

The PSE Building 10885 NE Fourth Street, Suite 700 (9 +1.425.635.2400 Bellevue. WA 98004-5579

0 +1.425.635.1400 PerkinsCoie.com

June 11, 2018

VIA ELECTRONIC FILING

Washington Utilities and Transportation Commission Attn: Mark Johnson Executive Director and Secretary 1300 S. Evergreen Park Drive, S.W. P.O. Box 47250 Olympia, Washington 98504-7250

Jason Kuzma JKuzma@perkinscoie.com D. +1.425.635.1416 F. +1.425.635.2416

Received

Records Management

06/11/2018 1:03PM

State of WASH. UTIL. AND TRANSP. **COMMISSION**

Re: Docket UE-180272 - Puget Sound Energy Final 2018 Request for Proposals for **Demand Response Programs**

Dear Mr. Johnson:

Puget Sound Energy ("PSE") hereby submits to the Washington Utilities and Transportation Commission (the "Commission") the attached final 2018 Request for Proposals for Demand Response Programs (the "2018 Demand Response RFP") for approval by the Commission. Attached to this letter are the following documents:

- Attachment A Attached as Attachment A is a complete copy of the final 2018 Demand Response RFP for which PSE is seeking approval.
- Attachment B Attached as Attachment B is a redline showing the changes made by PSE to 2018 Demand Response RFP since filing the draft version in Docket UE-180272 on March 29, 2018.
- Attachment C Attached as Attachment C is a 2018 Demand Response RFP Frequently Asked Questions prepared by PSE to respond to questions and comments raised in response to the draft RFP.
- Attachment D Attached as Attachment D is a 2018 Demand Response RFP: Summary of Public Comments prepared by PSE that summarizes comments raised in response to the draft RFP and PSE's responses thereto.

Mr. Mark Johnson June 11, 2018 Page 2

Questions regarding this filing should be addressed to the undersigned. Questions regarding the 2018 All Resources RFP Source RFP should be addressed to Kiley Faherty, Demand Response Program Development, at 425-462-3234 and <u>kiley.faherty@pse.com</u>.

Thank you for your assistance.

Very truly yours,

Juson N

Jason Kuzma

Attachment A



2018 RFP for Demand Response Programs *June 8, 2018*



2018 Request for Proposals (RFP)

Technology and Implementation Services

In support of

Puget Sound Energy (PSE) Demand Response (DR) Program

Date	Milestone
March 29, 2018	Draft RFP filed with WUTC
May 28, 2018	Public comment period closes
June 28, 2018	WUTC expected to approve PSE's Demand Response RFP
July 13, 2018	PSE releases final RFP solicitation
August 3, 2018	Intent to Bid Forms and Mutual Confidentiality Agreements due to PSE
August 17, 2018	Offers due to PSE
Late Q1 2019	PSE selects final short list, notifies respondents

PSE reserves the right to reject any and all proposals. This RFP does not constitute an order or any obligation on the part of PSE. PSE is not liable for any costs associated with the preparation of Bidders' proposals, or for any other costs incurred by Bidders prior to the execution of a contract or purchase order.

Table of Contents

1		Summary of RFP	1
2		Background and DR Resource Requirements	2
3	PSE 2.1 2.2	Background Resource Need DR Resource Objectives and Bidder Solution Requirements Scope of Work	2 4
_	3.1 3.2	Roles and Responsibilities Performance Goals	10
4 5	4.1 4.2 4.3	Technical Proposal Technology Products and Related Services Implementation Services Project Management Bidder Information and Qualifications	13 18 22
6		Proposal Format and Bidder Instructions	26
7	6.1	Bidder Selection Process RFP and Bid Procedures	
	7.1 7.2 7.3 7.4 7.5 7.6	RFP Schedule Intent to Bid Questions and Communications Submission of Proposal Responses Terms and Conditions of Submission Bidder Selection Process	28 29 29 30
E		it A: Schedule of Estimated Avoided Cost	
E	xhibi	it B: Intent to Bid Form	37
E	xhibi	it C: Mutual Nondisclosure Agreement	38
Б	vhihi	it D: Cost-effectiveness Evaluation Criteria	39

1 Summary of RFP

Puget Sound Energy (PSE) seeks bids from qualified firms to supply technology and implementation services for its Demand Response Program. PSE is issuing this Request for Proposals (RFP) for program delivery for 2019 through 2023 (program years). The bidder(s) will be responsible for providing load curtailment by winter 2023¹ from PSE's customers. PSE has a capacity need of 351 MW by 2023. Our most recent *Integrated Resource Plan* indicates that winter achievable technical potential for demand response in PSE's service territory is 188 MW by 2037. No minimum capacity offer is required to qualify to bid.

PSE is simultaneously filing an All Resources RFP. Both RFPs may be found on our web site at http://www.pse.com/RFP. This web site also includes a set of frequently asked questions ("FAQs") to share information that may be of common interest to bidders. Demand Response RFP FAQs can be found by clicking the Demand Response RFP hyperlink.

Proposals will be evaluated in a concurrent process with bids in response to PSE's 2018 All Resources RFP.

Section 2 of the RFP provides the relevant **Background** and discusses PSE's expectations of future programs.

Section 3 defines the **Scope of Work** expected of the vendor, as well as the expected responsibilities of PSE. This section also outlines some information on the expected load control strategies and relevant performance goals.

Section 4 requests information about the bidder's technology, technology-related services, and implementation services.

Section 5 requests information, relevant qualifications and references from the bidder.

Sections 6 and 7 provide requirements for the proposal format and bid submission as well as information on the RFP process.

A separate **Pricing Attachment** requests pricing information corresponding to the scope of work and bidder proposals.

A separate **Intent to Bid Form** requests specific bidder information to be submitted by the date indicated in section 7.1.

The RFP includes an Exhibit A that provides a schedule of PSE's estimated avoided cost.

¹ Winter capacity for 2023 covers November 1, 2023 to February 29, 2024.

2 Background and DR Resource Requirements

PSE Background

Puget Sound Energy (PSE) is Washington State's oldest local energy company and serves approximately 1.1 million electric customers and more than 790,000 natural gas customers in 10 counties. PSE's electric service area includes all of Kitsap, Skagit, Thurston and Whatcom counties; and parts of Island, King (excluding Seattle), Kittitas, and Pierce (excluding Tacoma) counties.

More information on PSE can be found at <u>https://www.pse.com/</u>. Information regarding rates and regulatory filings may be found at <u>http://pse.com/aboutpse/Rates/Pages/default.aspx.</u>

2.1 Resource Need

PSE's electric resource acquisition process is guided by our integrated resource planning analysis, which evaluates and establishes the Company's capacity (physical reliability) and renewable energy (policy driven)² needs on a biennial basis, consistent with WAC 480-100-238. Our most recent *Integrated Resource Plan* includes a detailed discussion of PSE's electric planning standard and describes our methodology for analyzing the Company's resource needs. The *Integrated Resource Plan* can be found on PSE's web site at http://www.pse.com/irp.

Since publishing the 2017 IRP, PSE has updated the assessment of its capacity and renewable resource needs. The peak capacity need was updated for two reasons:

- 1. Updated load forecast to reflect the Company's current economic demand forecast.
- 2. 100 MW of additional Mid-C transmission that became available after the 2017 IRP was finished.

The following chart includes the updates referenced above and conservation from the 2017 IRP, but does not include demand response.

² PSE has a legal obligation to meet the requirements of the Energy Independence Act, Chapter 19.285 RCW. The Energy Independence Act requires PSE to acquire qualifying eligible renewable resources and/or renewable energy credits to meet 3 percent, 9 percent and 15 percent of its load by 2012, 2016 and 2020, respectively.

Table 1. Electric Resource Capacity Need



PSE has a modest capacity need prior to 2021, which grows to 272 MW in 2022 after the retirement of Colstrip 1&2.

Table 2. Electric Resource Capacity Need, Peak Deficit/(Surplus)

2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
28	29	1	(21)	272	351	486	569	881	867	873	939	1,033	1,075	1,153	1,224	1,330	1,443	1,940	2,011

As part of the retirement of Colstrip units 1&2, the company has the opportunity to request that BPA redirect the transmission capacity from Garrison to Mid-C. If transmission rights from Colstrip 1&2 are redirected to the Mid-C, PSE would not have a substantial capacity need until 2024. The table below shows PSE's resource capacity need, if 300 MW of Colstrip transmission capacity is redirected.

Table 3. Electric Resource Capacity Need, if Colstrip 1&2 transmission is redirected, Peak Deficit/(Surplus)

2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
28	29	1	(21)	(42)	36	171	253	565	551	557	623	717	759	837	908	1,015	1,128	1,624	1,695

2.2 DR Resource Objectives and Bidder Solution Requirements

PSE's objectives for DR as a portfolio resource in the 2019-2023 contracting period are listed below. The primary objectives are requisite (or the minimum) requirements that a bidder needs to fulfill for PSE's future DR portfolio.

Primary Objectives:

- 1. Ensure DR resource is cost effective³ and can meet the following performance requirements:
 - a. Be available during weekday peak hours, typically between 7 a.m. to 10 a.m. in the morning, and 5 p.m. to 9 p.m. in the evening, from November 1 through February 28/29.⁴ PSE may call DR events outside these time windows, but bidders will not necessarily be expected to provide the same level of curtailment.
 - b. Provide load response with one of the following notification options: (1) hour ahead notification of calling DR events, (2) day ahead notification of calling DR events, or (3) a combination of hour ahead and day ahead notification of calling DR events.
 - c. The total event time from November 1 through February 28/29 shall be no more than 40 hours per individual product.

Secondary Objective:

- 1. Develop flexible DR capability that provides more rapid curtailment, and greater integration of DR dispatch with grid monitoring.
 - a. Provide fast response with notification time of 10 minutes or less.

³ Cost effectiveness criteria are discussed in Exhibit D.

⁴ PSE uses a daily forecast high below 40 degrees F and/or a forecast low below 30 degrees F 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.

3 Scope of Work

This section identifies some, but not necessarily all, of the roles and responsibilities of PSE and the selected vendor. Bidders will be expected to identify specific information needed from PSE as well as additional responsibilities required by bidders to successfully deploy the load curtailment technologies and meet the stated objectives described in Section 2.2. Successful bids must also articulate the implementation strategy.

3.1 Roles and Responsibilities

Table 4 below summarizes PSE and vendor responsibilities with respect to core business functions associated with DR program design and delivery.

Table 1 DD Business Functions and Besnensible	
Table 4. DR Business Functions and Responsible	Parties

Dusin sas Function	Responsib	le Party
Business Function	PSE	Vendor
Define Program Parameters and Initiate Load Control Events	Ρ, Α	-
Provision of Technology Products and Services	-	Ρ, Α
Marketing, Customer Recruitment & Outreach	А, р	Р
Technology Installation and Enablement	р	Р, А
Data Support and Performance Analysis	р	Ρ, Α
Billing and Settlement	А	Р
Customer Service and Satisfaction	Ρ, Α	Р
EM&V ⁵	Ρ, Α	-
Coordination with Energy Efficiency Programs	Ρ, Α	Р

Level of Responsibility:

A = Accountable (answerable for the correct and thorough completion of the deliverable or task, and often the one who delegates the work to the performer)

P = Perform (carries out the activity)

p = Performs with a lower level of responsibility than P

Blanks indicate that the party is neither accountable nor responsible.

PSE values its relationships with customers. It prefers to work with services partners that understand these relationships and combine a high degree of technical expertise with superior customer-focused awareness and service during program planning and implementation. It is PSE's preference to 'own' the customer relationship with the selected respondent and co-coordinate PSE Demand Response implementation efforts among Business Services, Energy Efficiency Services and other customer service and program implementation conduits.

⁵ Note that PSE is responsible/accountable for hiring an independent third-party to perform the EM&V.

The vendor must ensure that its products and services are appropriate for the program objectives described in Section 2.2. The vendor's roles include, but are not limited to, providing the following over the life of the contract:

The tables below provide brief descriptions of PSE and vendor roles and responsibilities with regard to the business functions earlier in Table 4.

PSE Responsibility	Vendor Responsibility
 Define DR program parameters (applicable months, event hours, cycling and/or temperature set point modifications; notification, event duration, annual limit on event hours, no. of times events can be called, etc.). Initiate load control events using vendor- provided software and hardware. 	Not Applicable

Define Program Parameters and Initiate Load Control Events

Provision of Technology Products and Services

PSE Responsibility	Vendor Responsibility
	For all customer classes:
	 The technology and its support. The vendor should present a fully-integrated architectural solution that includes the following elements:
	 Utility Interface (UI)
	 Head-end application
Not Applicable	 Load control devices
	 All necessary communications between UI, head-end, and load control devices (may leverage the customer's broadband internet).
	 A customer web portal and mobile app, if the load control devices require customer interaction.
	 Ability to do each of the following:

PSE Responsibility	Vendor Responsibility
	 Curtail the contracted amount of load within an hour of dispatch by PSE.
	 Selectively control the amount and duration of load shed in a predetermined manner.
	 Control remote devices, individually, as a whole, or as multiple groups, based on device type.
	 Provide curtailment forecasts for full deployment, including seasonally, monthly, and day-ahead.
	 Produce near real-time monitoring of curtailments in process.
	 Provide post event reporting on load shed achieved.
	For commercial and industrial participants:
	 Undertake preventive, routine, and non-routine maintenance on program equipment and software to ensure reliable long-term and safe operation.

Marketing, Customer Recruitment and Outreach

PSE Responsibility	Vendor Responsibility
 Assume primary responsibility for marketing, customer education and outreach 	 Jointly develop program marketing materials and digital tools and assets with PSE.
• Work in close coordination with vendor in developing program marketing materials, website and digital tools, customer education and outreach.	 Recruit customers in close coordination with PSE energy efficiency program staff and other relevant groups. Enroll, schedule, install, enable, verify,
• Ensure focus on PSE brand in messaging.	and test the program participants.
 Recruit customers in coordination with the vendor: PSE's energy efficiency program staff will serve as a primary touchpoint to customers during all stages 	

PSE Responsibility	Vendor Responsibility
of customer recruitment.	

Technology/Equipment Installation and Enablement

PSE Responsibility	Vendor Responsibility
• PSE Account Managers, Energy Management Engineers and/or energy efficiency program staff works closely with	 Provide vehicles with proper signage in support of installation activities. PSE to approve signage for vehicle.
the vendor during preliminary site assessments.	 Set up network/workforce to install and service program equipment.
• Where appropriate, PSE staff introduce vendor to customer for detailed site audit.	 Provide field and office training, including safety training for field personnel.
• PSE staff works in close coordination with vendor at different stages of technology enablement: schedule, install, enable, verify, and test the program participants.	 Manage all inventories of equipment, materials, and supplies associated with installation of program equipment and software.
	 Perform quality assurance audits on all installations by a new employee.
	 Perform maintenance/inspection and repair for all installed equipment.

Data Support and Performance Analysis

PSE Responsibility	Vendor Responsibility
 Provide export of customer data for use by the vendor. Bidders should define initial interface requirements. Mutually define with the bidder data field names, definitions, data type, and data sizes of all transferred/shared data; provide an interface to the vendor's system(s) for import of data required by the bidder. 	 Provide secure, data uploads into PSE's data tracking system. Provide participant data from a sufficient sample of customers for purposes of estimating average load impacts.
 Undertake program performance analysis using key metrics. 	

Evaluation, Measurement and Verification (EM&V)

PSE Responsibility	Vendor Responsibility
 Sponsor independent ex-post impact and process evaluation of the program(s), establish baseline development methodologies and analytical framework for conducting annual impact and process evaluations. 	 Provide participant data (to PSE and 3rd party evaluator) from a sufficient sample of customers for purposes of estimating average load impacts. The respondent will be called upon to provide meter and payment data, calculation methodologies and other relevant information related to enrolled participants.

Billing, Payment, Measurement & Verification

PSE Responsibility	Vendor Responsibility	
Undertake customer incentive payments.	• Conduct measurement and verification for estimation of load impacts (method to be agreed upon mutually with PSE, and verified by PSE and an independent contractor).	

Customer service and satisfaction

PSE Responsibility	Vendor Responsibility	
 Perform customer satisfaction measures at all major points of customer interaction in order to improve/maintain customer satisfaction with program. Develop customer satisfaction metrics 	 Coordinate with PSE to perform customer satisfaction measures at all major points of customer interaction in order to improve/maintain customer satisfaction with program. 	
along with vendor and obtain information from vendor to assess customer	 Exchange customer information with PSE as mutually agreed. 	
 satisfaction. Conduct surveys and focus groups in coordination with vendor to assess customer satisfaction.⁶ 	 Perform all activities related to customer complaint tracking and handling. Perform all activities related to customer 	

⁶ The specifications regarding the number and timing of the surveys/focus groups will be indicated at a later stage during/after the contract process.

PSE Responsibility	Vendor Responsibility
	 claims tracking and handling. Perform all activities associated with maintaining a call center operation including, but not limited to, customer recruitment, handling all types of enrollments, installation scheduling, and service call processing, complaint handling, and tracking.
	 Allow PSE to monitor customer service calls with customers.

Coordination with Energy Efficiency Programs

PSE Responsibility	Vendor Responsibility
 Assume responsibility for coordination of DR and EE products/services to provide integrated demand side management opportunities to customers. 	• Work in coordination with PSE's program managers and implementers on ways to integrate DR and EE program offerings to present these as integrated energy management opportunities to customers, especially at the stage of program marketing, customer education and outreach.

3.2 Performance Goals

PSE will pay bidders based on megawatts of delivered load reduction that meet the performance parameters identified under the Objectives in Section 2.2. These payments will be provided as:

- **Monthly capacity payments**, based on the average actual load reduction provided during events that month or, if no events occurred, the monthly committed load reduction specified by the vendor, multiplied by PSE's monthly capacity payment rate.
- (Optional) Monthly energy usage payments, based on the vendor's energy performance each month, multiplied by PSE's hourly energy usage payment rate.
- **Other payments** as structured in bidder's response in the Pricing Attachment and agreed upon with PSE.

If the vendor fails to commit or deliver megawatts greater than or equal to the minimum committed load reduction specified in the contract during a program month, PSE will reserve

the right to withhold some or all of the monthly payments to the vendor for that particular program month.

