5 MW or less may sell power to PSE pursuant to electric tariff rate Schedule 91.

- Identify required permits and approvals, and their status, and provide a schedule for completion as part of the overall project schedule. At a minimum, projects must have started the permitting process and demonstrate a plan for completion of the permitting process, including a habitat study.
- Include an overall project development and construction schedule for meeting the commercial operation date.⁴⁸
- For capacity resources, deliveries must begin no later than December 31, 2026. To align with PSE's first CEIP, PSE is seeking renewable resources beginning no later than December 31, 2025. Proposals must include a plan to deliver energy and/or capacity by the relevant dates specified above.
- Respondents must specify a point of interconnection and firm transmission path to or on PSE's system, or to one of the delivery points identified in Section 2, Table 4. Additionally, respondent will be responsible for arranging balancing and interconnection services for resources outside PSE's balancing authority. PSE will not accept deliveries at the project's busbar, unless the project interconnects at one of the delivery points specified in Table 4 or on PSE's system. Respondents must also meet all requirements specified in Section 2, subsection Energy Delivery.
- Generation projects requiring fuel must provide the following:
 - Gas-fired generation proposals must provide a plan to achieve firm fuel delivery to supply the proposed nameplate of the proposal (which may or may not be the entire output of a plant) for the proposed term.
 - Biomass, biofuel or other generation resources requiring fuel must provide in their proposals a fuel supply plan that demonstrates the firm availability of the fuel supply (either through an agreement or other equivalent means) to support the proposed capacity for the proposed term.
 - Standalone energy storage projects must demonstrate the ability to charge and discharge as required to meet the need. (PSE requires batteries to be studied additionally as a load. The standalone energy storage project will need to establish both a generation interconnection with transmission for the generation and a means to charge the load either through retail load service or transmission service.)
- Wind project proposals must confirm that the project has, at minimum, one (1) year of verifiable supporting data, adjusted to account for long-term wind speed trends. PSE reserves the right to require additional data and engage third-party consultants to independently verify project performance.

⁴⁸ PSE's intent is to minimize a variety of project execution risks, including the risk that a project(s) commercial operation date may be delayed or otherwise unable to deliver as promised to meet PSE's capacity needs.
- Solar project proposals must confirm that the project has at least one year of verifiable supporting irradiance data. PSE reserves the right to require additional data and engage third-party consultants to independently verify project performance.
- For development projects, proposals must describe the respondent's labor plan. Preference will be given to projects constructed with high labor standards, including family-level wages, benefits and opportunities for local workers and businesses.⁴⁹
- All proposals must state that all environmental attributes ⁵⁰ associated with the proportionate share of the subject project, if any, will accrue to the ownership and beneficial use of PSE. PSE will not accept REC-only proposals at this time.
- Bidder must provide a customer benefit plan consistent with the provisions in RCW 19.405.040(8). See Exhibit B (Proposal Requirements Forms), Tab 2a, "Customer Benefits from Transition to Clean Energy" and "Diversity, Equity and Inclusion" sections, which guide bidders to describe a proposed plan. Bidders may also provide a separately attached written diversity commitment, policy, or plan in addition to their responses to Exhibit B.
- All proposals must comply with all applicable laws, regulations and executive orders, including environmental laws, such as the Emissions Performance Standards.⁵¹
- PSE will not accept credit requirements imposed on PSE by the respondent.
- Respondents must certify to adhere to all applicable safety laws, guidelines and industry practices. If proposal is selected for acquisition, PSE reserves the right to review and assess at least the previous three (3) year safety performance of companies responding to this RFP to ensure that they meet acceptable standards.
- Proposal will certify that if selected for acquisition, the respondent will be responsible for meeting its scheduled deadlines. PSE will require the respondent to accept the risk and agree to pay liquidated damages for failing to meet contractual milestones. PSE may impose credit requirements based on the respondent's credit rating.
- Proposals must identify the geographical boundaries of the overall project by map, sketch
 or drawing, depict all property ownerships within those boundaries on the map, sketch
 or drawing and provide real estate agreements demonstrating respondent's degree of
 project site control for the purposes of the proposed project. PSE prefers proposals that
 further provide complete copies of all real estate agreements demonstrating control, and

⁴⁹ PSE prefers projects that utilize a Project Labor Agreement or Community Workforce Agreement for major construction activities associated with the construction of the project. Respondents shall make commercially reasonable efforts to ensure that such Project Labor Agreement or Community Workforce Agreement is eligible to be certified by the Washington Department of Labor and Industries under the standards of the Washington State Clean Energy Transformation Act (RCW 19.405).

