

December 29, 2020

Subject: Puget Sound Energy

Customer Energy Management

2020-21 Energy Efficiency Targeted Demand Side Management

Dear Potential Bidder:

Puget Sound Energy, Inc. (PSE) is soliciting proposals for **demand side energy management products, programs and support services delivery to targeted geographic locations** for the 2021 program period. This Request for Proposals (RFP) is sponsored by the Customer Energy Management (CEM) and Clean Energy Strategy (CES) groups at PSE. The groups are soliciting support for existing demand side management products, programs and/or services, delivered to targeted geographic areas that will result in direct and measurable gas and/or electric energy savings for the purpose of reducing capacity constraints in designated areas.

PSE is soliciting proposals for programs/pilots in these sector topic areas:

- Localized delivery of Energy Efficiency Programs
- Localized delivery of Demand Response Programs

Your first action item (see RFP Schedule in section 7.1 of the RFP) is to provide a completed Intent to Bid form (Exhibit B) identifying the programs for which you plan to submit proposals. The Mutual Non-Disclosure Agreement (Exhibit C) should also be submitted at that time. This allows PSE to identify contact(s) for ongoing RFP communications such as answers to questions and RFP updates. Bidder questions are also due at this time.

- Intent to Bid forms and Bidder Questions are due 5:00 PM Pacific Time, January 11, 2021 and must be submitted electronically to CEMRFP@pse.com.
- Electronic proposals must be received by no later than 5:00 PM Pacific Time, February 5, 2021 to CEMRFP@pse.com

All communication regarding this RFP should be directed to CEMRFP@pse.com.

Sincerely,

Haida May Malcolm Senior Market Analyst

Energy Efficiency Services - Puget Sound Energy

2020 Request for Proposals (RFP)

Technology and Implementation Services

In support of

Puget Sound Energy (PSE) Targeted Demand Side Management (TDSM) Program

Activity	Date*
RFP Release	December 29, 2020
Intent to Bid Form, Non-Disclosure Agreement & Bidder Questions Due	January 11, 2021
Bidder Questions Answered	January 22, 2021
Proposal Submission	February 5, 2021
Notifications: Short-list vendors identified for Interview	February 19, 2021
Bidder Interviews, Reference Checks & Selection Process Begins	March 1, 2021
Scope, Pricing & Contract Marketing, Sales and/or Promotional Plans	March 15 through April 12, 2021
Negotiation Finalization	April 16, 2021
Proposal/Program Launch	May 7, 2021

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	Su	ımmary of RFP	5
2	Ва	ackground and DR Resource Requirements	7
	DCF	Background	7
	2.1	Localized Capacity Needs	
	2.2	TDSM Objectives and Bidder Solution Requirements	
3	Sc	cope of Work	10
	3.1	Roles and Responsibilities	10
	3.2	Performance Goals	
4	Тє	echnical Proposal	16
	4.1	Technology Products and Related Services (25% weighting)	17
	4.2	Implementation Services (25% weighting)	
	4.3	Project Management (15% weighting)	
5	Bi	dder Information and Qualifications (35% weighting)	28
6	Pr	oposal Format and Bidder Instructions	30
	6.1	Bidder Selection Process	31
7	RF	FP and Bid Procedures	32
	7.1	RFP Schedule	32
	7.2	Intent to Bid	32
	7.3	Questions and Communications	33
	7.4	Submission of Proposal Responses	33
	7.5	Terms and Conditions of Submission	34
	7.6	Bidder Selection Process	35
E	xhibi	t A: Schedule of Estimated Avoided Cost	36
E	xhibi	it B: Intent to Bid Form	41
E	xhibi	it C: Mutual Nondisclosure Agreement	42
E	xhibi	t D: Cost-effectiveness Evaluation Criteria	43
F	yhihi	it E: Demand Response Key Proposal Details	15
-4			· · · · · · · · · · · · · · · · · · ·

Exhibit F: 7	Targeted Energy Efficiency Measures	46
Exhibit G:	IT Security Questionnaire	50
Exhibit H:	Bidder Pricing Instructions	51

1 Summary of RFP

The goal of this Request for Proposal (RFP) is to secure bids for the implementation of **delivery of Demand Side Energy Management products, programs and support services to Targeted Geographic Locations and Areas (TDSM Areas)** that will provide demand response and energy savings services to PSE customers in specified geographic locations for the 2021-25 program years. This RFP is sponsored by PSE's Customer Energy Management (CEM) and Clean Energy Strategy Departments.

Puget Sound Energy (PSE) seeks bids from qualified firms to supply technology and implementation services for its Targeted Demand Side Management (TDSM) Program(s).

TDSM is an Energy Efficiency initiative to identify localized conservation and demand response potential, develop plans to achieve a defined percentage of that potential, then implement those plans to deliver identified energy efficiency and capacity savings.

Working closely with PSE's Delivery Systems Planning teams Energy Efficiency identifies conservation and capacity potential in Non-Wires (electric)/Non-Pipes (natural gas) Alternatives analysis for Transmission and Distribution (T&D) projects to determine if the project may be deferred through the implementation of such efforts.

PSE is issuing this Request for Proposals (RFP) for program delivery for 2021 through 2025 (program years). The bidder(s) will be responsible for implementing energy savings by summer 2021 and providing load curtailment no later than winter 2022¹ from PSE's customers.

PSE has identified two TDSM areas: Bainbridge Island and Duvall. Additional TDSM areas may be identified during the contract period and bidders should include how future areas may be incorporated.