Additionally, in order to ensure successful delivery of products and services, bidders' performance and compensation will also be measured against pre-defined metrics specified during the contract process, which may include the following:

Technology Products and Services:

- System functionality meeting specifications identified in bidder proposal
- Data collection/provision requirements (types of data and frequency of provision)
- Device diagnostics capabilities and frequency of provision
- Event monitoring and performance reporting (speed, comprehensiveness, and frequency)

Implementation Services:

- Timely enrollment of participants
- Timely installation of equipment
- Minimum levels of customer service satisfaction
- Timely provision of customer enrollment data and forecasts
- Accurate customer enrollment data and payment processing

Curtailment Objectives:

- Annual growth targets
- Cumulative curtailment capability
- Event performance
- Timely provision of required event data, analysis and forecasts

4 Technical Proposal

PSE will consider any type of end use control technology, delivery mechanism, or combination of technologies and delivery mechanisms, provided the proposed solution meets PSE's objectives stated in Section 2.2.

In the tables below, please describe the products, services, and information you would provide if selected by PSE to perform the Scope of Work described above in Section 3. Where appropriate, bidders are asked to describe their past experiences and how they may enhance the bidder's ability to meet PSE's objectives outlined in Section 2.2.

Not all fields below will apply to all vendor solutions. Bidders should indicate fields that are not applicable to their proposed solution in their response.

Bidders may provide their responses in the format of the tables below, if desired. At a minimum, bidders must conform to the alpha-numeric outline of the sections, topics, and questions (e.g., System level diagram must be indicated as part of Section 4.1.B.1 Technology Products and Related Services, System Overview, System Level Diagram).

Bidders are also encouraged to provide clear, concise responses. In addition, bidders should feel free to reference to earlier sections for their responses if they feel the requested information would be repeated.

Example Response Format:

Section 4.1 Technology Products and Related Services

B. System Overview

1. System Level Diagram

[insert diagram here]

2. Description of Features/Functions

[insert text response here]

4.1 Technology Products and Related Services

A. S	A. Summary of Proposal (2-page limit)		
fo P	Summary of Proposal for Technology Products and Related Services	Provide a high-level overview of your proposed technology, associated hardware and software, and any technology-related services. This should be a concise summary of the offering that you propose in the remainder of this Section, highlighting unique elements of your proposal. This summary should NOT address Implementation Services, which are covered in Section 4.2.	

В.	System Overview	
1.	System Level Diagram	Provide a system level block diagram of the solution that you are proposing. Include head-end (control) elements, all key interfaces, databases, communication, monitoring, switches, and associated technology to deliver a load shed signal to the customers and end devices, and the return path for communications back to PSE. PSE prefers a two-way communication infrastructure.
		<u>Note</u> : PSE will not accept marketing brochures or any extraneous marketing information to fulfill this request, but may be included in an appendix. A simple but detailed block diagram that is easy to read and understand is mandatory.
2.	Description of Features/Functions	Based on the system-level diagram, describe the major functions/features of that system.
3.	End-Use Control Devices and Systems	Provide technical descriptions of any end-use devices and systems you are proposing for customer premises as well as the end-uses they might control.
4.	Communications Infrastructure	Based on the system-level description, provide a complete description of the communication infrastructure that will be needed and how it will be used.
		Discuss the flexibility and adaptability of communications options used to monitor, control, and manage the remote devices. Discuss your ability to upgrade the communications options to adopt new technology and/or systems and services (e.g., AMI). Provide information about your proposed future communication options, the proposed time frame for these, and the additional features and capabilities this will provide.

5.	Metering	Describe the type of metering that will be employed and how metering information will be relayed to PSE—frequency, resolution, summary reporting, etc. Also indicate any requirements for PSE's installed metering, or bidder's intended use of PSE meter data.
		<u>Note</u> : PSE is updating our electric metering equipment across our entire service territory. This is a six-year project, scheduled to complete in 2023.
		The Meter Upgrade Project team has created 40 sectors for the electric deployment. On average, each sector has 35,000 meters and approximately 80% of those meters are residential. Sectors 1-6 are scheduled to be completed in 2018.
		PSE is currently installing the following technology:
		 Residential Meters: E331/E351 FOCUS AXe (2S, 12S and 2SE) Commercial Meters: E650 S4x-4S
		For the most current information on PSE's Meter Upgrade Project, including project maps and schedules, please visit our website: <u>https://pse.com/inyourcommunity/meter-upgrade-</u> <u>project/Pages/default.aspx</u>
6.	Load Curtailment Mechanics	Describe the approaches, processes, and equipment to be used to execute load curtailment at customer facilities.
		Discuss the anticipated actions required of customers (may vary by customer), and any automated load response that may be employed.
7.	Interoperability	Based on the system-level diagram, describe the interoperability features of each element of your solution and the scalability of your proposed solution. Discuss any components that may not be interoperable with future deployments and why this is the case.
		Describe the communication and control center protocols that you support (e.g., CIM, Multispeak, etc.) and the open interoperability standards that your interfaces are based on. Provide your interoperability roadmap that shows your future direction for these protocols, along with timing and rationale.
8.	Security	Describe in detail the system architecture and measures that provide end-to-end security and cyber-security and ensure against attacks to program-related systems and data. Include discussion of secure data transfer, communications, device registration, and device messaging, and in particular customer related information privacy and security.

9. Maintenance	Describe the maintenance requirements and activities during the project phase. Include any equipment required and describe how the maintenance will be performed. Also, describe any expected software maintenance.
10. Upgrades	Describe how the devices will be upgraded over their lifetime and whether and how they will be able to comply with changing industry standards.
11. Requirements for PSE	Describe the expectation of PSE technology infrastructure, including server needs, database requirements and capacities, operating systems, security requirements, file transfer mechanisms, telecom requirements, and any other interfaces, components or software/hardware requirements.

c.	. Head-End (or Control) System	
1.	Technical Descriptions	Based on the system-level diagram, provide technical descriptions of the system management software that is proposed for the control of all deployed load control equipment and other infrastructure that may need to be controlled and managed.
2.	Operator Interface	Describe and provide graphics (screen captures or other appropriate) illustrating what an operator would see, and what they would do to set up an event, trigger the event, and then monitor its progress and effectiveness.
3.	Control Strategy Validation	Describe how your process will be tested when new load control strategies are implemented.
4.	Hosting	Based on the system-level diagram explain the options of whether the interface is hosted at the utility or the bidder's site as SaaS or a Cloud Based solution.
5.	Status and Reporting	Based on the system-level diagram, describe your reporting capability as it relates to displaying the current system status and to log system status and activity for subsequent analysis. Describe the data reports available for each element of the system.

D.	D. Load Curtailment Performance and Impact Assessment		
1.	Load Curtailment Performance to Meet Objectives	*** PSE places a high value on responses to this item. *** Describe the proposed load curtailment capability, including number of events and hours per year, duration of events, frequency of events, advanced notification required, and other relevant performance metrics associated with load curtailment that meets PSE's objectives in Section 2.2.	

2.	Winter Capacity Reduction Estimates by Year	In the table below, provide your proposed winter peak load reduction capacity per year from 2019 to 2023 ⁷ . The proposed amount indicates what bidder can provide that meets PSE's objectives discussed previously in Section 2.2. Winter Load Curtailment Estimate Per Year ⁸ (MW)					
			2019	2020	2021	2022	2023*
		Day Ahead					
		1 Hour Ahead					
		10 Minute					
		Total					
3.	Customer Baselines and Alternative Baseline Loads	PSE will provide a baseline methodology to calculate the winter peak load reduction, as discussed under the primary objectives in Section 2.2. PSE anticipates utilizing a day-matching approach (using customer loads from one or more prior days during the same hours as the event) with a symmetric up or down day-of event adjustment. ⁹ (so that the adjusted baseline matches the observed load during certain hours prior to the event). However, the specific methodology has not been established. For purposes of this RFP, bidders should assume that megawatts will be measured based on each customer's average load reduction measured over each 15-minute interval during the course of each event.					
		a. Please de measurer	scribe you nent requi		to comply	with these	2
		If you are providing load curtailment products for which a day-matchi baseline with same-day adjustment is not appropriate, please describ- your proposed baseline approach.					
4.	Reliability	Describe your approach to ensuring consistent load reductions during the course of an entire event and from one event to another. Provide data/graphical evidence of your performance history in doing so.					

⁷ Winter capacity for 2019 covers November 1, 2019 to February 28, 2020; winter capacity for 2023 covers November 1, 2023 to February 29, 2024

⁸ Note that loads will be dispatched according to the specifications outlined in Section 2.2 under Objectives.

⁹ This will need to be reconsidered/redefined for winter morning peak periods to which adjustments based on hours prior to the event period are invalid.

4.2 Implementation Services

PSE values its relationships with customers. It is PSE's preference to 'own' the customer relationship with the selected respondent and co-coordinate PSE Demand Response implementation efforts with energy efficiency program/services offerings and other customer service and program implementation conduits.

A. S	A. Summary of Proposal (2-page limit)			
	ummary of Proposal for nplementation Services	Provide a high-level overview of your proposed implementation services. This should be a concise summary of the offering that you propose in the remainder of this Section 4.2, highlighting unique elements of your proposal.		

B. Marketing, Recruitment, and Retention		
1. Customer Segmentation	Atomer SegmentationProvide a complete list of all customer sectors and en uses targeted for participation in the program.In the table below, provide an estimated share of the total curtailment amount in 2023 by customer sector, presented in terms of their percentage contribution to the total winter peak load reduction in 2023.	
	% share by sector in winter peak load	l curtailment
	% share by sector	2023
	Residential	
	Small commercial (<=50 kW max. demand)	
	Medium commercial (>50 kW and <=150 kW max. demand)	
	Large Commercial (>150 kW max. demand)	
	Total	100%

2. Engagement Plan	 Detail the strategy for public outreach, deployment and plan to engage end-use customers and solicit enrollment into a program. Include discussion of the particular customer sectors and sub-sectors to be targeted. Provide examples of how you might coordinate with PSE account managers and existing PSE programs to improve program marketing and recruitment.
3. Branding	Describe the "brand recognition" of any customer interaction, equipment, or systems which the end-use customer may encounter, such as the customer portal.
4. Incentive Payments	 Propose a customer incentive structure, if your marketing plan calls for incentives. Include discussion of any incentives for initial enrollment, on an annual basis, for equipment, or other variation. Provide a rationale for your proposed incentive structure, and provide alternative structures and rationales, if desired. PSE is not predisposed to the use of monetary incentives and understands that the provision of a thermostat and related services, for example, may be sufficient incentive. Note that PSE will be responsible for administering incentive payments to participants.
5. Coordination with PSE	 Describe how you will coordinate with other existing PSE programs to improve the program delivery. Include discussion on how you and PSE could cross-promote and integrate your offering with existing/future EE programs, etc. ¹⁰ Provide examples of how your firm has successfully partnered with other existing utility programs to enhance program delivery.

¹⁰ For a description of existing programs refer to PSE's energy efficiency program information in PSE's 2018-2019 Biennial Conservation Plan Exhibit 3, which contains EE program descriptions at <u>https://www.utc.wa.gov/_layouts/15/CasesPublicWebsite/GetDocument.ashx?docID=4&year=2017&docketNumber=171087</u>

C. Equipment Installation	C. Equipment Installation and Operation		
1. Staffing	Describe your current network of equipment installers and/or your proposed subcontractor or subcontracting approach for installation of load control devices and related equipment. Discussion should address the following:		
	 Existing or planned coverage in/near PSE service territory 		
	 Your qualification requirements for using subcontractors and your process for identifying, training, and utilizing local contractors, if applicable 		
	 Your process for evaluating performance, ensuring professional conduct, and maintaining adequate capacity to meet program goals 		
2. Processes	Describe the installation process for any customer equipment. Include discussion of the equipment needed to complete installation, amount of time needed to install a facility, and any requirements from the customer.		
3. Verification of equipment operation	Describe your practices for verification and testing of equipment while installer is onsite.		
4. Equipment maintenance	Describe your maintenance, auditing, and repair practices for installed devices to ensure continued operation (this may include site visits and/or use of two- way communications to verify operation).		

D.	D. Data Support				
1.	CIS and work management software	Describe your CIS and work management software, including how customer information is entered and updated, how scheduling of installations is accommodated, and how service requests and other necessary information are incorporated.			

2. Interface Requirements	Describe the process by which PSE's system is updated or fed with real time information, such as load curtailment activity and other predefined fields. Also, describe processes for providing updates/reports.
3. Data Sharing and Reporting	 Respond in detail to the following: What types of information/data will be exchanged with PSE, and how will this data be transferred in a secure manner? Is it pulled, pushed on a time basis, or both?
	• What access will PSE staff have to account status, and what information will be available?
	 What types of status reporting will be provided to PSE, with what level of detail, and with what frequency?
	What are your data retention policies?
	• What is your QA/QC process for ensuring that your customer data is correct and valid?
4. Reliability and Backup	Describe the protections and recovery methods for dealing with unforeseeable events (e.g., acts of nature, computer or hard drive failure in the computing resources, or security breaches) that may compromise vital customer or work management data.
5. Testing Approach	Describe how the data transfer processes will be tested initially and how they will be checked during the project to assure functionality and accuracy.

Ε.	E. Customer Service and Satisfaction		
1.	Service calls	Describe your method of responding to customer service requests requiring onsite visits. What is the typical time from the service call to a response from a scheduler? To resolution of the problem? How are decisions made regarding whether service work is needed and covered under your responsibilities?	

2.	Customer satisfaction	What procedures do you propose to ensure customer satisfaction and to measure and report results to PSE? What metrics could be easily provided short of any detailed customer satisfaction surveys that PSE might conduct?
----	-----------------------	--

F.	End-of-Contract Terms	
1.	End-of-Contract Technology Ownership Terms	• Indicate who owns the equipment, and what your suggested terms are for ownership of equipment at the end of the contract period in 2023, should PSE decide to discontinue services with your firm at that time.
		 Indicate whether it is possible for PSE buy the equipment and/or acquire a license to operate the head end system at the end of the contract period.
		 Provide pricing terms for the ownership transfer or licensing.

4.3 Project Management

PSE values its relationships with customers. The utility prefers to work with services partners that understand these relationships and combine a high degree of technical expertise with superior customer-focused awareness and service during program planning and implementation. It is PSE's preference to 'own' the customer relationship with the selected respondent and co-coordinate PSE Demand Response implementation efforts among Business Services, Energy Efficiency Services and other customer service and program implementation conduits.

A. Roles and Expectations of PSE		
For each of the major (lettered) topic areas above and for any other relevant topics, discuss the role that you expect PSE to play and any specific needs/expectations in terms of providing information, services, and feedback.		
Topic Area	Role and Expectations of PSE	
 Marketing, Recruitment, and Retention 		

2.	Equipment Installation and Operation	
3.	Data Support	
4.	Customer Service and Satisfaction	
5.	Other	

В.	3. Schedule and Delivery	
1.	Implementation Timeline	Provide a detailed schedule for major implementation tasks, including, but not limited to program startup activities, marketing, equipment installation, establishment of communications infrastructure, system testing and program operations.
		If the schedule depends on unknown factors at this time, describe those factors and how they could impact the schedule and program (e.g., lead-time constraints).
2.	Extenuating factors	What extenuating factors may affect performance and schedule? How might these impact program rollout and what can be done in advance by the implementation contractor or by PSE to avoid affecting program rollout and/or to mitigate their impact?

5 Bidder Information and Qualifications

In the tables below, please provide company information, relevant project experience, and references. See the introduction to Section 4 Technical Proposal above for guidance on the format of your response.

Α.	A. General Company Info	
1.	Bidder Name	Legal company name
2.	Address(es)	Include headquarters address as well as other relevant addresses for PSE (e.g., local offices in Washington, etc.)
3.	Description	Company description/ history
4.	Other information	 Form of organization: corporation; partnership; individual d/b/a; or other as applicable.
		b. State of incorporation or registration
		c. Federal Identification Number or Social Security Number as applicable
		d. Website URL
		e. Is your company capable of receiving payments via a Financial Electronic Data Interchange (FEDI)? If not, would you consider establishing an account with a financial institution that is FEDI capable?
5.	Financial Statements	Audited financial statements for past three years (submit as attachment)
6.	Contact	Name, address, telephone number, and email address of primary bidder contact.

For each subcontractor being proposed, provide the information in Table A, Items 1 through 4d.

в.	. Relevant Project Experience	
1.	Existing Customers	List existing demand response program utility customers.
2.	Customer Documentation	Provide documentation that describe up to five existing utility customers of your proposed system solution (type of installations, # devices, implementation services provided). Clarify any differences with what you are proposing in this RFP. You may reference marketing materials provided as an attachment to your proposal.

C.	C. References	
1.	Contact Information and Summary	Provide a company name, contact name, phone number, and email address for three customers that can be contacted about your relevant work for them. Include a brief description of the project if not already described in Item B1 above.

6 Proposal Format and Bidder Instructions

Proposals should provide a concise yet complete description of the bidder's approach, capabilities, and pricing for satisfying the required services outlined in this RFP. Bidders are required to prepare their proposal response according to the content described in the Bidder Checklist below. Specific bid instructions and requirements for the proposal format and content are as follows:

- 1) Proposals should contain, in proper order, all items listed and described in the Bidder Checklist below. Many of these items refer to more detailed questions or instructions contained in Sections 4 and 5 of this RFP. The organizational structure (numbering system) of the questions/instructions in these sections must be used to describe the proposed services. Bidders do not need to provide responses in the tabular format used in Sections 4 and 5, but the category letter, topic number, and topic name should be clearly labeled to identify which question/information request is being addressed.
- PSE has not established specific page limits. However, <u>bidders are encouraged to be</u> <u>concise in their responses</u>, answering the questions directly and referencing supplemental materials in an appendix where necessary.
- 3) Additional materials that the bidder believes will substantially improve PSE's understanding of the bidder's capabilities and/or proposal may be submitted as appendices or attachments.

Requirements for bid submission are discussed in Section 7.

Item	Description	
Intent to Bid	Complete and submit Intent to Bid Form provided as a separate attachment. To be submitted by August 3, 2018.	
Mutual Non-Disclosure Agreement	To be submitted by August 3, 2018.	
Technical Proposal Documents, including:		
Table of Contents	Identifies all major sections of the proposal and their starting page numbers	
Technical Responses	Responds to all questions in RFP Section 4 regarding your proposed technology solution.	