⁵⁰ "Environmental attributes" means generally credits, benefits, reductions, offsets and other beneficial allowances with respect to fuel, emissions, air quality, or other environmental characteristics, resulting from the use of certain generation resources or the avoidance of emissions.

⁵¹ System PPAs longer than five years are eligible to participate in this All-Source RFP; however, they must comply with the Emissions Performance Standards (Chapter 173-407 WAC) and Chapter 480-100 WAC, which require disclosure of the underlying resource or resource pool to verify compliance with the standards.

independent third-party confirmation of property ownership, such as title insurance commitments or policies for each property with copies of all exceptions. For property not under control for the project, PSE prefers proposals that include a summary of property owner contacts and the status of negotiations with those property owners.

- Proposals must identify required permits and approvals, their status, and provide a schedule for completion as part of the overall project schedule. PSE prefers proposals that further demonstrate a respondent's permitting acumen (e.g., providing a permitting plan or demonstrating progress, identifying required studies and status, successful outreach to lead agencies and stakeholders, indicating past success permitting other projects in the area). Bidders should have begun permitting or long lead-time studies, such as habitat studies. If permitting or studies have not begun, bidders should present a plan for receiving or completing the aforementioned, respectively.
- Development proposals must include sufficient detail to substantiate a viable project and to adequately assess risk. For example, wind proposals must also provide the information listed below. Other resource types should plan to provide a similar level of detail and expect a similar level of scrutiny.
 - Proposals should include only turbine models from industry-recognized top-tier wind turbine suppliers.
 - Proposals should include full description of turbine model(s) to be used including history of successor models and relevant improvements that are expected in the proposed model.
 - Proposals should indicate anticipated date of third-party certification of proposed turbine model(s) along with the name of the recognized industry third-party providing certification.
 - Proposals should describe the design life of the turbine models. If existing turbines are included in the proposal, their expected remaining life should be clearly documented in the proposal.
 - Proposals should include documentation of a turbine site-suitability review performed by a third-party or by the turbine OEM. Proposed turbines should be documented as being suitable for the site including, but not limited to, the following factors:
 - Average wind speed
 - Turbulence
 - Extreme wind speeds
 - Extreme temperature ratings
 - Proposals should include documentation indicating the plant's ability to comply with FERC order 661-A *Standard Interconnection Agreements for Wind Energy and*

Other Alternative Technologies. The plant's ability to provide appropriate voltage ride-through and voltage support should be clearly documented.

• Proposals should include an avian risk plan with planned avian monitoring and mitigation actions.

For ownership proposals

In addition to the minimum qualifying criteria required for all proposals (above), PSE has identified the following additional criteria for ownership proposals:

- PSE will only accept proposals for ownership at or after COD.
- If project is selected, PSE will require comprehensive engineering design documents and drawings well in advance of project construction. Projects will be required to meet all PSE requirements and specifications.
- Bidders shall certify that all proposed design engineering firms and project constructors will have proven expertise and experience in projects of similar scope and size.
- Proposals should include details on the proposed service and maintenance plan for major turbine equipment.
- Proposals should include a description of the manufacturer warranties/guarantees for major equipment and the GSU/step-up transformers.

Battery energy storage systems

Due to the unique risks associated with ownership of battery energy storage systems, PSE prefers PPAs for such resources. In addition to the applicable requirements in the sections above, proposals for PSE ownership of battery energy storage resources must meet the minimum requirements identified in Section 2 of this All-Source RFP.

Demand response and distributed energy resources proposals

In addition to the applicable requirements in the sections above, DR and DER resources must meet the minimum requirements identified in Section 2 of this All-Source RFP.

Signatures and certifications

Each electronic proposal must include a scanned copy of the Bid Certification Form (Exhibit B, Tab 9) signed by a duly authorized officer or agent of the respondent submitting the proposal. By signing the form, the respondent's duly authorized officer or agent certifies that:

- The respondent's proposal is genuine; not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation; and is submitted in conformity with any anti-competitive agreement or rules.
- The respondent has not directly or indirectly induced or solicited any other respondent to submit a false or sham proposal.
- The respondent has not solicited or induced any other person, firm, or corporation to refrain from proposing.
- The respondent has not sought to obtain for itself any advantage over any other respondent by collusion.

Code of conduct, eligibility and conflict of interest disclosure

This All-Source RFP will accept proposals from all third-party project developers or owners, marketing entities, or other utilities that meet the minimum requirements and comply with the process guidelines described in this All-Source RFP. All respondents shall disclose in their proposals any and all relationships between themselves, the project and/or members of their project team and PSE, its employees, officers, directors, subsidiaries, or affiliates.

Code of conduct

PSE is committed to a culture of ownership, accountability, honesty, integrity and trust. In conducting this RFP, PSE will follow its <u>Code of Conduct</u>. This Code of Conduct outlines the honest and ethical manner in which all employees and board of directors at Puget Energy, Inc., Puget Sound Energy, and related subsidiaries are expected to behave, with each employee having a duty to uphold the Code of Conduct.

The Federal Energy Regulatory Commission's ("FERC") regulations governing the sales of energy and/or capacity at market-based rates impose restrictions on transactions between "market-regulated power sales affiliates" and their affiliated traditional franchised public utilities with captive wholesale or retail customers. Under FERC regulations, "affiliate" is defined in <u>18 C.F.R.</u> section 35.36(a)(9).

Washington state law and regulations define what constitutes an "affiliated interest," which is different than how FERC defines "affiliate." In Washington, affiliated interest is defined in <u>RCW</u> <u>80.16.010</u>.

Self-build proposals

PSE does not plan to submit a self-build proposal in the 2021 All-Source RFP.

Subsidiary or affiliate proposals

Subsidiaries or affiliates of PSE will be eligible to submit proposals in response to this All-Source RFP. Each respondent to PSE's All-Source RFP must disclose any subsidiary or affiliate relationship to PSE in Exhibit B, Tab 2a to this All-Source RFP. All respondents, including affiliates and subsidiaries of PSE, shall follow a consistent process for submittal. PSE will treat all respondents, including affiliates and subsidiaries of PSE, in a fair and consistent manner throughout the evaluation. Consistent with the provisions in WAC 480-107-023 and -024, the All-Source RFP evaluation team will neither give preferential treatment or special consideration to any subsidiary or affiliate of PSE to ensure no unfair advantage occurs, nor will PSE or its independent evaluator disclose the contents of its All-Source RFP evaluation or competing proposals to subsidiaries or affiliates of PSE prior to the information becoming publicly available. The IE will immediately report to PSE and the WUTC any perceived attempt by any individual or party to improperly influence any findings determined by the IE, or to challenge or interfere with their independent role in the solicitation process.

Validity, deadlines and regulatory approval

Bid validity and deadlines

PSE anticipates selecting a short list in Q2 2022. Unless a bid is withdrawn, PSE will assume that it is valid through completion of the RFP. PSE further assumes that proposals will remain valid for a period that would allow for negotiation and execution of definitive agreements, including any applicable management and regulatory approvals.

Regulatory approvals

Regulatory approvals for resources acquired may not be obtained until the latter half of 2023 or later. PSE may seek post-closing regulatory review of any resource purchases, exchanges, acquisitions, or associated costs that result from this RFP. Such regulatory review could include receipt by PSE from the Washington Utilities and Transportation Commission ("WUTC") of approvals and orders, as applicable, pertaining to and confirming the inclusion of the full amount of any asset purchase price plus PSE's transaction costs and other amounts allocable to the construction, start-up, testing and commissioning of the project, as applicable, in PSE's rate base. Such approvals and/or orders to be in form and substance satisfactory to PSE in its sole discretion.

In addition to being subject to the jurisdiction of the WUTC, PSE is also regulated by the FERC. FERC's jurisdiction and authority over the activities of PSE are defined in the Federal Power Act and include certain aspects of the acquisition of electric power. In particular, Sections 203 and 205 of the Federal Power Act require, respectively, (i) approval by FERC prior to transferring FERC-jurisdictional assets a value in excess of \$10,000,000; and (ii) certain filings by PSE to support its authorization to sell power and related products at market-based rates.

Pursuant to Section 203 of the Federal Power Act, FERC has approval authority over any acquisition by PSE of public utility facilities subject to FERC jurisdiction with a value in excess of \$10,000,000. In reviewing filings under Section 203 of the Federal Power Act, FERC considers the effect on competition, rates, and regulation. FERC's approval of such an acquisition will be based on a finding that it is "consistent with the public interest."