Bidder Checklist

Item	Description	
Bidder Information and Qualifications	Responds to all questions in RFP Section 5 regarding your organization, experience, and references.	
Pricing Proposal Document, consisting of:		
Pricing Proposal	Provide pricing by responding to all questions and instructions contained in the Pricing Attachment to this RFP.	

6.1 Bidder Selection Process

6.1.1 Minimum Qualifications

Bidders responding to this RFP must have at least the following qualifications to be considered for selection:

- At least five years of experience with providing load curtailment technology or delivering similar types of load management programs for utility sponsored or ratepayer funded programs.
- Demonstrated organizational, financial, and data tracking and reporting abilities.
- Demonstrated commitment to quality and customer service.
- Contractors are encouraged to locate key delivery team members in Washington. Staffing of the prime contract manager in Bellevue, WA is strongly preferred.

6.1.2 Proposal Evaluation Criteria

Proposals will be reviewed and bidders selected for interviews and/or contract negotiations based on a variety of criteria including, but not limited to: demonstrated competence and experience; management structure and assigned personnel; quality of proposed equipment and services; pricing; and performance guarantees.

PSE reserves the right to contact a bidder at any time for clarifications about any part of the Bidder's proposal. Proposal review questions and communications will focus on clarifying the information set forth by the Contractor in the proposals and will not be an opportunity for the Contractor to revise terms.

7 RFP and Bid Procedures

This section of the RFP addresses procedures governing the submission of bids and the solicitation process.

7.1 RFP Schedule

The anticipated schedule for this solicitation, subject to change at PSE's sole discretion, is as follows:

Date	Milestone
March 29, 2018	Draft RFP filed with WUTC
May 28, 2018	Public comment period closes
June 28, 2018	WUTC expected to approve PSE's Demand Response RFP
July 13, 2018	PSE releases final RFP solicitation
August 3, 2018	Mutual Confidentiality Agreements and Intent to Bid due to PSE
August 17, 2018	Offers due to PSE
Late Q1 2019	PSE selects final short list, notifies respondents

The above schedule is subject to change at the discretion of PSE. Notification of changes may be sent by PSE to the individual designated as bidder's contact (in either the intent to bid or the proposal).

7.2 Intent to Bid

Bidders are strongly encouraged, although not obligated, to indicate their "intent to bid" by submitting the intent to bid form no later than August 3, 2018 to the DR RFP email address at <u>DemandResponse@pse.com</u>.

Bidders providing an Intent to Bid will receive follow-up communications from PSE regarding clarifications or changes to the RFP and the solicitation process.

PSE will issue this RFP to all qualified bidders. If your organization is interested in bidding but did not receive the invitation to bid, you may send an email to <u>DemandResponse@pse.com</u>.

PSE will not accept responses from any PSE affiliates or subsidiaries. PSE also will not accept responses from other electric utilities.

7.3 Questions and Communications

Technical or program-related questions related to this RFP should be submitted by email to the RFP email address at <u>DemandResponse@pse.com</u> after issuance of this RFP. Questions should be provided in writing by August 3, 2018.

Commercial or administrative questions related to this RFP may be submitted at any time by email to <u>DemandResponse@pse.com</u>.

No other contact with PSE employees or its contractors related to this RFP shall be made throughout this entire process. Any unauthorized contact may result in immediate disqualification.

RFP website: RFP documents, responses to bidder questions, and other relevant material will be posted to PSE's RFP web site at <u>https://pse.com/aboutpse/EnergySupply/Pages/Acquiring-Energy.aspx</u>.

7.4 Submission of Proposal Responses

Bidders must submit both hard copy and electronic versions of their proposals by the due date and time listed below. Any proposals received after this date and time may be rejected. Proposals that do not contain the information requested in this RFP may also be rejected at PSE's sole and absolute discretion.

- 1) **Deadline for Submission** August 17, 2018 at 5:00 p.m. (Pacific Time) for electronic copies to be received by PSE. Hard copies must be postmarked or shipped by the deadline, but may be received by PSE the following business day.
- 2) **Proposal Submission** Bidders are required to submit both hard copies and electronic copies of their proposal as follows:

Hard copies. Bidder shall submit **two (2) hard copies** of their proposal. Hard copies should include the Technical Proposal Documents, and any other attachments or supplemental materials that bidder wishes to provide (see Bidder Checklist in Section 6 above). Responses to the Pricing Attachment should be contained in a separately bound document, but may be included in the same package. Proposals must be enclosed in a sealed envelope or box clearly marked "Demand Response Proposal" and sent to the following address:

Attn: Demand Response Puget Sound Energy 2380 116th Ave NE Bellevue, WA 98004

Electronic copies. In addition to the hard copies, bidders shall email **two electronic copies** of their full proposal to <u>DemandResponse@pse.com</u>. One copy should be in PDF format, for

internal distribution, and a second in Microsoft Word for purposes of facilitating preparation of contracts. Electronic copies should be organized into the following separate files (see Bidder Checklist in Section 6 above):

- Technical Proposal
- Pricing Proposal
- Other attachments or supplemental materials.

<u>Important</u>: Please note that emails with attachments larger than 10MB may not pass through PSE's firewall. Bids should be submitted via separate emails if necessary to ensure that attachments do not exceed this limit.

- 3) Verification of Receipt of Proposal It is the bidder's sole responsibility to ensure that hard copies of its proposal are sent by the deadline and received at the address specified above no later than the following business day.
- 4) Errors or Omissions A bidder that discovers an error or omission in its proposal response package may withdraw that package and resubmit one, provided that it does so before the deadline for submission of proposal responses.
- 5) RFP Withdrawal PSE reserves the sole and absolute right to withdraw this RFP at any time before the duly authorized execution of the contract/purchase order with bidders for any reason including, but not limited to, action by the Washington Utilities and Transportation Commission (UTC) or changes in forecasted resource needs. In its sole and absolute discretion, PSE may accept or reject any or all proposals, and may accept other than the lowest-cost proposal. PSE will not assume any liability, under any circumstances, to any bidder submitting a proposal in response to this RFP.
- 6) Proposal Preparation Costs Bidder accepts any and all costs and expenses incurred prior to the duly authorized execution of the contract/purchase order and will not seek any costs and expenses from PSE. This includes proposal preparation and any requested on-site interviews or contract negotiation expenses.
- 7) Proposal Confidentiality To the extent possible, PSE will attempt to keep submitted proposals confidential. However, it is possible that proposals may be requested by the WUTC for review, or by other interveners, and as such, full assurance of complete confidentiality is not possible. To the extent required by law or regulatory order, PSE will make available to the public a summary of all proposals received and the final ranking of all such proposals. Furthermore, PSE will not assume any liability to a Bidder or other party as a result of any public disclosure of any proposal or contract/purchase order.

7.5 Terms and Conditions of Submission

All proposals, along with all other documentation, submitted in connection with this RFP shall become and will remain the property of PSE and will not be returned to the Bidder.
By submitting a proposal pursuant to this RFP, Bidders acknowledge and agree that (a) they will be fully bound by the terms and conditions of this RFP and PSE Terms and Conditions in submitting their proposals, (b) they have had the opportunity to seek independent legal and financial advice of their own choosing with respect to the RFP and their proposals, (c) they have obtained all necessary authorizations, approvals and waivers, if any, required by them as a condition of submitting their proposals, (d) they are submitting their proposals subject to all applicable laws, and (e) they have not engaged and will not engage in communications with any other Bidder in the RFP concerning the price or other economic terms contained in their proposals and have not engaged in collusion or other unlawful or unfair business practices in connection with this RFP.

7.5.1 Reservation of Rights and Disclaimers

This program and any contracts signed in association with it are and will be contingent upon Washington Utilities and Transportation Commission (UTC) approval. PSE reserves the right not to accept the proposals of any of the respondents to this RFP. PSE also reserves the right not to make an award, to re-bid the proposed program, to decline to enter into an agreement with any respondent and to terminate negotiations with any respondent, all at PSE's sole discretion.

PSE reserves the right to revise, suspend, or terminate this RFP process and any associated schedules at its sole discretion without liability to any person or entity responding to this RFP or any other person or entity. PSE will communicate by e-mail to respondents regarding any changes to this RFP, schedules, or the RFP process.

Respondents who submit proposals do so without legal recourse against PSE, PSE's parent company or affiliates, and the directors, management, employees, agents or contractors of any of them, for any reason arising out of this RFP. Respondents are solely responsible for all of their costs incurred to prepare, submit, or negotiate its proposal, a definitive agreement, or any other activity related thereto.

7.5.2 Post Proposal Negotiation and Awarding of Contracts

PSE reserves the right to negotiate both price and non-price factors during any post-proposal negotiations with a finalist. PSE has no obligation to enter into an agreement with any respondent to this RFP and may terminate or modify this RFP at any time without liability or obligation to any respondent. This RFP shall not be construed as preventing PSE from entering into any agreement that it deems appropriate at any time before, during or after this RFP process is complete. This includes requesting a clarification of the technical proposal and pricing of a firm proposed as a subcontractor should PSE wish to enter into direct contract negotiations with only the proposed subcontractor.

7.6 Bidder Selection Process

7.6.1 Minimum Qualifications

Bidders responding to this RFP must have at least the following qualifications to be considered for selection:

- At least five years of experience with providing load curtailment technology or delivering similar types of load management programs for utility sponsored or ratepayer funded programs.
- Demonstrated organizational, financial, and data tracking and reporting abilities.
- Demonstrated commitment to quality and customer service.
- Contractors are encouraged to locate key delivery team members in Washington. Staffing of the prime contract manager in Bellevue, WA is strongly preferred.

7.6.2 Proposal Evaluation Criteria

Proposals will be reviewed and bidders selected for interviews and/or contract negotiations based on a variety of criteria including, but not limited to: demonstrated competence and experience; management structure and assigned personnel; quality of proposed equipment and services; pricing; and performance guarantees. Exhibit D provides additional information regarding cost-effectiveness criteria.

PSE reserves the right to contact a bidder at any time for clarifications about any part of the Bidder's proposal. Proposal review questions and communications will focus on clarifying the information set forth by the Contractor in the proposals and will not be an opportunity for the Contractor to revise terms.

7.6.3 Negotiations and Finalizations

Once the bidder(s) has been selected for the program, contract negotiations will be conducted. These negotiations will relate to the scope of work, specific program delivery features, program budgets, schedules, and payment terms. The contractual terms will include general terms and conditions. PSE reserves the right to simultaneously conduct negotiations with both the prospective vendor/contractor and an alternate bidder. PSE also reserves the right to terminate negotiations with any bidder in the event that PSE and the bidder are unable to agree on contract terms and conditions within a reasonable period of time to be determined in PSE's sole and absolute discretion.

Exhibit A: Schedule of Estimated Avoided Cost

Schedule of Estimated Avoided Cost

Consistent with WAC 480-107-055, this Schedule of Estimated Avoided Costs is intended to provide only general information to potential bidders about the cost of new power supplies. It does not provide a guaranteed contract price for electricity or capacity.

The two tables below show two types of estimated avoided cost information for 2018-2037, avoided energy costs and avoided capacity costs. Both types of estimated avoided costs are discussed throughout Puget Sound Energy's ("PSE") 2017 Integrated Resource Plan ("IRP") and in details in the section 4 of Appendix N: Electric Analysis to the 2017 IRP ("Appendix N"). with the January 12, 2018 correction filed with the Washington Utilities and Transportation Commission under Docket Nos. UE-160918 and UG-160919.

- Table No. 1: 2018-2037 Avoided Energy Costs as Projected as the Estimated Monthly Prices for Mid-C Market in PSE's 2017 Integrated Resource Plan
- Table No. 2: 2018-2037 Avoided Capacity Costs as Estimated in PSE's 2017 Integrated Resource Plan by Resource Type with the January 12, 2018 Correction filed with the Washington Utilities and Transportation Commission under Docket Nos. UE-160918 and UG-160919.

Table No. 1 of this Schedule of Estimated Avoided Cost below provides the nominal price forecast of monthly prices at the Mid-Columbia ("Mid-C") power trading market on a monthly basis for flat load. These prices are based upon PSE's estimates of currently projected market prices for electricity as provided for in WAC 480-107-055(2). These forecasted prices are consistent with the "Base + CAR only" estimated monthly prices for Mid-C market prices derived using PSE's AURORA forecast model and do not include system integration, shaping, or transmission costs. System integration, shaping, or transmission costs can be applied to decrement these prices. Currently, integration costs can range between \$3.02/MWh (OATT Schedule 13) and \$3.15/MWh (PSE 2017 IRP, page D-43) for a wind resource. This "Base + CAR Only" scenario in the 2017 IRP removes federal clean power plan compliance for the electric portfolio in the context of the base scenario assumptions but incorporating the compliance of Washington State's Clean Air Rule ("CAR"). This estimated avoided energy cost information is not a guaranteed contract price but just to provide general information to potential bidders.

Table No. 2 of this Schedule of Estimated Avoided Cost contains an estimated capacity value for combined heat and power systems that are dispatchable by PSE consistent with RCW 19.280.070(2). The estimated capacity value is not a guaranteed contract price but rather provides general information to potential bidders. The estimated capacity costs in Table No. 2 are consistent with PSE's corrected 2017 IRP forecast, along with the different market price forecasts from PSE's AURORA forecast model. Avoided resource costs are directly related to avoiding acquisition of new capacity resources. The timing and costs of avoided capacity

resources are tied directly to the 2017 IRP. These costs represent the average costs of capacity additions (or average incremental costs) not marginal costs. System integration, shaping, or transmission costs can be applied to decrement these prices.

- The estimated capacity value for 2018-2021 is based on PSE's avoided capacity costs associated with firming up short-term market purchases during the time period before PSE's need to add capacity resources in 2022. This estimate was derived from data used to set the proposed rates in PSE's 2017 general rate case.
- For the year 2022, the estimated capacity costs reflect the cost of acquiring more firm transmission to the Mid-C market.
- For the time period of 2023-2024, the estimated capacity costs are based on PSE's levelized cost of a battery storage project as shown in PSE's 2017 IRP.
- The 2025-2037 estimated capacity costs include the levelized cost of new peaking plants built during the period as indicated in the 2017 IRP Appendix N.

2018-2	2018-2037 Avoided Energy Costs as Projected as the Estimated Monthly Prices for Mid-C Market in PSE's												
	2017 Integrated Resource Plan												
						(Nomin	al \$/M\	Vh)					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg. Annual
2018	31.1	30.8	28.8	24.4	21.6	21.6	27.8	30.1	29.9	28.7	27.5	28.5	27.61
2019	29.7	29.2	27.6	24.9	22.7	22.2	28.2	30.5	30.9	30.0	27.6	28.5	27.71
2020	29.4	29.2	27.7	24.8	22.2	22.8	28.9	31.1	32.1	32.0	29.6	29.6	28.34
2021	31.2	31.2	28.9	26.0	23.3	23.8	30.1	32.7	33.5	32.1	30.9	31.1	29.60
2022	32.9	33.3	30.4	28.5	26.5	27.4	33.0	35.9	36.8	35.9	34.7	33.9	32.47
2023	35.1	35.8	32.6	30.3	29.1	29.9	35.6	38.6	39.5	40.7	38.7	36.9	35.27
2024	37.0	38.6	35.0	32.7	31.5	31.5	37.9	41.6	42.9	42.2	39.4	39.4	37.52
2025	40.6	41.9	38.7	36.9	35.4	34.9	42.2	45.5	46.8	45.8	43.1	43.1	41.27
2026	44.8	46.2	43.4	39.9	37.4	38.1	45.9	49.7	50.6	51.1	47.8	46.9	45.17
2027	47.8	49.2	46.3	42.7	40.1	40.7	48.6	52.6	53.4	52.9	50.3	49.7	47.91
2028	50.8	51.8	48.9	46.1	44.4	43.9	51.7	56.1	56.3	56.7	54.5	52.8	51.23
2029	53.8	55.6	51.8	48.2	45.8	45.2	54.8	59.5	60.0	60.2	57.0	55.8	54.01
2030	56.8	58.5	53.8	50.8	47.7	46.0	57.4	61.8	63.0	62.3	59.3	59.1	56.41
2031	59.8	61.5	56.7	54.4	51.4	49.0	60.7	65.3	66.7	65.8	63.1	62.6	59.80
2032	63.3	64.3	60.1	56.5	52.3	52.8	63.6	69.0	70.3	70.1	68.2	66.3	63.11
2033	66.96	67.97	62.83	60.23	56.59	55.91	66.95	72.51	73.42	72.30	70.45	69.25	66.28
2034	69.6	70.2	64.0	61.8	59.3	56.6	68.8	74.7	75.5	74.8	73.1	71.7	68.39
2035	72.4	73.4	67.7	64.2	59.3	57.0	71.5	78.5	80.0	78.7	76.8	75.4	71.29
2036	75.0	76.0	69.8	66.3	60.4	58.8	73.7	80.5	83.1	80.4	78.5	78.4	73.45
2037	77.5	78.0	71.7	68.6	63.7	60.5	75.5	82.6	85.2	82.3	81.4	81.1	75.74

Table No. 1: 2018-2037 Avoided Energy Costs as Projected as the Estimated Monthly Pricesfor Mid-C Market in PSE's 2017 Integrated Resource Plan

Table No. 2: 2018-2037 Avoided Capacity Costs as Estimated in PSE's 2017 Integrated Resource Plan by Resource Type with the January 12, 2018 Correction Filed with the Washington Utilities and Transportation Commission under Docket Nos. UE-160918 and UG-160919

2018-2037 Avoided Capacity Costs as Estimated in PSE's 2017 Integrated Resource Plan by Resource Type with the January 12, 2018 Correction filed with the Washington Utilities and Transportation Commission under Docket Nos. UE-160918 and UG-160919 (Nominal \$/kw-year)									
	Firm Resource Wind Resource Solar Resource								
2018	\$0.10	\$0.02	\$0.00						
2019	\$0.10	\$0.02	\$0.00						
2020	\$0.10	\$0.02	\$0.00						
2021	\$0.10	\$0.02	\$0.00						
2022	\$3.26	\$0.52	\$0.07						
2023	\$93.00	\$14.88	\$1.86						
2024	\$93.00	\$14.88	\$1.86						
2025	\$80.00	\$12.80	\$1.60						
2026	\$80.00	\$12.80	\$1.60						
2027	\$80.48	\$12.88	\$1.61						
2028	\$80.48	\$12.88	\$1.61						
2029	\$80.48	\$12.88	\$1.61						
2030	\$80.48	\$12.88	\$1.61						
2031	\$84.16	\$13.47	\$1.68						
2032	\$84.16	\$13.47	\$1.68						
2033	\$84.16	\$13.47	\$1.68						
2034	\$88.31	\$14.13	\$1.77						
2035	\$88.31	\$14.13	\$1.77						
2036	\$91.09	\$14.57	\$1.82						
2037	\$91.09	\$14.57	\$1.82						

Exhibit B: Intent to Bid Form



INTENT TO BID FORM

Request for Proposal Technology and Implementation Services In support of Puget Sound Energy (PSE) Demand Response Program

Yes:	My Company intends to submit a response to this Request for Proposal
No:	My Company will not submit a response to this Request for Proposal
 Yes/No:	My Company is a woman, veteran, minority owned business. (If yes, identify category)

In response to your Request for Proposal for the identified program(s), the undersigned will furnish an RFP response in accordance with the contract documents and any addenda thereto. Labor, materials, tools, supplies, equipment, transportation, supervision, services, goods, and other items as may be required.

1. Company Information

Company Name

Business Address

City

State

Zip Code

2. Designated Contact for this RFP

Name, Title

Email

Phone

3. Signature: (person legally authorized to commit company)

Signature

Date

Printed name and title

Submit completed form per date identified in Request for Proposal Timeline via email to: DemandResponse@PSE.com

Exhibit C: Mutual Nondisclosure Agreement



MUTUAL NONDISCLOSURE AGREEMENT

Puget Sound Energy, Inc. a Washington corporation with offices at 10885 NE 4th St., Bellevue, WA ("PSE") and the "Other Party" identified on the signature page below are considering a business transaction (the "Transaction"). In connection with the proposed Transaction, the parties are willing to disclose confidential information to each other on the terms and conditions stated in this agreement (this "Agreement").

The parties, intending to be legally bound, agree that:

I. Confidentiality.

 In connection with the Transaction, each party (a "Disclosing Party") is prepared to make available to the other party (a "Receiving Party") certain Confidential Information regarding the Disclosing Party's business. The Receiving Party agrees to keep such information confidential, and protect all Confidential Information from disclosure by using the highest practical degree of care and at least the same care the Receiving Party uses to protect its own confidential information.

the Receiving Party uses to protect its own confidential information. 2. "Confidential Information" means: (i) any and all information with respect to the status of or the terms of the Transaction, and (ii) any trade secrets or other confidential or proprietary information of the Disclosing Party, whether of a technical, business or other nature (including, without limitation, the relationship between the parties, and information relating to the Disclosing Party's technology, software, products, services, designs, methodologies, know how, business plans, finances, marketing plans, customers, employees, prospects or other affairs). Confidential Information also includes any information that has been made available to the Disclosing Party by third parties that the Disclosing Party is obligated to keep confidential.

3. Receiving Party may not disclose Confidential Information to third parties; provided however, that notwithstanding the foregoing, Receiving Party may disclose Confidential Information to its employees, consultants, advisors, or other agents (its "Representatives") only to the extent necessary for such Representatives to assist the Receiving Party in evaluating the Transaction, provided that such Representatives agree to keep such Confidential Information confidential in accordance with this Agreement. A breach of this Agreement by a Representative of Receiving Party will be deemed a breach by the Receiving Party and Receiving Party and Receiving Party agrees, at its sole expense, to take all reasonable measures (including but not limited to court proceedings) to restrain its Representative of or unauthorized disclosure of the Disclosing Party of any actual, probable or reasonably suspected disclosure or unauthorized access to the Disclosing Party's Confidential Information.

 Receiving Party will not use or allow others to use Confidential Information for any purpose other than evaluating the Transaction.

5. At Disclosing Party's request, Receiving Party will return all materials furnished by Disclosing Party that contain Confidential Information and will destroy or deliver to Disclosing Party any other materials containing Confidential Information, including materials prepared by Receiving Party, unless such Confidential Information is required to be retained by the Receiving Party to comply with applicable law, regulatory requirements or internal document retention policies. Notwithstanding the foregoing, the parties acknowledge that Receiving Party's computer systems may automatically back-up and retain electronic copies of the Confidential Information. To the extent that such systems create copies of the Confidential Information, the Receiving Party may retain such copies in its archival or back-up computer storage. If the Receiving retain retain a copy of any Confidential Information for any reason, including copies on electronic

backup media, then such information shall in all respects remain subject to the terms and conditions of this Agreement.
6. The provisions of this Part I shall not apply to Confidential

6. The provisions of this Part I shall not apply to Confidential Information that: (a) is or becomes publicly available through no fault of Receiving Party; (b) is or has been received in good faith by Receiving Party without restriction on use or disclosure from a third party having no obligation of confidentiality to Disclosing Party; or (c) is or has been independently developed by Receiving Party without reference to Confidential Information received from Disclosing Party; as evidenced by Receiving Party's written records.

 The fact that portions of Confidential Information may be publicly available or otherwise not subject to this Agreement will not affect Receiving Party's obligations with respect to the remaining portion.

8. If Receiving Party is required by judicial or administrative process to disclose Confidential Information, Receiving Party shall promptly notify Disclosing Party and allow Disclosing Party areasonable time to oppose such process. If disclosure is nonetheless required, Receiving Party may disclose only the Confidential Information that, in the written opinion of counsel acceptable to Disclosing Party, Receiving Party is legally required to disclose. Receiving Party shall use its best efforts to limit the dissemination of Confidential Information that is disclosed.

 This Agreement will not apply to information disclosed to Receiving Party after Receiving Party receives written notice from Disclosing Party that further disclosures will not be treated as confidential.

10. In providing Confidential Information pursuant to this Agreement, Disclosing Party makes no representation, either express or implied, as to adequacy, sufficiency, or freedom from fault of such Confidential Information and incurs no responsibility nor obligation whatsoever by reason thereof; and the furnishing of such Confidential Information will not convey any rights or license with respect to such Confidential Information.

II. No Commitment to Enter Into Transaction. The parties acknowledge that nothing in this Agreement is intended to create or constitute any agency or partnership among the parties, or any legally binding obligation for either party to enter into, or negotiate to enter into, the Transaction.

III. Miscellaneous.

 This Agreement shall continue in full force and effect for two (2) years from the Effective Date, unless terminated earlier or extended by mutual agreement of the parties.

2. In the event of a default under this Agreement, the nonbreaching party will be entitled to injunctive relief, without posting bond, in addition to any other available remedies, including damages. In any litigation concerning this Agreement, the prevailing party will be entitled to recover all reasonable expenses of litigation, including reasonable attorney fees at trial and on any appeal.

 Any failure by a party to enforce another party's strict performance of any provision of this Agreement will not constitute a waiver of its right to subsequently enforce such provision or any other provision of this Agreement.

4. This Agreement will be governed by and construed and enforced in accordance with the internal laws of the state of Washington, without regard to contrary principles of conflicts of law. The federal and state courts within the State of Washington shall have exclusive jurisdiction to adjudicate any dispute arising out of and relating to this Agreement. Venue for purposes of any litigation arising under this Agreement will be in King County, Washington.

All additions or modifications to this Agreement must be in writing and executed by all parties.

EFFECTIVE DATE: date last signed below

Puget Sound Energy, Inc.	Other Party:
Authorized Signature:	Authorized Signature:
Name:	Name:
Title:	Title:
Date:	Date:

Updated: 01252012

Exhibit D: Cost-effectiveness Evaluation Criteria

PSE prefers proposals that provide the lowest reasonable cost throughout the program or project life, taking into account the price of the proposal and other factors that impact PSE's overall cost. PSE intends to analyze the cost-effectiveness of demand response proposals in a manner consistent with the IRP.

PSE will evaluate bids in two ways: using benefits and costs as indicated in the Program Administrator Cost Test (PAC) and Total Resource Cost (TRC) Test. The benefits and costs shown in the tables below will be included in the bid evaluation process when applicable, quantifiable, and significant. PSE prefers proposals and combinations of proposals that result in the lowest impact on PSE's revenue requirements and rates when included in PSE's existing generation resource portfolio.

PSE will adjust the bidder's proposed capacity during the evaluation process using Effective Load Carrying Capability (ELCC) as shown in Table 3. The ELCC used in this evaluation will be dependent on the bidder's proposed resource availability, i.e., frequency and duration of events. For example, a proposal with a program with no more than one, 4-hour event per day will be evaluated with an ELCC of 58%, while a program with up to two, 3-hour events per day with 6 hours of recovery time between events will be evaluated with an ELCC of 77%.

Benefits	PAC	TRC
Avoided Capacity Costs	\checkmark	\checkmark
Avoided Energy Costs	\checkmark	\checkmark
Avoided Transmission & Distribution Costs	\checkmark	\checkmark
Avoided Environmental Compliance Costs	\checkmark	\checkmark

 Table 1. Cost-effectiveness Benefits for PAC and TRC Test

Costs	PAC	TRC
Program Administrator Expenses	\checkmark	\checkmark
Program Administrator Capital Costs	\checkmark	\checkmark
Financial Incentive to Participant	\checkmark	×
DR Measure Cost: Program Administrator	\checkmark	\checkmark
DR Measure Cost: Participant Contribution	×	\checkmark
Participant Transaction Costs	×	\checkmark
Participant Value of Lost Service	×	\checkmark
Increased Energy Consumption	\checkmark	\checkmark
Environmental Compliance Costs	\checkmark	\checkmark

 Table 2. Cost-effectiveness Costs for PAC and TRC Test

ELCC Estimates for Various DR Event Parameters												
		Call Frequency										
Event Duration	E	lapsed Ho	Elapsed Hours Since Start of Last Event									
(Hours)	4	6	8	12	24	24						
2	63%	61%	57%	49%								
3	80%	77%	77%	59%								
4	90%	85%	80%	65%	53%	58%						
5	94%	89%	84%	68%	55%							

Table 3. Effective Load Carrying Capability Based on Frequency and Duration of DemandResponse Events

Attachment B



2018 RFP for Demand Response Programs March 29, 2018 June 84, 2018 Draft



2018 Request for Proposals (RFP)

Technology and Implementation Services

In support of

Puget Sound Energy (PSE) Demand Response (DR) Program

Date	Milestone
March 29, 2018	Draft RFP filed with WUTC
May 28, 2018	Public comment period closes
June 2 <u>8</u> 7, 2018	WUTC expected to approve PSE's <u>Demand ResponseAll Source</u> RFP
July 13, 2018	PSE releases final RFP solicitation
August 3, 2018	Intent to Bid Forms and Mutual Confidentiality Agreements due to PSE
August 17, 2018	Offers due to PSE
Late Q1 2019	PSE selects final short list, notifies respondents

PSE reserves the right to reject any and all proposals. This RFP does not constitute an order or any obligation on the part of PSE. PSE is not liable for any costs associated with the preparation of Bidders' proposals, or for any other costs incurred by Bidders prior to the execution of a contract or purchase order.

Table of Contents

1		Summary of RFP	1
2		Background and DR Resource Requirements	2
	PSE	Background	2
	2.1	Resource Need	
	2.2	DR Resource Objectives and Bidder Solution Requirements	4
3		Scope of Work	5
	3.1	Roles and Responsibilities	5
	3.2	Performance Goals	10
4		Technical Proposal	12
	4.1	Technology Products and Related Services	13
	4.2	Implementation Services	
	4.3	Project Management	
5		Bidder Information and Qualifications	24
6		Proposal Format and Bidder Instructions	26
6	6.1	Proposal Format and Bidder Instructions Bidder Selection Process	
6 7	6.1		27
-	6.1 7.1	Bidder Selection Process RFP and Bid Procedures RFP Schedule	27 28 28
-	7.1 7.2	Bidder Selection Process RFP and Bid Procedures RFP Schedule Intent to Bid	27 28 28 28
-	7.1 7.2 7.3	Bidder Selection Process RFP and Bid Procedures RFP Schedule Intent to Bid Questions and Communications	27 28 28 28 28 29
-	7.1 7.2 7.3 7.4	Bidder Selection Process RFP and Bid Procedures RFP Schedule Intent to Bid Questions and Communications Submission of Proposal Responses	27 28 28 28 29 29
-	7.1 7.2 7.3 7.4 7.5	Bidder Selection Process RFP and Bid Procedures RFP Schedule Intent to Bid Questions and Communications Submission of Proposal Responses Terms and Conditions of Submission	27 28 28 28 29 29 30
7	7.1 7.2 7.3 7.4 7.5 7.6	Bidder Selection Process RFP and Bid Procedures RFP Schedule Intent to Bid Questions and Communications Submission of Proposal Responses Terms and Conditions of Submission Bidder Selection Process	27 28 28 29 29 30 32
7 E	7.1 7.2 7.3 7.4 7.5 7.6 xhib	Bidder Selection Process RFP and Bid Procedures RFP Schedule Intent to Bid Questions and Communications Submission of Proposal Responses Terms and Conditions of Submission Bidder Selection Process Bidder Selection Process it A: Schedule of Estimated Avoided Cost	27 28 28 29 29 30 32 33
7 E	7.1 7.2 7.3 7.4 7.5 7.6 xhib	Bidder Selection Process RFP and Bid Procedures RFP Schedule Intent to Bid Questions and Communications Submission of Proposal Responses Terms and Conditions of Submission Bidder Selection Process	27 28 28 29 29 30 32 33
7 E E	7.1 7.2 7.3 7.4 7.5 7.6 xhib xhib	Bidder Selection Process RFP and Bid Procedures RFP Schedule Intent to Bid Questions and Communications Submission of Proposal Responses Terms and Conditions of Submission Bidder Selection Process Bidder Selection Process it A: Schedule of Estimated Avoided Cost	27 28 28 29 29 30 32 33 37

1 Summary of RFP

Puget Sound Energy (PSE) seeks bids from qualified firms to supply technology and implementation services for its Demand Response Program. PSE is issuing this Request for Proposals (RFP) for program delivery for 2019 through 2023 (program years). The bidder(s) will be responsible for providing load curtailment by winter 2023¹ from PSE's customers. PSE has a capacity need of 351 MW by 2023. Our most recent *Integrated Resource Plan* indicates that winter achievable technical potential for demand response in PSE's service territory is 188 MW by 2037. No minimum capacity offer is required to qualify to bid.

PSE is simultaneously filing an All Resources RFP. Both RFPs may be found on our web site at http://www.pse.com/RFP. This web site also includes a set of frequently asked questions ("FAQs") to share information that may be of common interest to bidders. Demand Response RFP FAQs can be found by clicking the Demand Response RFP hyperlink.

Proposals will be evaluated in a concurrent process with bids in response to PSE's 2018 All Resources-Source RFP.

Section 2 of the RFP provides the relevant **Background** and discusses PSE's expectations of future programs.

Section 3 defines the **Scope of Work** expected of the vendor, as well as the expected responsibilities of PSE. This section also outlines some information on the expected load control strategies and relevant performance goals.

Section 4 requests information about the bidder's technology, technology-related services, and implementation services.

Section 5 requests information, relevant qualifications and references from the bidder.

Sections 6 and 7 provide requirements for the proposal format and bid submission as well as information on the RFP process.

A separate **Pricing Attachment** requests pricing information corresponding to the scope of work and bidder proposals.

A separate **Intent to Bid Form** requests specific bidder information to be submitted by the date indicated in section 7.1.

The RFP includes an Exhibit A that provides a schedule of PSE's estimated avoided cost.

¹ Winter capacity for 2023 covers November 1, 2023 to February 29, 2024.

2 Background and DR Resource Requirements

PSE Background

Puget Sound Energy (PSE) is Washington State's oldest local energy company and serves approximately 1.1 million electric customers and more than 790,000 natural gas customers in 10 counties. PSE's electric service area includes all of Kitsap, Skagit, Thurston and Whatcom counties; and parts of Island, King (excluding Seattle), Kittitas, and Pierce (excluding Tacoma) counties.

More information on PSE can be found at <u>https://www.pse.com/</u>. Information regarding rates and regulatory filings may be found at <u>http://pse.com/aboutpse/Rates/Pages/default.aspx</u>.

2.1 Resource Need

PSE's electric resource acquisition process is guided by our integrated resource planning analysis, which evaluates and establishes the Company's capacity (physical reliability) and renewable energy (policy driven)² needs on a biennial basis, consistent with WAC 480-100-238. Our most recent *Integrated Resource Plan* includes a detailed discussion of PSE's electric planning standard and describes our methodology for analyzing the Company's resource needs. The *Integrated Resource Plan* can be found on PSE's web site at http://www.pse.com/irp.

Since publishing the 2017 IRP, PSE has updated the assessment of its capacity and renewable resource needs. The peak capacity need was updated for two reasons:

- 1. Updated load forecast to reflect the Company's current economic demand forecast.
- 2. 100 MW of additional Mid-C transmission that became available after the 2017 IRP was finished.

The following chart includes the <u>updates referenced above and</u> conservation from the 2017 IRP, but does not include demand response.

² PSE has a legal obligation to meet the requirements of the Energy Independence Act, Chapter 19.285 RCW. The Energy Independence Act requires PSE to acquire qualifying eligible renewable resources and/or renewable energy credits to meet 3 percent, 9 percent and 15 percent of its load by 2012, 2016 and 2020, respectively.



Table 1. Electric Resource Capacity Need

PSE has a modest capacity need prior to 2021, which grows to 272 MW in 2022 after the retirement of Colstrip 1&2.

Table 2. Electric Resource Capacity Need, Peak Deficit/(Surplus)

 2018
 2020
 2021
 2022
 2023
 2024
 2025
 2026
 2027
 2028
 2029
 2031
 2031
 2033
 2034
 2035
 2036
 2037

 28
 29
 1
 (21)
 272
 351
 486
 569
 881
 867
 873
 939
 1,031
 1,075
 1,153
 1,224
 1,330
 1,443
 1,940
 2,011

As part of the retirement of Colstrip units 1&2, the company has the opportunity to request that BPA redirect the transmission capacity from Garrison to Mid-C. If transmission rights from Colstrip 1&2 are redirected to the Mid-C, PSE would not have a <u>substantial</u> capacity need until 202<u>45</u>. The table below shows PSE's resource capacity need, if 300 MW of Colstrip transmission capacity is redirected.