FERC has authorized PSE to sell power at market-based rates pursuant to Section 205 of the Federal Power Act. As a condition of its authority to sell power at market-based rates, PSE must demonstrate to FERC that it does not possess market power in the relevant markets. Acquisition by PSE of generation or power resources may require PSE to demonstrate that it continues to lack market power after the resource acquisition. In addition, FERC's regulations prohibit PSE from engaging in the wholesale purchase of energy or capacity from an affiliate without first seeking FERC authorization. As a result, PSE may be required to seek prior FERC approval of any transaction with an affiliated entity.

Accordingly, PSE will evaluate all proposals in light of the requirements of the Federal Power Act and the effect that such regulatory requirements and review may have on PSE.

SECTION 5. CREDIT REQUIREMENTS

5. Credit Requirements

PSE will not accept collateral thresholds, credit ratings triggers, general adequate assurances language or similar language that might require PSE to provide performance assurance. PSE developed this policy in order to protect its customers and to avoid undue costs, especially in the event of an industry-triggered credit downgrade.

PSE will require respondents to provide performance assurance. PSE will expect respondents with sub-investment-grade credit ratings (or being of similar creditworthiness), or whose credit ratings drop below investment grade, to provide performance assurance acceptable to PSE. Non-investment grade entities have inherent default risks. Collateral requirements are utilized to mitigate such risks. When certain PPAs are in default, physical supply will be affected. The collateral gives PSE an option to purchase market power to bridge the gap and, in turn, protect its ratepayers from both cost and reliability risks. This is consistent with standard industry practices.

In addition to any provisions included in the prototype term sheets for ownership agreements (Exhibit E to this All-Source RFP), capacity and/or energy agreements (Exhibit F to this All-Source RFP), or clean energy power purchase agreements (Exhibit G to this All-Source RFP) PSE may require negative control provisions⁵² in any definitive agreements.

⁵² "Negative control provisions" means covenants restricting respondent business practices that could jeopardize respondent's ability to perform its obligations.

6. Proposal Submission

Submission process, deliverables and deadlines

PSE is developing a web platform for respondents to confidentially submit electronic proposals to this All-Source RFP. PSE will provide a link to the platform and instructions for proposal submission on the RFP web site (www.pse.com/rfp) once the final RFP is issued, or soon thereafter.

Questions or comments about the All-Source RFP may be submitted to <u>AllSourceRFPmailbox@pse.com</u>. PSE will post answers to questions on its RFP web site. RFP schedule updates and any supplemental informational updates associated with this RFP will also be posted to PSE's <u>RFP web site</u>.

Deliverable	Date Due	Format
All-Source RFP proposal (See Section 4 and Exhibit B for Proposal Requirements)	September 1, 2021	 One electronic copy of the proposal via PSE's confidential electronic proposal submission web platform (instructions will be provided on www.pse.com/rfp when the final RFP is issued) Proposal must include one complete Excel copy of the Exhibit B (Proposal Requirements) forms and all required attachments (as indicated therein)⁵³ Proposal must include one signed scanned copy of Exhibit C (Mutual Confidentiality Agreement) Proposal must also include a signed scanned copy of the Bid Certification Form (Exhibit B, Tab 9) in addition to the live version included in the Excel form
Bid fee	September 1, 2021	• See Table 8 for details about the bid fee.

Table 7. Deliverables and deadlines

⁵³ Respondents may not add, remove or modify tabs in Exhibit B (Proposal Requirements Forms). PSE has designed this Excel file to be a key input to PSE's All-Source RFP proposal database and models. PSE will reject Exhibit B forms, if respondents add, remove or modify tabs in the Exhibit B file. Any changes to the integrity of, or a failure to complete the required fields of, the Exhibit B file will result in a validation error response and the web platform will not accept the proposal until the error is corrected.

Proposal requirements forms (Exhibit B)

PSE is committed to providing bidders with the guidance needed to successfully complete Exhibit B and to navigate the newly designed proposal submission process. PSE will not simply reject bids due to a data entry error or a misunderstood direction for a specific field. To help bidders successfully submit their proposals, PSE will provide the following:

- a downloadable user instruction manual on how to navigate and use the RFP submission portal and its core features and functions,
- a downloadable user reference on typical expected data validation error messages,
- a live demonstration at the bidders' conference to show bidders how to submit a proposal and what to expect with the automated screening,
- unlimited access to submit and resubmit proposals during the RFP submission window, and
- a three-day curing period after the RFP due date to allow bidders to remedy an unacceptable term or condition, or other non-conforming criteria or fatal flaw in a proposal.