Table 3. Electric Resource Capacity Need, if Colstrip 1&2 transmission is redirected, Peak Deficit/(Surplus)

2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
28	29	1	(21)	(42)	36	171	253	565	551	557	623	717	759	837	908	1,015	1,128	1,624	1,695

2.2 DR Resource Objectives and Bidder Solution Requirements

PSE's objectives for DR as a portfolio resource in the 2019-2023 contracting period are listed below. The primary objectives are requisite (or the minimum) requirements that a bidder needs to fulfill for PSE's future DR portfolio.

Primary Objectives:

- 1. Ensure DR resource is cost effective³ and can meet the following performance For requirements:
 - a. Be available during weekday peak hours, typically between 7 a.m. to 10 a.m. in the morning, and 5 p.m. to 9 p.m. in the evening, from November 1 through February 28/29.⁴ PSE may call DR events outside these time windows, but bidders will not necessarily be expected to provide the same level of curtailment.
 Provide load response with one of the following notification options: an-(1) hour-
 - ahead notification of calling DR events_Lb. (2) Provide load response with day ahead notification of calling DR events, or (3)
 - <u>a combination of hour ahead and day ahead- notification of calling DR events.</u>
 c. The total event time from November 1 through February 28/29 shall be no more
 - than 40 hours per individual productindividual product.

Secondary Objective:

- 1. Develop flexible DR capability that provides more rapid curtailment, and greater integration of DR dispatch with grid monitoring.
 - a. Provide fast response with notification time of 10 minutes or less.

Formatted: Space After: Auto

Formatted: List Paragraph, Space After: Auto, Add space between paragraphs of the same style

³ Cost effectiveness criteria are discussed in Exhibit D.

⁴ PSE uses a daily forecast high below 40 degrees F and/or a forecast low below 30 degrees F 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.

3 Scope of Work

This section identifies some, but not necessarily all, of the roles and responsibilities of PSE and the selected vendor. Bidders will be expected to identify specific information needed from PSE as well as additional responsibilities required by bidders to successfully deploy the load curtailment technologies and meet the stated objectives described in Section 2.2. Successful bids must also articulate the implementation strategy.

3.1 Roles and Responsibilities

Table 4 below summarizes PSE and vendor responsibilities with respect to core business functions associated with DR program design and delivery.

 Table 4. DR Business Functions and Responsible Parties

Dusiness Function	Responsible Party					
Business Function	PSE	Vendor				
Define Program Parameters and Initiate Load Control Events	Ρ, Α	-				
Provision of Technology Products and Services	-	Ρ, Α				
Marketing, Customer Recruitment & Outreach	A, p	Р				
Technology Installation and Enablement	р	Ρ, Α				
Data Support and Performance Analysis	р	Ρ, Α				
Billing and Settlement	А	Р				
Customer Service and Satisfaction	Ρ, Α	Р				
EM&V ⁵	Ρ, Α	-				
Coordination with Energy Efficiency Programs	Ρ, Α	Р				

Level of Responsibility:

A = Accountable (answerable for the correct and thorough completion of the deliverable or task, and often the one who delegates the work to the performer)

P = Perform (carries out the activity)

p = Performs with a lower level of responsibility than P

Blanks indicate that the party is neither accountable nor responsible.

PSE values its relationships with customers. It prefers to work with services partners that understand these relationships and combine a high degree of technical expertise with superior customer-focused awareness and service during program planning and implementation. It is PSE's preference to 'own' the customer relationship with the selected respondent and co-coordinate PSE Demand Response implementation efforts among Business Services, Energy Efficiency Services and other customer service and program implementation conduits.

⁵ Note that PSE is responsible/accountable for hiring an independent third-party to perform the EM&V.

The vendor must ensure that its products and services are appropriate for the program objectives described in Section 2.2. The vendor's roles include, but are not limited to, providing the following over the life of the contract:

The tables below provide brief descriptions of PSE and vendor roles and responsibilities with regard to the business functions earlier in Table 4.

Define Program Parameters and Initiate Load Control Events

PSE Responsibility	Vendor Responsibility
 Define DR program parameters (applicable months, event hours, cycling and/or temperature set point modifications; notification, event duration, annual limit on event hours, no. of times events can be called, etc.). Initiate load control events using vendor-provided software and hardware. 	Not Applicable

Provision of Technology Products and Services

PSE Responsibility	Vendor Responsibility
	For all customer classes:
	• The technology and its support. The vendor should present a fully-integrated architectural solution that includes the following elements:
	 Utility Interface (UI)
	 Head-end application
Not Applicable	 Load control devices
	 All necessary communications between UI, head-end, and load control devices (may leverage the customer's broadband internet).
	 A customer web portal and mobile app, if the load control devices require customer interaction.
	• Ability to do each of the following:

PSE Responsibility	Vendor Responsibility
	 Curtail the contracted amount of load within an hour of dispatch by PSE.
	 Selectively control the amount and duration of load shed in a predetermined manner.
	 Control remote devices, individually, as a whole, or as multiple groups, based on device type.
	 Provide curtailment forecasts for full deployment, including seasonally, monthly, and day-ahead.
	 Produce near real-time monitoring of curtailments in process.
	 Provide post event reporting on load shed achieved.
	For commercial and industrial participants:
	 Undertake preventive, routine, and non-routine maintenance on program equipment and software to ensure reliable long-term and safe operation.

Marketing, Customer Recruitment and Outreach

PSE Responsibility	Vendor Responsibility
 Assume primary responsibility for marketing, customer education and outreach 	 Jointly develop program marketing materials and digital tools and assets with PSE.
 Work in close coordination with vendor in developing program marketing materials, website and digital tools, customer education and outreach. 	 Recruit customers in close coordination with PSE energy efficiency program staff and other relevant groups. Enroll, schedule, install, enable, verify,
• Ensure focus on PSE brand in messaging.	and test the program participants.
 Recruit customers in coordination with the vendor: PSE's energy efficiency program staff will serve as a primary touchpoint to customers during all stages 	

PSE Responsibility	Vendor Responsibility
of customer recruitment.	

Technology/Equipment Installation and Enablement

PSE Responsibility	Vendor Responsibility
 PSE Account Managers, Energy Management Engineers and/or energy efficiency program staff works closely with 	 Provide vehicles with proper signage in support of installation activities. PSE to approve signage for vehicle.
the vendor during preliminary site assessments.	 Set up network/workforce to install and service program equipment.
• Where appropriate, PSE staff introduce vendor to customer for detailed site audit.	• Provide field and office training, including safety training for field personnel.
 PSE staff works in close coordination with vendor at different stages of technology enablement: schedule, install, enable, verify, and test the program participants. 	 Manage all inventories of equipment, materials, and supplies associated with installation of program equipment and software.
	 Perform quality assurance audits on all installations by a new employee.
	 Perform maintenance/inspection and repair for all installed equipment.

Data Support and Performance Analysis

PSE Responsibility	Vendor Responsibility
 Provide export of customer data for use by the vendor. Bidders should define initial interface requirements. 	 Provide secure, data uploads into PSE's data tracking system. Provide participant data from a sufficient
 Mutually define with the bidder data field names, definitions, data type, and data sizes of all transferred/shared data; provide an interface to the vendor's system(s) for import of data required by the bidder. 	sample of customers for purposes of estimating average load impacts.
Undertake program performance analysis using key metrics.	

Evaluation, Measurement and Verification (EM&V)

PSE Responsibility	Vendor Responsibility
• Sponsor independent ex-post impact and process evaluation of the program(s), establish baseline development methodologies and analytical framework for conducting annual impact and process evaluations.	 Provide participant data (to PSE and 3rd party evaluator) from a sufficient sample of customers for purposes of estimating average load impacts. The respondent will be called upon to provide meter and payment data, calculation methodologies and other relevant information related to enrolled participants.

Billing, Payment, Measurement & Verification

PSE Responsibility	Vendor Responsibility
Undertake customer incentive payments.	• Conduct measurement and verification for estimation of load impacts (method to be agreed upon mutually with PSE, and verified by PSE and an independent contractor).

Customer service and satisfaction

PSE Responsibility	Vendor Responsibility
 Perform customer satisfaction measures at all major points of customer interaction in order to improve/maintain customer satisfaction with program. 	 Coordinate with PSE to perform customer satisfaction measures at all major points of customer interaction in order to improve/maintain customer satisfaction
• Develop customer satisfaction metrics along with vendor and obtain information from vendor to assess customer	with program.Exchange customer information with PSE as mutually agreed.
 satisfaction. Conduct surveys and focus groups in coordination with vendor to assess customer satisfaction.⁶ 	 Perform all activities related to customer complaint tracking and handling. Perform all activities related to customer

⁶ The specifications regarding the number and timing of the surveys/focus groups will be indicated at a later stage during/after the contract process.

PSE Responsibility	Vendor Responsibility
	claims tracking and handling.
	 Perform all activities associated with maintaining a call center operation including, but not limited to, customer recruitment, handling all types of enrollments, installation scheduling, and service call processing, complaint handling, and tracking.
	Allow PSE to monitor customer service calls with customers.

Coordination with Energy Efficiency Programs

PSE Responsibility	Vendor Responsibility
 Assume responsibility for coordination of DR and EE products/services to provide integrated demand side management opportunities to customers. 	• Work in coordination with PSE's program managers and implementers on ways to integrate DR and EE program offerings to present these as integrated energy management opportunities to customers, especially at the stage of program marketing, customer education and outreach.

3.2 Performance Goals

PSE will pay bidders based on megawatts of delivered load reduction that meet the performance parameters identified under the Objectives in Section 2.2. These payments will be provided as:

- Monthly capacity payments, based on the average actual load reduction provided during events that month or, if no events occurred, the monthly committed load reduction specified by the vendor, multiplied by PSE's monthly capacity payment rate.
- (Optional) Monthly energy usage payments, based on the vendor's energy performance each month, multiplied by PSE's hourly energy usage payment rate.
- **Other payments** as structured in bidder's response in the Pricing Attachment and agreed upon with PSE_

If the vendor fails to commit or deliver megawatts greater than or equal to the minimum committed load reduction specified in the contract during a program month, PSE will reserve

the right to withhold some or all of the monthly payments to the vendor for that particular program month.

Additionally, in order to ensure successful delivery of products and services, bidders' performance and compensation will also be measured against pre-defined metrics specified during the contract process, which may include the following:

Technology Products and Services:

- System functionality meeting specifications identified in bidder proposal
- Data collection/provision requirements (types of data and frequency of provision)
- Device diagnostics capabilities and frequency of provision
- Event monitoring and performance reporting (speed, comprehensiveness, and frequency)

Implementation Services:

- Timely enrollment of participants
- Timely installation of equipment
- Minimum levels of customer service satisfaction
- Timely provision of customer enrollment data and forecasts
- Accurate customer enrollment data and payment processing

Curtailment Objectives:

- Annual growth targets
- Cumulative curtailment capability
- Event performance
- Timely provision of required event data, analysis and forecasts

4 Technical Proposal

PSE will consider any type of end use control technology, delivery mechanism, or combination of technologies and delivery mechanisms, provided the proposed solution meets PSE's objectives stated in Section 2.2.

In the tables below, please describe the products, services, and information you would provide if selected by PSE to perform the Scope of Work described above in Section 3. Where appropriate, bidders are asked to describe their past experiences and how they may enhance the bidder's ability to meet PSE's objectives outlined in Section 2.2.

Not all fields below will apply to all vendor solutions. Bidders should indicate fields that are not applicable to their proposed solution in their response.

Bidders may provide their responses in the format of the tables below, if desired. At a minimum, bidders must conform to the alpha-numeric outline of the sections, topics, and questions (e.g., System level diagram must be indicated as part of Section 4.1.B.1 Technology Products and Related Services, System Overview, System Level Diagram).

Bidders are also encouraged to provide clear, concise responses. In addition, bidders should feel free to reference to earlier sections for their responses if they feel the requested information would be repeated.

Example Response Format: Section 4.1 Technology Products and Related Services B. System Overview 1. System Level Diagram [insert diagram here] 2. Description of Features/Functions [insert text response here]

4.1 Technology Products and Related Services

A. Summary of Proposal (2-page limit)

1.	Summary of Proposal for Technology Products and Related Services	Provide a high-level overview of your proposed technology, associated hardware and software, and any technology-related services. This should be a concise summary of the offering that you propose in the remainder of this Section, highlighting unique elements of your proposal. This summary should NOT address Implementation Services, which are covered in Section 4.2.
----	---	---

В.	System Overview	
1.	System Level Diagram	Provide a system level block diagram of the solution that you are proposing. Include head-end (control) elements, all key interfaces, databases, communication, monitoring, switches, and associated technology to deliver a load shed signal to the customers and end devices, and the return path for communications back to PSE. PSE prefers a two-way communication infrastructure.
		<u>Note</u> : PSE will not accept marketing brochures or any extraneous marketing information to fulfill this request, but may be included in an appendix. A simple but detailed block diagram that is easy to read and understand is mandatory.
2.	Description of Features/Functions	Based on the system-level diagram, describe the major functions/features of that system.
3.	End-Use Control Devices and Systems	Provide technical descriptions of any end-use devices and systems you are proposing for customer premises as well as the end-uses they might control.
4.	Communications Infrastructure	Based on the system-level description, provide a complete description of the communication infrastructure that will be needed and how it will be used.
		Discuss the flexibility and adaptability of communications options used to monitor, control, and manage the remote devices. Discuss your ability to upgrade the communications options to adopt new technology and/or systems and services (e.g., AMI). Provide information about your proposed future communication options, the proposed time frame for these, and the additional features and capabilities this will provide.

5. Metering	Describe the type of metering that will be employed and how metering information will be relayed to PSE—frequency, resolution, summary reporting, etc. Also indicate any requirements for PSE's installed metering, or bidder's intended use of PSE meter data.		
	<u>Note: PSE is updating our electric metering equipment across our entire</u> <u>service territory. This is a six-year project, scheduled to complete in</u> 2023.		Formatted: No underline
	The Meter Upgrade Project team has created 40 sectors for the electric deployment. On average, each sector has 35,000 meters and approximately 80% of those meters are residential. Sectors 1-6 are scheduled to be completed in 2018.		
	<u>Residential Meters: E331/E351 FOCUS AXe (2S, 12S and 2SE)</u> Commercial Meters: E650 S4x-4S,	-	Formatted: List Paragraph, Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"
	For the most current information on PSE's Meter Upgrade Project,	$\overline{}$	Formatted: Font: +Body (Calibri), 11 pt
	including a project maps and schedules, please visit our website:		Formatted: No underline
	https://pse.com/inyourcommunity/meter-upgrade-		Formatted: No underline
	project/Pages/default.aspx	\sim	Field Code Changed
6. Load Curtailment Mechanics	Describe the approaches, processes, and equipment to be used to execute load curtailment at customer facilities.		Formatted: Hyperlink, Font: Times New Roman, 12 pt, No underline
	Discuss the anticipated actions required of customers (may vary by customer), and any automated load response that may be employed.		
7. Interoperability	Based on the system-level diagram, describe the interoperability features of each element of your solution and the scalability of your proposed solution. Discuss any components that may not be interoperable with future deployments and why this is the case.		
	Describe the communication and control center protocols that you support (e.g., CIM, Multispeak, etc.) and the open interoperability standards that your interfaces are based on. Provide your interoperability roadmap that shows your future direction for these protocols, along with timing and rationale.		
8. Security	Describe in detail the system architecture and measures that provide end-to-end security and cyber-security and ensure against attacks to program-related systems and data. Include discussion of secure data transfer, communications, device registration, and device messaging, and in particular customer related information privacy and security.		

9. Maintenance	Describe the maintenance requirements and activities during the project phase. Include any equipment required and describe how the maintenance will be performed. Also, describe any expected software maintenance.
10. Upgrades	Describe how the devices will be upgraded over their lifetime and whether and how they will be able to comply with changing industry standards.
11. Requirements for PSE	Describe the expectation of PSE technology infrastructure, including server needs, database requirements and capacities, operating systems, security requirements, file transfer mechanisms, telecom requirements, and any other interfaces, components or software/hardware requirements.

с.	. Head-End (or Control) System		
1.	Technical Descriptions	Based on the system-level diagram, provide technical descriptions of the system management software that is proposed for the control of all deployed load control equipment and other infrastructure that may need to be controlled and managed.	
2.	Operator Interface	Describe and provide graphics (screen captures or other appropriate) illustrating what an operator would see, and what they would do to set up an event, trigger the event, and then monitor its progress and effectiveness.	
3.	Control Strategy Validation	Describe how your process will be tested when new load control strategies are implemented.	
4.	Hosting	Based on the system-level diagram explain the options of whether the interface is hosted at the utility or the bidder's site as SaaS or a Cloud Based solution.	
5.	Status and Reporting	Based on the system-level diagram, describe your reporting capability as it relates to displaying the current system status and to log system status and activity for subsequent analysis.	
		Describe the data reports available for each element of the system.	

D	D. Load Curtailment Performance and Impact Assessment			
1.	Load Curtailment Performance to Meet Objectives	*** PSE places a high value on responses to this item. *** Describe the proposed load curtailment capability, including number of events and hours per year, duration of events, frequency of events, advanced notification required, and other relevant performance metrics associated with load curtailment that meets PSE's objectives in Section 2.2.		

2.	Winter Capacity Reduction Estimates by Year	In the table below, provide your proposed winter peak load reduction capacity per year from 2019 to 2023 ⁷ . The proposed amount indicates what bidder can provide that meets PSE's objectives discussed previously in Section 2.2. Winter Load Curtailment Estimate Per Year ⁸ (MW)					
			2019	2020	2021	2022	2023*
		Day Ahead					
		1 Hour Ahead					
		10 Minute					
		Total					
3.	Customer Baselines and Alternative Baseline Loads	PSE will provide a baseline methodology to calculate the winter peak load reduction, as discussed under the primary objectives in Section 2.2. PSE anticipates utilizing a day-matching approach (using customer loads from one or more prior days during the same hours as the event) with a symmetric up or down day-of event adjustment ⁹ (so that the adjusted baseline matches the observed load during certain hours prior to the event). However, the specific methodology has not been established. For purposes of this RFP, bidders should assume that megawatts will be measured based on each customer's average load reduction measured over each 15-minute interval during the course of each event.					
		a. Please de measurer	scribe you nent requi	••	to comply	with these	!
		If you are providing load curtailment products for which a day-m baseline with same-day adjustment is not appropriate, please de your proposed baseline approach.		, 0			
4.	Reliability	Describe your app the course of an e data/graphical ev	entire even	t and from	one event	to anothe	r. Provide

⁹ This will need to be reconsidered/redefined for winter morning peak periods to which adjustments based on hours prior to the event period are invalid.

⁷ Winter capacity for 2019 covers November 1, 2019 to February 28, 2020; winter capacity for 2023 covers November 1, 2023 to February 29, 2024

⁸ Note that loads will be dispatched according to the specifications outlined in Section 2.2 under Objectives.

4.2 Implementation Services

PSE values its relationships with customers. It is PSE's preference to 'own' the customer relationship with the selected respondent and co-coordinate PSE Demand Response implementation efforts with energy efficiency program/services offerings and other customer service and program implementation conduits.

Α.	A. Summary of Proposal (2-page limit)				
1.	Summary of Proposal for Implementation Services	Provide a high-level overview of your proposed implementation services. This should be a concise summary of the offering that you propose in the remainder of this Section 4.2, highlighting unique elements of your proposal.			

B. Marketing, Recruitment, and Retention			
1. Customer Segmentation	Provide a complete list of all customer sectors and end uses targeted for participation in the program.		
In the table below, provide an estimated total curtailment amount in 2023 by cus presented in terms of their percentage of the total winter peak load reduction in 2		customer sector, ge contribution to	
	% share by sector in winter peak load	d curtailment	
	% share by sector	2023	
	Residential		
	Small commercial (<=50 kW max. demand)		
	Medium commercial (>50 kW and <=150 kW max. demand)		
	Large Commercial (>150 kW max. demand)		
	Total	100%	

2. Engagement Plan	 Detail the strategy for public outreach, deployment and plan to engage end-use customers and solicit enrollment into a program. Include discussion of the particular customer sectors and sub-sectors to be targeted. Provide examples of how you might coordinate with PSE account managers and existing PSE programs to improve program marketing and recruitment.
3. Branding	Describe the "brand recognition" of any customer interaction, equipment, or systems which the end-use customer may encounter, such as the customer portal.
4. Incentive Payments	 Propose a customer incentive structure, if your marketing plan calls for incentives. Include discussion of any incentives for initial enrollment, on an annual basis, for equipment, or other variation. Provide a rationale for your proposed incentive structure, and provide alternative structures and rationales, if desired. PSE is not predisposed to the use of monetary incentives and understands that the provision of a thermostat and related services, for example, may be sufficient incentive. Note that PSE will be responsible for administering incentive payments to participants.
5. Coordination with PSE	 Describe how you will coordinate with other existing PSE programs to improve the program delivery. Include discussion on how you and PSE could cross-promote and integrate your offering with existing/future EE programs, etc. ¹⁰ Provide examples of how your firm has successfully partnered with other existing utility programs to enhance program delivery.

¹⁰ For a description of existing programs refer to PSE's energy efficiency program information in PSE's 2018-2019 Biennial Conservation Plan Exhibit 3, which contains EE program descriptions at <u>https://www.utc.wa.qov/_layouts/15/CasesPublicWebsite/GetDocument.ashx?docID=4&year=2017&docketNumber=171087</u>

C. Equipment Installation a	. Equipment Installation and Operation				
1. Staffing	Describe your current network of equipment installers and/or your proposed subcontractor or subcontracting approach for installation of load control devices and related equipment. Discussion should address the following:				
	 Existing or planned coverage in/near PSE service territory 				
	 Your qualification requirements for using subcontractors and your process for identifying, training, and utilizing local contractors, if applicable 				
	 Your process for evaluating performance, ensuring professional conduct, and maintaining adequate capacity to meet program goals 				
2. Processes	Describe the installation process for any customer equipment. Include discussion of the equipment needed to complete installation, amount of time needed to install a facility, and any requirements from the customer.				
3. Verification of equipment operation	Describe your practices for verification and testing of equipment while installer is onsite.				
4. Equipment maintenance	Describe your maintenance, auditing, and repair practices for installed devices to ensure continued operation (this may include site visits and/or use of two- way communications to verify operation).				

D. Data Support				
 CIS and work management software 	Describe your CIS and work management software, including how customer information is entered and updated, how scheduling of installations is accommodated, and how service requests and other necessary information are incorporated.			

2. Interface Requirements	Describe the process by which PSE's system is updated or fed with real time information, such as load curtailment activity and other predefined fields. Also, describe processes for providing updates/reports.
3. Data Sharing and Reporting	 Respond in detail to the following: What types of information/data will be exchanged with PSE, and how will this data be transferred in a secure manner? Is it pulled, pushed on a time basis, or both? What access will PSE staff have to account status, and what information will be available?
	 What types of status reporting will be provided to PSE, with what level of detail, and with what frequency?
	• What are your data retention policies?
	 What is your QA/QC process for ensuring that your customer data is correct and valid?
4. Reliability and Backup	Describe the protections and recovery methods for dealing with unforeseeable events (e.g., acts of nature, computer or hard drive failure in the computing resources, or security breaches) that may compromise vital customer or work management data.
5. Testing Approach	Describe how the data transfer processes will be tested initially and how they will be checked during the project to assure functionality and accuracy.

E. Customer Service and Satisfaction	
1. Service calls	Describe your method of responding to customer service requests requiring onsite visits. What is the typical time from the service call to a response from a scheduler? To resolution of the problem? How are decisions made regarding whether service work is needed and covered under your responsibilities?

2. Customer satisfaction	What procedures do you propose to ensure customer satisfaction and to measure and report results to PSE? What metrics could be easily provided short of any detailed customer satisfaction surveys that PSE might conduct?
--------------------------	--

F. End-of-Contract Terms	
 End-of-Contract Technology Ownership Terms 	• Indicate who owns the equipment, and what your suggested terms are for ownership of equipment at the end of the contract period in 2023, should PSE decide to discontinue services with your firm at that time.
	 Indicate whether it is possible for PSE buy the equipment and/or acquire a license to operate the head end system at the end of the contract period.
	 Provide pricing terms for the ownership transfer or licensing.

4.3 Project Management

Retention

PSE values its relationships with customers. The utility prefers to work with services partners that understand these relationships and combine a high degree of technical expertise with superior customer-focused awareness and service during program planning and implementation. It is PSE's preference to 'own' the customer relationship with the selected respondent and co-coordinate PSE Demand Response implementation efforts among Business Services, Energy Efficiency Services and other customer service and program implementation conduits.

A. Roles and Expectations of PSE For each of the major (lettered) topic areas above and for any other relevant topics, discuss the role that you expect PSE to play and any specific needs/expectations in terms of providing information, services, and feedback.		
 Marketing, Recruitment, and 		
2. Equipment Installation Operation	and	
---	-----	--
3. Data Suppor	rt	
4. Customer Se and Satisfac		
5. Other		

в.	Schedule and Delivery					
1.	Implementation Timeline	Provide a detailed schedule for major implementation tasks, including, but not limited to program startup activities, marketing, equipment installation, establishment of communications infrastructure, system testing and program operations.				
		If the schedule depends on unknown factors at this time, describe those factors and how they could impact the schedule and program (e.g., lead-time constraints).				
2.	Extenuating factors	What extenuating factors may affect performance and schedule? How might these impact program rollout and what can be done in advance by the implementation contractor or by PSE to avoid affecting program rollout and/or to mitigate their impact?				

5 Bidder Information and Qualifications

In the tables below, please provide company information, relevant project experience, and references. See the introduction to Section 4 Technical Proposal above for guidance on the format of your response.

A. General Company	A. General Company Info					
1. Bidder Name	Legal company name					
2. Address(es)	Include headquarters address as well as other relevant addresses for PSE (e.g., local offices in Washington, etc.)					
3. Description	Company description/ history					
4. Other information	 Form of organization: corporation; partnership; individual d/b/a; or other as applicable. 					
	b. State of incorporation or registration					
	c. Federal Identification Number or Social Security Number as applicable					
	d. Website URL					
	e. Is your company capable of receiving payments via a Financial Electronic Data Interchange (FEDI)? If not, would you consider establishing an account with a financial institution that is FEDI capable?					
5. Financial Statements	Audited financial statements for past three years (submit as attachment)					
6. Contact	Name, address, telephone number, and email address of primary bidder contact.					

For each subcontractor being proposed, provide the information in Table A, Items 1 through 4d.

B. Rele	B. Relevant Project Experience				
1. Existi	ing Customers	List existing demand response program utility customers.			
	omer umentation	Provide documentation that describe up to five existing utility customers of your proposed system solution (type of installations, # devices, implementation services provided). Clarify any differences with what you are proposing in this RFP. You may reference marketing materials provided as an attachment to your proposal.			

C.	References	
1.	Contact Information and Summary	Provide a company name, contact name, phone number, and email address for three customers that can be contacted about your relevant work for them. Include a brief description of the project if not already described in Item B1 above.

6 Proposal Format and Bidder Instructions

Proposals should provide a concise yet complete description of the bidder's approach, capabilities, and pricing for satisfying the required services outlined in this RFP. Bidders are required to prepare their proposal response according to the content described in the Bidder Checklist below. Specific bid instructions and requirements for the proposal format and content are as follows:

- Proposals should contain, in proper order, all items listed and described in the Bidder Checklist below. Many of these items refer to more detailed questions or instructions contained in Sections 4 and 5 of this RFP. The organizational structure (numbering system) of the questions/instructions in these sections must be used to describe the proposed services. Bidders do not need to provide responses in the tabular format used in Sections 4 and 5, but the category letter, topic number, and topic name should be clearly labeled to identify which question/information request is being addressed.
- PSE has not established specific page limits. However, <u>bidders are encouraged to be</u> <u>concise in their responses</u>, answering the questions directly and referencing supplemental materials in an appendix where necessary.
- Additional materials that the bidder believes will substantially improve PSE's understanding of the bidder's capabilities and/or proposal may be submitted as appendices or attachments.

Requirements for bid submission are discussed in Section 7.

Bidder Checklist

Item	Description
Intent to Bid	Complete and submit Intent to Bid Form provided as a separate attachment. To be submitted by August 3, 2018.
Mutual Non-Disclosure Agreement	To be submitted by August 3, 2018.
Technical Proposal Docume	ents, including:
Table of Contents	Identifies all major sections of the proposal and their starting page numbers
Technical Responses	Responds to all questions in RFP Section 4 regarding your proposed technology solution.

Item	Description
Bidder Information and Qualifications	Responds to all questions in RFP Section 5 regarding your organization, experience, and references.
Pricing Proposal Document,	consisting of:
Pricing Proposal	Provide pricing by responding to all questions and instructions contained in the Pricing Attachment to this RFP.

6.1 Bidder Selection Process

6.1.1 Minimum Qualifications

Bidders responding to this RFP must have at least the following qualifications to be considered for selection:

- At least five years of experience with providing load curtailment technology or delivering similar types of load management programs for utility sponsored or ratepayer funded programs.
- Demonstrated organizational, financial, and data tracking and reporting abilities.
- Demonstrated commitment to quality and customer service.
- Contractors are encouraged to locate key delivery team members in Washington. Staffing of the prime contract manager in Bellevue, WA is strongly preferred.

6.1.2 Proposal Evaluation Criteria

Proposals will be reviewed and bidders selected for interviews and/or contract negotiations based on a variety of criteria including, but not limited to: demonstrated competence and experience; management structure and assigned personnel; quality of proposed equipment and services; pricing; and performance guarantees.

PSE reserves the right to contact a bidder at any time for clarifications about any part of the Bidder's proposal. Proposal review questions and communications will focus on clarifying the information set forth by the Contractor in the proposals and will not be an opportunity for the Contractor to revise terms.

7 RFP and Bid Procedures

This section of the RFP addresses procedures governing the submission of bids and the solicitation process.

7.1 RFP Schedule

The anticipated schedule for this solicitation, subject to change at PSE's sole discretion, is as follows:

Date	Milestone
March 29, 2018	Draft RFP filed with WUTC
May 28, 2018	Public comment period closes
June 2 <u>8</u> 7, 2018	WUTC expected to approve PSE's <u>Demand ResponseAll Source</u> RFP
July 13, 2018	PSE releases final RFP solicitation
August 3, 2018	Mutual Confidentiality Agreements and Intent to Bid due to PSE
August 17, 2018	Offers due to PSE
Late Q1 2019	PSE selects final short list, notifies respondents

The above schedule is subject to change at the discretion of PSE. Notification of changes may be sent by PSE to the individual designated as bidder's contact (in either the intent to bid or the proposal).

7.2 Intent to Bid

Bidders are strongly encouraged, although not obligated, to indicate their "intent to bid" by submitting the intent to bid form no later than August 3, 2018 to the DR RFP email address at <u>DemandResponse@pse.com</u>.

Bidders providing an Intent to Bid will receive follow-up communications from PSE regarding clarifications or changes to the RFP and the solicitation process.

PSE will issue this RFP to all qualified bidders. If your organization is interested in bidding but did not receive the invitation to bid, you may send an email to <u>DemandResponse@pse.com</u>.

PSE will not accept responses from any PSE affiliates or subsidiaries. PSE also will not accept responses from other electric utilities.

7.3 Questions and Communications

Technical or program-related questions related to this RFP should be submitted by email to the RFP email address at <u>DemandResponse@pse.com</u> after issuance of this RFP. Questions should be provided in writing by August 3, 2018.

Commercial or administrative questions related to this RFP may be submitted at any time by email to <u>DemandResponse@pse.com</u>.

No other contact with PSE employees or its contractors related to this RFP shall be made throughout this entire process. Any unauthorized contact may result in immediate disqualification.

RFP website: RFP documents, responses to bidder questions, and other relevant material will be posted to PSE's RFP web site at <u>https://pse.com/aboutpse/EnergySupply/Pages/Acquiring-Energy.aspx</u>.

7.4 Submission of Proposal Responses

Bidders must submit both hard copy and electronic versions of their proposals by the due date and time listed below. Any proposals received after this date and time may be rejected. Proposals that do not contain the information requested in this RFP may also be rejected at PSE's sole and absolute discretion.

- Deadline for Submission August 17, 2018 at 5:00 p.m. (Pacific Time) for electronic copies to be received by PSE. Hard copies must be postmarked or shipped by the deadline, but may be received by PSE the following business day.
- 2) **Proposal Submission** Bidders are required to submit both hard copies and electronic copies of their proposal as follows:

Hard copies. Bidder shall submit two (2) hard copies of their proposal. Hard copies should include the Technical Proposal Documents, and any other attachments or supplemental materials that bidder wishes to provide (see Bidder Checklist in Section 6 above). Responses to the Pricing Attachment should be contained in a separately bound document, but may be included in the same package. Proposals must be enclosed in a sealed envelope or box clearly marked "Demand Response Proposal" and sent to the following address:

Attn: Demand Response Puget Sound Energy <u>2380 116th Ave NE10885 NE 4th St. PSE 11S</u> Bellevue, WA 98004

Electronic copies. In addition to the hard copies, bidders shall email **two electronic copies** of their full proposal to <u>DemandResponse@pse.com</u>. One copy should be in PDF format, for

Formatted: Superscript

29

internal distribution, and a second in Microsoft Word for purposes of facilitating preparation of contracts. Electronic copies should be organized into the following separate files (see Bidder Checklist in Section 6 above):

- Technical Proposal
- Pricing Proposal
- Other attachments or supplemental materials.

<u>Important</u>: Please note that emails with attachments larger than 10MB may not pass through PSE's firewall. Bids should be submitted via separate emails if necessary to ensure that attachments do not exceed this limit.

- 3) Verification of Receipt of Proposal It is the bidder's sole responsibility to ensure that hard copies of its proposal are sent by the deadline and received at the address specified above no later than the following business day.
- 4) Errors or Omissions A bidder that discovers an error or omission in its proposal response package may withdraw that package and resubmit one, provided that it does so before the deadline for submission of proposal responses.
- 5) RFP Withdrawal PSE reserves the sole and absolute right to withdraw this RFP at any time before the duly authorized execution of the contract/purchase order with bidders for any reason including, but not limited to, action by the Washington Utilities and Transportation Commission (UTC) or changes in forecasted resource needs. In its sole and absolute discretion, PSE may accept or reject any or all proposals, and may accept other than the lowest-cost proposal. PSE will not assume any liability, under any circumstances, to any bidder submitting a proposal in response to this RFP.
- 6) Proposal Preparation Costs Bidder accepts any and all costs and expenses incurred prior to the duly authorized execution of the contract/purchase order and will not seek any costs and expenses from PSE. This includes proposal preparation and any requested on-site interviews or contract negotiation expenses.
- 7) Proposal Confidentiality To the extent possible, PSE will attempt to keep submitted proposals confidential. However, it is possible that proposals may be requested by the WUTC for review, or by other interveners, and as such, full assurance of complete confidentiality is not possible. To the extent required by law or regulatory order, PSE will make available to the public a summary of all proposals received and the final ranking of all such proposals. Furthermore, PSE will not assume any liability to a Bidder or other party as a result of any public disclosure of any proposal or contract/purchase order.

7.5 Terms and Conditions of Submission

All proposals, along with all other documentation, submitted in connection with this RFP shall become and will remain the property of PSE and will not be returned to the Bidder.

By submitting a proposal pursuant to this RFP, Bidders acknowledge and agree that (a) they will be fully bound by the terms and conditions of this RFP and PSE Terms and Conditions in submitting their proposals, (b) they have had the opportunity to seek independent legal and financial advice of their own choosing with respect to the RFP and their proposals, (c) they have obtained all necessary authorizations, approvals and waivers, if any, required by them as a condition of submitting their proposals, (d) they are submitting their proposals subject to all applicable laws, and (e) they have not engaged and will not engage in communications with any other Bidder in the RFP concerning the price or other economic terms contained in their proposals and have not engaged in collusion or other unlawful or unfair business practices in connection with this RFP.

7.5.1 Reservation of Rights and Disclaimers

This program and any contracts signed in association with it are and will be contingent upon Washington Utilities and Transportation Commission (UTC) approval. PSE reserves the right not to accept the proposals of any of the respondents to this RFP. PSE also reserves the right not to make an award, to re-bid the proposed program, to decline to enter into an agreement with any respondent and to terminate negotiations with any respondent, all at PSE's sole discretion.

PSE reserves the right to revise, suspend, or terminate this RFP process and any associated schedules at its sole discretion without liability to any person or entity responding to this RFP or any other person or entity. PSE will communicate by e-mail to respondents regarding any changes to this RFP, schedules, or the RFP process.