Respondents may also reach out to RFP team staff through the All-Source RFP mailbox (<u>AllSourceRFPmailbox@pse.com</u>) with questions about Exhibit B and the automated submission process.

Respondents should note that the bid submittal deadline is not subject to the three-day cure period. It is expected that respondents will plan ahead to submit their bids on time, allowing for sufficient time to seek advice from the RFP team, in the event of any data entry errors. Bidders are encouraged to submit early to confirm that their proposal forms will be accepted by the automated system. Bidders will have until the due date to delete and resubmit forms and other supporting files from the portal.

PSE has undertaken a significant automation effort to help improve the efficiency and accuracy of the RFP process. Exhibit B is the primary input to this process. The automation project is currently in the testing phase, with efforts ongoing to support a successful and satisfactory user experience when completing the Exhibit B bid forms and submitting proposal materials. If technical issues are identified during testing that may negatively impact the user experience, the Exhibit B file will be corrected and an update will be provided on PSE's web site (http://www.pse.com/rfp) and in Docket UE-210220 (https://www.utc.wa.gov/casedocket/2021/210220). PSE will notify stakeholders of any updates to the Exhibit B forms. To be added to the RFP stakeholder distribution list, contact AllSourceRFP@pse.com.

Evaluation fees

A bidder shall complete a separate set of proposal requirements forms (Exhibit B) and submit a separate bid fee for each proposal submitted. For the purposes of this RFP, a proposal is defined as a bid for the same resource containing up to three (3) total offer options. Bidders may submit more than one proposal. Proposals are not mutually exclusive.

An offer is defined as an option within a single proposal for the same resource, or co-located resources. Offers may vary options such as capacity (MW), term, start or end dates, pricing structure, transmission delivery point, some combination of co-located resources, or other proposal elements.

Table 8 presents the evaluation fees applicable to this All-Source RFP.

Bid fee	 Bid fees will be due on the proposal due date specified in Table 7, subject to the cure period (three business days) described in Section 3 (Evaluation Process, Intake Process).
	• PSE will provide instructions for submitting the bid fee on the RFP web site (<u>www.pse.com/rfp</u>) once the final RFP is issued or soon thereafter.
	 Bid fees will be assessed per proposal based on the total (aggregated) nameplate of the project:
	Proposal Size Bid Fee
	≥5 – 10 MW \$2,500
	10 – 20 MW \$5,000
	≥20 MW \$10,000
	• Bidder may submit one (1) proposal and include up to two (2) additional offers (same resource or resources) for a single bid fee. An offer could include different terms, such as PPA/BTO/PPA with purchasing option, etc.
	• Bidders may submit more than one proposal for a separate bid fee.
	Proposals are not mutually exclusive.
	• Bid fees will be used to help offset the costs that PSE will incur while reviewing proposals. Costs may include, but are not limited to,

Table 8.Evaluation fees

	acquiring the services of third-party resources to perform independent analysis, conducting studies, engaging legal services, etc.					
Bid refund policy	 Bid fees are non-refundable, unless a proposal is withdrawn before the submittal deadline. If a proposal does not meet the minimum eligibility requirements specified in Section 4, the bidder will be notified and will have three (3) days to remedy the proposal. 					
Success fee	 PSE may enter into negotiations and seek to execute contracts for shortlisted resources. Upon contract execution, successful bidders may be charged a success fee to recover the incremental costs associated with due diligence work or legal services associated with negotiations. 					
	 The success fee will be capped per proposal based on the total (aggregated) nameplate of the project: 					
		Project size		\$/MW aximum	Success fee maximum	
		≥5 – 80 MW	\$	650 / MW	\$50,000	
		>80 – 150 MW	\$	800 / MW	\$105,200	
		≥150 MW	\$	1000/MW	\$[250,000]	
	Example I: If a project with an aggregat nameplate capacity totals 80 MW the maximum success fee woul be determined as follows: • (0-80 MW) * \$650 = \$52,000 = X		1W, ould	Example II: If a project with an aggregate nameplate capacity totals 160 MW, the maximum success fee would be determined as follows: • (0-80 MW) * \$650 = \$52,000 = A • (81-150 MW) * \$800 = \$55,200 = B • (151-160 MW) * \$1,000 = \$9,000 = C		

Proposal Success Fee (I) = MIN(X,	Proposal Success Fee (II) = MIN(A + B
\$50000) = \$50,000	+ C , \$250000)= \$116,200

All costs to participate in the All-Source RFP process, including the preparation of proposals, negotiations, etc., are the responsibility of the respondent.