Respondents who submit proposals do so without legal recourse against PSE, PSE's parent company or affiliates, and the directors, management, employees, agents or contractors of any of them, for any reason arising out of this RFP. Respondents are solely responsible for all of their costs incurred to prepare, submit, or negotiate its proposal, a definitive agreement, or any other activity related thereto.

7.5.2 Post Proposal Negotiation and Awarding of Contracts

PSE reserves the right to negotiate both price and non-price factors during any post-proposal negotiations with a finalist. PSE has no obligation to enter into an agreement with any respondent to this RFP and may terminate or modify this RFP at any time without liability or obligation to any respondent. This RFP shall not be construed as preventing PSE from entering into any agreement that it deems appropriate at any time before, during or after this RFP process is complete. This includes requesting a clarification of the technical proposal and pricing of a firm proposed as a subcontractor should PSE wish to enter into direct contract negotiations with only the proposed subcontractor.

7.6 Bidder Selection Process

7.6.1 Minimum Qualifications

Bidders responding to this RFP must have at least the following qualifications to be considered for selection:

- At least five years of experience with providing load curtailment technology or delivering similar types of load management programs for utility sponsored or ratepayer funded programs.
- Demonstrated organizational, financial, and data tracking and reporting abilities.
- Demonstrated commitment to quality and customer service.
- Contractors are encouraged to locate key delivery team members in Washington. Staffing of the prime contract manager in Bellevue, WA is strongly preferred.

7.6.2 Proposal Evaluation Criteria

Proposals will be reviewed and bidders selected for interviews and/or contract negotiations based on a variety of criteria including, but not limited to: demonstrated competence and experience; management structure and assigned personnel; quality of proposed equipment and services; pricing; and performance guarantees. Exhibit D provides additional information regarding cost-effectiveness criteria.

PSE reserves the right to contact a bidder at any time for clarifications about any part of the Bidder's proposal. Proposal review questions and communications will focus on clarifying the information set forth by the Contractor in the proposals and will not be an opportunity for the Contractor to revise terms.

7.6.3 Negotiations and Finalizations

Once the bidder(s) has been selected for the program, contract negotiations will be conducted. These negotiations will relate to the scope of work, specific program delivery features, program budgets, schedules, and payment terms. The contractual terms will include general terms and conditions. PSE reserves the right to simultaneously conduct negotiations with both the prospective vendor/contractor and an alternate bidder. PSE also reserves the right to terminate negotiations with any bidder in the event that PSE and the bidder are unable to agree on contract terms and conditions within a reasonable period of time to be determined in PSE's sole and absolute discretion.

Exhibit A: Schedule of Estimated Avoided Cost

Schedule of Estimated Avoided Cost

Consistent with WAC 480-107-055, this Schedule of Estimated Avoided Costs –is intended to provide only general information to potential bidders about the cost of new power supplies. It does not provide a guaranteed contract price for electricity or capacity.

The two tables below show two types of estimated avoided cost information for 2018-2037, avoided energy costs and avoided capacity costs. Both types of estimated avoided costs are discussed throughout Puget Sound Energy's ("PSE") 2017 Integrated Resource Plan ("IRP") and in details in the section 4 of Appendix N: Electric Analysis to the 2017 IRP ("Appendix N"). with the January 12, 2018 correction filed with the Washington Utilities and Transportation Commission under Docket Nos. UE-160918 and UG-160919.

- Table No. 1: 2018-2037 Avoided Energy Costs as Projected as the Estimated Monthly Prices for Mid-C Market in PSE's 2017 Integrated Resource Plan
- Table No. 2: 2018-2037 Avoided Capacity Costs as Estimated in PSE's 2017 Integrated Resource Plan by Resource Type with the January 12, 2018 Correction filed with the Washington Utilities and Transportation Commission under Docket Nos. UE-160918 and UG-160919.

Table No. 1 of this Schedule of Estimated Avoided Cost below provides the nominal price forecast of monthly prices at the Mid-Columbia ("Mid-C") power trading market on a monthly basis for flat load. These prices are based upon PSE's estimates of currently projected market prices for electricity as provided for in WAC 480-107-055(2). These forecasted prices are consistent with the "Base + CAR only" estimated monthly prices for Mid-C market prices derived using PSE's AURORA forecast model and do not include system integration, shaping, or transmission costs. System integration, shaping, or transmission costs can be applied to decrement these prices. Currently, integration costs can range between \$3.02/MWh (OATT Schedule 13) and \$3.15/MWh (PSE 2017 IRP, page D-43) for a wind resource. This "Base + CAR Only" scenario in the 2017 IRP removes federal clean power plan compliance for the electric portfolio in the context of the base scenario assumptions but incorporating the compliance of Washington State's Clean Air Rule ("CAR"). This estimated avoided energy cost information is not a guaranteed contract price but just to provide general information to potential bidders.

Table No. 2 of this Schedule of Estimated Avoided Cost contains an estimated capacity value for combined heat and power systems that are dispatchable by PSE consistent with RCW 19.280.070(2). The estimated capacity value is not a guaranteed contract price but rather provides general information to potential bidders. The estimated capacity costs in Table No. 2 are consistent with PSE's corrected 2017 IRP forecast, along with the different market price forecasts from PSE's AURORA forecast model. Avoided resource costs are directly related to avoiding acquisition of new capacity resources. The timing and costs of avoided capacity

resources are tied directly to the 2017 IRP. These costs represent the average costs of capacity additions (or average incremental costs) not marginal costs. System integration, shaping, or transmission costs can be applied to decrement these prices.

- The estimated capacity value for 2018-2021 is based on PSE's avoided capacity costs associated with firming up short-term market purchases during the time period before PSE's need to add capacity resources in 2022. This estimate was derived from data used to set the proposed rates in PSE's 2017 general rate case.
- For the year 2022, the estimated capacity costs reflect the cost of acquiring more firm transmission to the Mid-C market.
- For the time period of 2023-2024, the estimated capacity costs are based on PSE's levelized cost of a battery storage project as shown in PSE's 2017 IRP.
- The 2025-2037 estimated capacity costs include the levelized cost of new peaking plants built during the period as indicated in the 2017 IRP Appendix N.

2018-2	2018-2037 Avoided Energy Costs as Projected as the Estimated Monthly Prices for Mid-C Market in PSE's												
	2017 Integrated Resource Plan												
	(Nominal \$/MWh)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg. Annual
2018	31.1	30.8	28.8	24.4	21.6	21.6	27.8	30.1	29.9	28.7	27.5	28.5	27.61
2019	29.7	29.2	27.6	24.9	22.7	22.2	28.2	30.5	30.9	30.0	27.6	28.5	27.71
2020	29.4	29.2	27.7	24.8	22.2	22.8	28.9	31.1	32.1	32.0	29.6	29.6	28.34
2021	31.2	31.2	28.9	26.0	23.3	23.8	30.1	32.7	33.5	32.1	30.9	31.1	29.60
2022	32.9	33.3	30.4	28.5	26.5	27.4	33.0	35.9	36.8	35.9	34.7	33.9	32.47
2023	35.1	35.8	32.6	30.3	29.1	29.9	35.6	38.6	39.5	40.7	38.7	36.9	35.27
2024	37.0	38.6	35.0	32.7	31.5	31.5	37.9	41.6	42.9	42.2	39.4	39.4	37.52
2025	40.6	41.9	38.7	36.9	35.4	34.9	42.2	45.5	46.8	45.8	43.1	43.1	41.27
2026	44.8	46.2	43.4	39.9	37.4	38.1	45.9	49.7	50.6	51.1	47.8	46.9	45.17
2027	47.8	49.2	46.3	42.7	40.1	40.7	48.6	52.6	53.4	52.9	50.3	49.7	47.91
2028	50.8	51.8	48.9	46.1	44.4	43.9	51.7	56.1	56.3	56.7	54.5	52.8	51.23
2029	53.8	55.6	51.8	48.2	45.8	45.2	54.8	59.5	60.0	60.2	57.0	55.8	54.01
2030	56.8	58.5	53.8	50.8	47.7	46.0	57.4	61.8	63.0	62.3	59.3	59.1	56.41
2031	59.8	61.5	56.7	54.4	51.4	49.0	60.7	65.3	66.7	65.8	63.1	62.6	59.80
2032	63.3	64.3	60.1	56.5	52.3	52.8	63.6	69.0	70.3	70.1	68.2	66.3	63.11
2033	66.96	67.97	62.83	60.23	56.59	55.91	66.95	72.51	73.42	72.30	70.45	69.25	66.28
2034	69.6	70.2	64.0	61.8	59.3	56.6	68.8	74.7	75.5	74.8	73.1	71.7	68.39
2035	72.4	73.4	67.7	64.2	59.3	57.0	71.5	78.5	80.0	78.7	76.8	75.4	71.29
2036	75.0	76.0	69.8	66.3	60.4	58.8	73.7	80.5	83.1	80.4	78.5	78.4	73.45
2037	77.5	78.0	71.7	68.6	63.7	60.5	75.5	82.6	85.2	82.3	81.4	81.1	75.74

Table No. 1: 2018-2037 Avoided Energy Costs as Projected as the Estimated Monthly Pricesfor Mid-C Market in PSE's 2017 Integrated Resource Plan

Table No. 2: 2018-2037 Avoided Capacity Costs as Estimated in PSE's 2017 Integrated Resource Plan by Resource Type with the January 12, 2018 Correction Filed with the Washington Utilities and Transportation Commission under Docket Nos. UE-160918 and UG-160919

2018-2037 Avoided Capacity Costs as Estimated in PSE's 2017 Integrated Resource Plan by Resource Type with the January 12, 2018 Correction filed with the Washington Utilities and Transportation Commission under Docket Nos. UE-160918 and UG-160919 (Nominal \$/kw-year)				
	Firm Resource	Wind Resource	Solar Resource	
2018	\$0.10	\$0.02	\$0.00	
2019	\$0.10	\$0.02	\$0.00	
2020	\$0.10	\$0.02	\$0.00	
2021	\$0.10	\$0.02	\$0.00	
2022	\$3.26	\$0.52	\$0.07	
2023	\$93.00	\$14.88	\$1.86	
2024	\$93.00	\$14.88	\$1.86	
2025	\$80.00	\$12.80	\$1.60	
2026	\$80.00	\$12.80	\$1.60	
2027	\$80.48	\$12.88	\$1.61	
2028	\$80.48	\$12.88	\$1.61	
2029	\$80.48	\$12.88	\$1.61	
2030	\$80.48	\$12.88	\$1.61	
2031	\$84.16	\$13.47	\$1.68	
2032	\$84.16	\$13.47	\$1.68	
2033	\$84.16	\$13.47	\$1.68	
2034	\$88.31	\$14.13	\$1.77	
2035	\$88.31	\$14.13	\$1.77	
2036	\$91.09	\$14.57	\$1.82	
2037	\$91.09	\$14.57	\$1.82	

36

Exhibit B: Intent to Bid Form



INTENT TO BID FORM

Request for Proposal Technology and Implementation Services In support of Puget Sound Energy (PSE) Demand Response Program

Yes: No:

My Company intends to submit a response to this Request for Proposal No: My Company will not submit a response to this Request for Proposal Yes/No: My Company is a woman, veteran, minority owned business. (If yes, identify category)

In response to your Request for Proposal for the identified program(s), the undersigned will furnish an RFP response in accordance with the contract documents and any addenda thereto. Labor, materials, tools, supplies, equipment, transportation, supervision, services, goods, and other items as may be required.

1.	Company Information	
Con	mpany Name	
Bus	siness Address	,
City	y State	Zip Code
2.	Designated Contact for this RFP	
Nan	me, Title	
Ema	nail	Phone
3.	Signature: (person legally authorized to commit company)	
Sigr	inature	Date
Sut	nted name and title Ibmit completed form per date identified in Request for Pr ImandResponse@PSE.com	oposal Timeline via email to:

Exhibit C: Mutual Nondisclosure Agreement

PSE PUGET SOUND ENERGY

MUTUAL NONDISCLOSURE AGREEMENT

Puget Sound Energy, Inc. a Washington corporation with offices at 10855 NE 4⁶ St., Bellevue, WA ("PSE") and the "Other Party" identified on the signature page below are considering a business transaction (the "Transaction"). In connection with the proposed Transaction, the parties are willing to disclose confidential information to each other on the terms and conditions stated in this agreement (this "Agreement").

The parties, intending to be legally bound, agree that

I. Confidentiality.

Confidentiality.

 In connection with the Transaction, each party (a "Disclosing Party") is prepared to make available to the other party (a "Receiving Party") certain Confidential Information regarding the Disclosing Party's business. The Receiving Party agrees to keep such information confidential and protect all Confidential Information from disclosure by using the highest practical degree of care and at least the same care the Receiving Party uses to protect its own confidential information with respect to the status of or the terms of the Transaction, and (ii) any trade secrets or other confidential or proprietary information of the Disclosing Party, whether of a technical, business or other nature (including, without limitation, the relationship between the parties, and information relating to the Disclosing Party's technology, software, products, services, designs. methodologies, know how, business plans, finances, marketing plans, outsomers, employees, prospects or other affairs). Confidential Information also includes any information that has been made available to the Disclosing Party by third parties that the Disclosing Party is obligated to keep confidential.

other sitals). Conclemant information also includes any information that has been made available to the Disciolang Party by third parties that the Disciosing Party is obligated to keep confidential.

 Receiving Party may not disciose Confidential.
 Receiving Party may not disciose Confidential Information to third parties: <u>provided, however</u>, that notwithstanding the foregoing. Receiving Party may not disciose Confidential Information to the employees, consultants, advisors, or other agents (ts "Representatives") only to the extent necessary for such representatives to assist the Receiving Party in evaluating the Transaction, provided that such Representatives agree to keep such Confidential Information confidential in accordance with this Agreement. A breach of this Agreement by a Representative to the security Party agrees, at its sole expense, to take all reasonable measures including but not limited to court proceedings) to restrain its Representatives from prohibited or unauthorized disclosure of the Confidential Information. Receiving Party shall immediately notify Disciosing Party of any actual, probable or reasonably suspected disclosure or unauthorized access to the Disciosing Party Confidential Information.
 Receiving Party will not use or allow others to use

 Receiving Party will not use or allow others to use Confidential Information for any purpose other than evaluating the Transactio

Concentrate intermediate for any pulpose other inter-restance the S. At Disclosing Party's request, Receiving Party will return all materials function and will destroy or deliver to Disclosing Party any other materials containing Confidential Information, including materials prepared by Receiving Party, unless such Confidential Information is required to be retained by the Receiving Party to comply with applicable law, regulatory requirements or internal document retention policies. Notwithistanding the Confidential Information, the Receiving Party scenare copies of the Confidential Information, the Receiving Party may retain such copies in its archival or back-up computer storage. If the Receiving Party retains a copy of any Confidential Information for any reason, including copies on electronic

backup media, then such information shall in all respects remain subject to the terms and conditions of this Agreement. 6. The provisions of this Part I shall not apply to Confidential Information that: (a) is or becomes publicly available through no fault of Receiving Party: (b) is or has been received in good faith by Receiving Party without restriction on use or disclosure from a third party having no obligation of confidentiality to Disclosing Party, or (c) is or has been independential Advector by Receiving Party without reference to Confidential Information received from Disclosing Party, as evidenced by Receiving Party's written records. 7. The fact that portions of Confidential Information may be publicly available or otherwise not subject to this Agreement will not affect Receiving Party's obligations with respect to the remaining portion.

portion.

portion. 8. If Receiving Party is required by judicial or administrative process to disclose Confidential Information, Receiving Party shall promptly notify Disclosing Party and allow Disclosing Party as reasonable time to oppose such process. If disclosure is nonetheless reasonable time to oppose such process. If disclosure is nonetheless required, Receiving Party may disclose only the Confidential Information that, in the written opinion of counsel acceptable to Disclosing Party, Receiving Party is legally required to disclose. Receiving Party, and use its best efforts to limit the dissemination of Confidential Information that is disclosed. 9. This Agreement will not apply to information disclosed to Receiving Party after Receiving Party receives written notice from Disclosing Party that further disclosures will not be treated as confidential.

conditential. 10. In providing Confidential Information pursuant to this Agreement. Disclosing Party makes no representation, either express or implied, as to adequacy, sufficiency, or freedom from fault of such Confidential information and incurs no responsibility nor obligation whatsoever by reason thereof; and the furnishing of such Confidential Information will not convey any rights or license with respect to such Confidential Information. Confidential Information.

II. No Commitment to Enter Into Transaction. The parties acknowledge that nothing in this Agreement is intended to create or constitute any agency or partnership among the parties, or any legally binding obligation for either party to enter into, or negotiate to enter into, the Transaction.

III. Miscellaneous

Miscellaneous:

 This Agreement shall continue in full force and effect for two (2) years from the Effective Date, unless terminated earlier or extended by mutual agreement of the parties.
 In the event of a default under this Agreement, the non-breaching party will be entitled to injunctive relief, without posting bond, in addition to any other available remedies, including damages. In any Nitgation concerning this Agreement, the prevailing party will be entitled to recover all reasonable expenses of litigation, including reasonable ettorney fees at this and on any appeal.
 Any failure by a party to enforce another party's strict performance of any provision of this Agreement will not constitute a waiver of its right to subsequently enforce such provision or any other provision of this Agreement will be governed by and construed and enforced in accordance with the internal laws of the state of

4. This Agreement will be governed by and construed and enforced in accordance with the internal laws of the state of Washington, without regard to contrary principles of conflicts of law. The federal and state courts within the State of Washington shall have exclusive jurisdiction to adjudicate any dispute arising out of and relating to this Agreement. Venue for purposes of any litigation arising under this Agreement will be in King County, Washington.

All additions or modifications to this Agreement must be in writing and executed by all parties.

EFFECTIVE DATE: date last signed below

Puget Sound Energy, Inc.	Other Party:
Authorized Signature:	Authorized Signature:
Name:	Name:
Title:	Title:
Date:	Date:

Updated: 01252012

38

Exhibit D: Cost-effectiveness Evaluation Criteria

PSE prefers proposals that provide the lowest reasonable cost throughout the program or project life, taking into account the price of the proposal and other factors that impact PSE's overall cost. PSE intends to analyze the cost-effectiveness of demand response proposals in a manner consistent with the IRP.

PSE will evaluate bids in two ways: using benefits and costs as indicated in the Program Administrator Cost Test (PAC) and Total Resource Cost (TRC) Test. The benefits and costs shown in the tables below will be included in the bid evaluation process when applicable, quantifiable, and significant. PSE prefers proposals and combinations of proposals that result in the lowest impact on PSE's revenue requirements and rates when included in PSE's existing generation resource portfolio.

PSE will adjust the bidder's proposed capacity during the evaluation process using Effective Load Carrying Capability (ELCC) as shown in <u>T</u>table 3. The ELCC used in this evaluation will be dependent on the bidder's proposed resource availability, i.e., frequency and duration of events. For example, a proposal with a program with no more than one, 4-hour event per day will be evaluated with an ELCC of 58%, while a program with up to two, 3-hour events per day with 6 hours of recovery time between events will be evaluated with an ELCC of 77%₂₇

Benefits	PAC	TRC
Avoided Capacity Costs	\checkmark	\checkmark
Avoided Energy Costs	\checkmark	\checkmark
Avoided Transmission & Distribution Costs	\checkmark	\checkmark
Avoided Environmental Compliance Costs	\checkmark	\checkmark

 Table 1. Cost-effectiveness Benefits for PAC and TRC Test

Costs	PAC	TRC
Program Administrator Expenses	\checkmark	\checkmark
Program Administrator Capital Costs	\checkmark	\checkmark
Financial Incentive to Participant	\checkmark	×
DR Measure Cost: Program Administrator	\checkmark	\checkmark
DR Measure Cost: Participant Contribution	×	\checkmark
Participant Transaction Costs	×	\checkmark
Participant Value of Lost Service	×	\checkmark
Increased Energy Consumption	\checkmark	\checkmark
Environmental Compliance Costs	\checkmark	\checkmark

Table 2. Cost-effectiveness Costs for PAC and TRC Test

ELCC Estimates for Various DR Event Parameters											
	Call Frequency										
Event Duration	E	lapsed Ho	Elapsed Hours Since Start of Last Event								
(Hours)	4	6	8	12	24	24					
2	63%	61%	57%	49%							
3	80%	77%	77%	59%							
4	90%	85%	80%	65%	53%	58%					
5	94%	89%	84%	68%	55%						

Table 3. Effective Load Carrying Capability Based on Frequency and Duration of DemandResponse Events

Attachment C

2018 Demand Response RFP Frequently Asked Questions

Last updated 6/8/18

Topic #	Question	Answer	Added
Schedul	e and Process		
101	Is PSE planning to host a bidder conference for this RFP?	Yes. PSE is planning to host a bidder conference on July 9, 2018 in Bellevue, Washington. There will be a WebEx option for those who cannot attend in person.	5/23/18
		Details are being finalized now. Additional information and registration instructions will be emailed to the RFP distribution list and posted to <u>www.pse.com/rfp</u> .	
		If you do not already receive RFP notifications and would like to be added to our distribution list, email <u>DemandResponse@pse.com</u> .	
102	Why does PSE's evaluation process take six to seven months to complete?	PSE's goal is to thoroughly evaluate all proposals received in response to its Demand Response RFP. PSE understands that the process is a long one, but a thorough evaluation takes time. PSE will work as quickly as possible without sacrificing the quality of review.	6/6/18
103	Will PSE keep bidders informed of its progress during the evaluation process?	Yes. PSE will keep bidders informed of its RFP progress. PSE's process calls for a two-phased approach. In phase one, PSE will screen out proposals with higher costs and/or fatal flaws. At the end of phase one, PSE will notify bidders of their status (selected or not selected for further review), communicate next steps and provide a schedule update. The second phase will be a more detailed due diligence review that typically involves greater interaction with bidders as PSE may submit data requests or seek clarification of proposed terms.	6/6/18
104	Does PSE require bidders to register as a Supplier in order to be eligible to respond to this RFP?	No, vendors do not need to register as a Supplier in order to be eligible to respond to the Demand Response RFP. However, bidders are asked to submit an Intent to Bid form (Exhibit B to the Demand Response RFP) and the Mutual Nondisclosure Agreement (Exhibit C to the Demand Response RFP) by August 3 and bids by August 17 th to be eligible to participate.	6/8/18
105	Will PSE be select one bidder or multiple bidders for this RFP?	PSE may select multiple bidders in order to provide different services to customers or different resource benefits to PSE.	6/8/18
Resourc	e Need and Timing		
201	Given the shared resource need, how will proposals submitted in response to the Demand Response RFP (UE-180272) be evaluated and compared with proposals	PSE's Demand Response program will take the lead on evaluating demand response proposals with the support of the All Resources RFP team. In addition to	6/6/18

2018 Demand Response RFP Frequently Asked Questions Last updated 6/8/18

Topic #	Question	Answer	Added
	submitted in response to the All Resources RFP (UE-180271)?	supporting the evaluation of responses received for the DR RFP, the All Resources RFP team will include these DR resources in their portfolio analysis. The teams will work together to determine which resources are selected to meet the capacity	
		resource need at "lowest reasonable cost".	
202	Does PSE have sector specific goals for DR?	No, PSE does not have sector specific goals at this time.	6/8/18
203	Does PSE require a minimum bid for DR?	No, PSE does not require a minimum bid.	6/8/18
	ectiveness and Cost Recovery		•
301	How will PSE evaluate cost effectiveness of DR resources? Is there a tool that PSE can share with vendors?	As is described in Exhibit D: Cost-effectiveness Evaluation Criteria of the Demand Response RFP, PSE will evaluate cost-effectiveness of bids in two ways: using benefits and costs as indicated in the Program Administrator Cost Test (PAC) and Total Resource Cost (TRC) Test. Exhibit D also identifies the benefits and costs that will be included in the bid evaluation process when applicable, quantifiable, and significant.	6/8/18
		PSE does not have a publically available tool for evaluating cost-effectiveness at this time.	
302	Has PSE established an approved cost recovery mechanism?	PSE has not resolved policy questions and barriers related to prudence and cost recovery for demand response at this time. We are working to resolve these issues and hope to do so prior to the conclusion of the vendor selection process for this RFP.	6/8/18
Evaluati	on Criteria and Proposal Ranking		
501	How does PSE evaluate proposals received in response to this RFP?	The Demand Response RFP team will take the same approach to evaluating proposals that the All Resources RFP team is taking. Generally, PSE first considers the economics of a proposal and whether the project has any serious fatal flaws (e.g., an inability to deliver to PSE's system or obtain necessary permitting to complete the project). Once a proposal is determined to be competitive on a cost basis and viable to meet customer needs, PSE pursues a more granular level of qualitative analysis. PSE does not apply a quantitative score to each qualitative criteria but allows the evaluation team to apply its expertise in assessing the particular risks and merits of each proposal's unique characteristics and qualities.	6/6/18
502	Can PSE provide some examples of fatal flaws?	Yes. While it would be difficult to imagine all possible potential fatal flaws that	6/6/18

2018 Demand Response RFP Frequently Asked Questions

Last updated 6/8/18

Topic #	Question	Answer	Added
		could exclude a proposal from further consideration, PSE can provide some guidance for bidders. Fatal flaws would include, but are not limited to, the following examples:	
		 Significantly higher cost than alternatives Proposal fails to provide sufficient information to substantiate a real project Commercially unproven technology Regulatory or legal risks associated with non-compliance or other obligations that could adversely impact PSE 	
Program	Evaluation, Measurement & Verification (EM&V)		
601	How will PSE go about hiring a third-party EM&V firm?	PSE has not determined how we will go about hiring a third-party EM&V firm at this time.	6/8/18
602	Would PSE allow for a Demand Response firm to include an EM&V plan within their bid?	PSE will allow bidders to include an EM&V plan within their bid. However, inclusion of a EM&V plan is not required.	6/8/18

Attachment D

Revised 6/8/18 Docket UE-180272

*PSE's current FAQ list can be found on <u>www.pse.com/rfp</u> by clicking the Demand Response RFP hyperlink. The FAQ column includes a [#] reference to the corresponding FAQ, as applicable.

#	Summary of Comment(s)	RFP edit?	DR FAQ? [#]*	PSE Response
Jim A	dcock, Ratepayer, IRPAG member			
1.1	Advocates renewables only RFP Recommendation: PSE should explicitly prohibit all fossil fueled proposals from this RFP.	N	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 1.1 in 2018 Draft All Resources RFP: Summary of Public Comments.
Brian	Grunkemeyer, Ratepayer			
2.1	Advocates clarifying PSE's intended relationship with CAISO's Western Energy Imbalance Market (EIM)	Ν	N	At present, PSE does not anticipate serving as a Scheduling Coordinator for demand response providers that aggregate substantial load in their service territory in the near-term.
	Recommendation: PSE should consider mentioning in their RFP what they envision their relationship with CAISO's Western Imbalance Market will be. For example, will they serve as a Scheduling Coordinator for demand response providers that aggregate substantial load in their service territory, and allow them to function as Proxy Demand Resources?			
NW E	nergy Coalition (Amy Wheeless and Joni Bosh), IRPAG, Environmental Advocates			
3.1	Advocates clarification on policy questions and barriers related to prudence and cost recovery.	N	Y [302]	PSE has not resolved policy questions and barriers related to prudence and cost recovery for demand response at this time. We are working to resolve these issues and hope to do so prior to the conclusion of the vendor selection
	Recommendation: PSE should provide clarity in regard to policy questions and barriers related to prudence and cost recovery for demand response. Specifically, whether the issues have been resolved, or if these unresolved questions may be a potential impediment to selecting a DR vendor and DR program implementation.		[002]	process for this RFP. However, if we are unable to establish an approved cost recovery mechanism, it may impede our ability to select a DR vendor and move forward with DR program implementation.
3.2	Advocates shorter evaluation period and date certain for short list	N	Y	PSE's goal is to thoroughly evaluate all proposals received in response to its Demand Response RFP. PSE understands that the process is a long one, but a

#	Summary of Comment(s)	RFP edit?	DR FAQ? [#]*	PSE Response
	Recommendation: PSE should provide more clarity with regard to the end of its process and its short list announcement. An earlier date is encouraged to allow bidders to begin program implementation in 2019.		[102, 103]	thorough evaluation takes time. PSE will work as quickly as possible without sacrificing the quality of review.
				PSE will also keep bidders informed of the RFP progress. PSE's process calls for a two-phased approach. In phase one, PSE will screen out proposals with higher costs and/or fatal flaws. At the end of phase one, PSE will notify bidders of their status (selected or not selected for further review), communicate next steps and provide a schedule update. The second phase will be a more detailed due diligence review that typically involves greater interaction with bidders when PSE may submit data requests or seek clarification of proposed terms.
3.3	Advocates increased transparency related to RFP responses and results. Recommendation: Following the 2016 RFP release, NWEC and other stakeholders heard only that the responses did not meet PSE's needs and that no proposed programs were moving forward. Some more documentation of the kinds of responses that were received and how they did not meet PSE's needs would have been appreciated, or at least an understanding that there is some oversight to this process. With this RFP, we hope that there is more clarity in the process from PSE. Given that much of the customer interaction would happen through PSE's Energy Efficiency program staff, having a report and review of DR programs within the PSE Conservation Resource Advisory Group (CRAG) seems to make the most sense.	Ν	N	 PSE understands the desire for increased transparency related to RFP responses and results, especially when an award is not made as was the case with the 2016 RFPs. Due to the confidential and sensitive nature of bid content and the specifics of PSE's findings related to that content, which are protected by non-disclosure agreements, PSE is limited in the information that we can share with external stakeholders. Following the conclusion of the vendor selection process, PSE will provide as much clarity on the process and results as we are able to. PSE is open to providing a report and review of DR programs to the PSE Conservation Resource Advisory Group (CRAG) in the future.
3.4	Advocates for the addition of a day-ahead program. Recommendation: It is recommended that PSE allow vendors to propose a day-ahead program as this would garner more customer participation and could allow the company to acquire more cost-effective DR.	Y	N	It was not PSE's intention to indicate that respondents are prohibited from proposing day-ahead programs. The Primary Objectives outlined in Section 2.2 have been modified to clarify that PSE will accept responses proposing one of three notification options: (1) hour ahead notification, (2) day ahead notification, or (3) a combination of hour ahead and day ahead notification.

#	Summary of Comment(s)	RFP edit?	DR FAQ? [#]*	PSE Response
3.5	Advocates for geographic targeting Recommendation: It is recommended this RFP encourage proposals that focus on specific distribution areas of PSE's system where deferring additional transmission and distribution investment would provide additional value.	N	N	PSE will accept proposals that focus on specific distribution areas of PSE's system; however, geographic targeting is not required.
3.6	Advocates for clarity on data access and ownership issues Recommendation: It is recommended that PSE provide clarity on who will own the customer data and what access to customer data vendors may have. At a minimum, it is recommended that there be an acknowledgement that this will be an issue to determine during selection and contracting should be included.	N	N	PSE work will closely with the selected bidder(s) during the selection and contracting process to establish mutually agreeable data security, data integrity, and data sharing protocols.
Wash 4.1	ington and N. Idaho District Council of Laborers (Jermaine Smiley), Largest union Advocates advancement of renewables and socioeconomic benefits of creating quality local jobs Recommendation: Evaluation, screening and ranking process should advance development of renewable energy resources while maximizing local socioeconomic impacts. PSE should prefer projects that create quality jobs and maximize local socioeconomic benefits.	N	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 4.1 in 2018 Draft All Resources RFP: Summary of Public Comments.
4.2	Advocates requirement to use Wash. union labor for renewables development and requiring workforce development plansRecommendation: PSE should adopt clear union labor requirements for its renewables solicitation. Minimum criteria for development projects to be eligible for consideration should include a workforce development plan detailing worker training or qualification requirements, and availability of local contractors or local labor pool to satisfy project needs.	N	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 4.2 in 2018 Draft All Resources RFP: Summary of Public Comments.

#	Summary of Comment(s)	RFP edit?	DR FAQ? [#]*	PSE Response
4.3	Advocates increased public involvement in evaluation and resource selectionRecommendation: PSE should make available to the public a summary of all proposals received and schedule a hearing whereby the public can provide input on proposals. PSE should consider public comment on proposals when selecting its final short list.	N	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 4.3 in 2018 Draft All Resources RFP: Summary of Public Comments.
Sierra	Lefter Club (Andrea Issod), IRPAG, Environmental Advocate			
5.1	Advocates stating resource plan preferences (specifically clean energy priorities) Recommendation: PSE should explicitly emphasize its Integrated Resource Plan preferences (specifically "energy efficiency, demand response, energy storage and renewable resources").	Ν	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 14.1 in 2018 Draft All Resources RFP: Summary of Public Comments.
5.2	Advocates public procurement process with full stakeholder participation and explicitly indicating relative importance of each evaluation criterion Recommendation: PSE should conduct a public, transparent RFP at least as rigorous as the IRP. The resource procurement process should include the opportunity for full stakeholder participation to evaluate the bids, including a requirement that PSE summarize each project proposal and allow for review and comment on proposed ranking by electronic means (potentially with a protective order and party status to protect confidential data). PSE should provide more clarity around evaluation criteria and relative importance of each criterion to others. Additionally, PSE should clarify whether PSE's evaluation criteria and process will adhere to requirements in WAC 480-107- 035.	Ν	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 14.2 in 2018 Draft All Resources RFP: Summary of Public Comments.

Revised 6/8/18 Docket UE-180272

#	Summary of Comment(s)	RFP edit?	DR FAQ? [#]*	PSE Response
5.3	Advocates separation of RFP evaluation team and team submitting any self- build bid into process, if applicableRecommendation: During the IRP stakeholder process, PSE indicated that it has already obtained the necessary permits to construct a natural gas plant.1To ensure propriety of the process, and uphold the public perception of propriety, if PSE intends to bid resources into its own RFP process, there must be a wall between the entity submitting the bid and the evaluation of proposals. The regulations, which allow competing bidders to request appointment of an independent third party to assist staff review of a bid from 	N	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 14.3 in 2018 Draft All Resources RFP: Summary of Public Comments.
-	west and Intermountain Power Pool ("NIPPC") (Irion Sanger), Stakeholder			
6.1	Advocates making existing excess transmission rights from Mid-C and redirected Colstrip transmission available to bidders Recommendation: PSE should make transmission rights already in rates (existing from Mid-C and Colstrip 1&2 rights) available to any bidder (specifically mentions PPAs). PSE should allow bidders to demonstrate if these firm rights can be redirected to their facilities and, if so, to incorporate them into their bids. Further recommends that existing firm rights associated with an existing flexible dispatchable resource could be redirected to new renewable generation resources and "shared' on a short-term basis to avoid the need for bidders to provide additional incremental rights. Recommends that PSE identify all transmission rights and provide bidders an opportunity to	Ν	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 15.1 in 2018 Draft All Resources RFP: Summary of Public Comments.

¹ Final IRP Advisory Group Meeting Notes. October 27, 2016. https://pse.com/aboutpse/EnergySupply/Documents/10-27-16_Final_IRP_AG_Meeting_Notes.pdf

#	Summary of Comment(s)	RFP edit?	DR FAQ? [#]*	PSE Response
	incorporate surplus rights into their bids.			
6.2	Advocates allowing bidders to submit bids using any combination of firm, conditional firm and short-term firm transmission	N	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 15.2 in 2018 Draft All Resources RFP: Summary of Public Comments.
	Recommendation: Long-term firm, point-to-point transmission should not be a requirement for bidders. PSE should explicitly state that conditional firm			
	and short-term firm are acceptable to avoid inadvertently excluding projects with better shape profiles, better capacity factors, fewer permitting risks, lower construction costs, or better tax incentives.			
6.3	Advocates clarifying how bids that do not provide long-term firm transmission will be evaluated against those that do	N	N	This comment was submitted in response to both the Demand Response RFP and PSE's All Resources RFP (UE-180271). Please see response to comment 15.3 in 2018 Draft All Resources RFP: Summary of Public Comments.
	Recommendation: PSE should clearly state how it plans to treat bids without			
	 long-term firm transmission. Questions posed: Will there be different transmission requirements for baseload vs. renewable resources? 			
	What types of alternative arrangements will be acceptable?			
	 Will there be a scoring penalty for bids without long-term firm transmission and, if so, what is the penalty? 			
	RFP should specify how PSE will evaluate projects using different forms of transmission. Recommends reflecting delivery risk associated with alternative transmission solutions in the price and bid scoring process. Recommends RFP			
	be modified to provide specific details regarding the types of transmission acceptable for each type of resource and what impact would be on any particular bid score.			