Bidders are encouraged to propose solutions with any available technologies that can meet the identified objectives, across all customer segments. These technologies include, but are not limited to, smart thermostats, water heater communication modules, and behavioral modification. Technologies may be proposed separately or in combination.

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.

Winter capacity for 2022 covers November 1, 2022 to February 29, 2023.

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** (Exhibit B) 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.

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 https://www.pse.com/. Information regarding rates and regulatory filings may be found at http://pse.com/aboutpse/Rates/Pages/default.aspx.

2.1 Localized Capacity Needs

2.1.1 Bainbridge Island

As part of a non-wires alternative solution to postpone a new substation on Bainbridge Island PSE seeks to reduce winter peak capacity needs on the island by 3.3 MW capacity need by 2029. PSE serves over 12,500 electric customers on Bainbridge Island.

2.1.2 Duvall

PSE, in efforts to defer the installation of an additional natural gas pipeline to Duvall, seeks to reduce winter peak natural gas usage by 3000 MBH by 2029. There are approximately 2,200 natural gas heated homes in Duvall, most (90%) with electric water heat.

2.2 TDSM Objectives and Bidder Solution Requirements

PSE's objectives for targeted demand side management as a capacity resource in the 2021-2025 contracting period are listed below.

Programs must target customers in TDSM Areas using one or more of the following approaches:

- **a.** Bainbridge Island customers with energy efficient electric measure upgrades affecting capacity usage including space heat, water heat and weatherization.
- **b.** Bainbridge Island customers with electric demand response measures affecting capacity usage including space heat, water heat and behavioral methods.
- **c.** Geographically defined areas of The City of Duvall, WA customers with energy efficient natural gas measure upgrades affecting capacity usage including space heat, water heat and weatherization.
- **d.** Geographically defined areas of The City of Duvall, WA customers with gas demand response measures affecting capacity usage, including space heat, water heat and behavioral methods.
- **e.** Any other to be determined (TBD) TDSM Area(s) within PSE's service territory with energy efficient electric and/or natural gas upgrades affecting capacity usage including space heat, water heat and weatherization.
- **f.** Any other TBD TDSM Area within PSE's service territory with energy efficient electric and/or natural gas upgrades affecting capacity usage including space heat, water heat and behavioral methods.

Targeted Demand Response (TDR):

The TDR team works to support the Delivery System Planning (DSP) efforts of the Electric and Natural Gas infrastructure planning teams. Specifically as related to Non Wires Alternatives (NWA) and Non Pipe Alternatives (NPA) analysis for T&D Deferral projects. As projects are identified and capacity constraints are verified, load curtailment needs will be planned.

Demand Response Objectives:

- 1. Ensure DR resource is cost effective² 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 28/29.³ PSE may call DR events outside these time windows, but bidders will not necessarily be expected to provide the same level of curtailment.

² Cost effectiveness criteria are discussed in Exhibit D.

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.

- 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.

Targeted Energy Efficiency (TEE)

To achieve the targeted peak load reductions PSE will utilize both TDR and TEE. PSE will use localized avoided cost of energy calculations to help determine rebate incentive levels in each geographically targeted area. TDSM Area Energy Efficiency measure incentives (Exhibit F) may differ in amount from system wide measure incentives and may differ from one TDSM Area to another.

Targeted EE Objectives:

- 1. Provide Instant Rebates to Customers
 - i. Include plans of how to provide and communicate, verbally and on invoices and proposals, the incentive amount to the customer.
 - ii. Utilize the TDSM Area specific rebate form indicating eligible measures and incentives.

Integration with current and future PSE systems

PSE is currently implementing an Advanced Distribution Management System (ADMS) and plans to move towards implementation of a Distributed Energy Resource Management System (DERMS) in the near future. Written response should highlight the vendor's current and planned future capabilities for integration with PSE's systems, including any completed integrations with ADMS / DERMS. Proposal should also highlight how TDR programs would be dispatched in the absence of a DERMS.

Current and future programs may include load dispatching and automated curtailment for storage (utility and customer scale batteries), electric vehicles and electric ferries. An optimal solution will be able to address PSE's future potential needs.

PSE recognizes the significant logistical differences between electric and natural gas demand response programs. Bidders may choose to propose solutions for electric DR, Natural Gas DR, or both.

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 TDSM program design and delivery.

Table 4. TDSM Business Functions and Responsible Parties

Business Function	Responsible	e Party
business runction	PSE	Vendor
Define Program Parameters and Initiate Load Control Events	Р, А	-
Provision of Technology Products and Services	-	Р, А
Marketing, Customer Recruitment & Outreach	А, р	Р
Technology Installation and Enablement	р	P, A
Data Support and Performance Analysis	р	P, A
Billing and Settlement	А	Р
Customer Service and Satisfaction	P, A	Р
EM&V ⁴	P, A	-
Coordination with Energy Efficiency Programs	P, A	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)

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, Clean Energy Strategy and other customer service and program implementation conduits.

The vendor must ensure that its products and services are appropriate for the program objectives described in Section 2.2.

P = Perform (carries out the activity)

p = Performs with a lower level of responsibility than P

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

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.).	Not Applicable
Initiate load control events using vendor-provided software and hardware.	

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:
	o Utility Interface (UI)
	 Head-end application
	 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.
Not Applicable	Ability to do each of the following:
	 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.

PSE Responsibility	Vendor Responsibility
	For commercial and industrial participants: O 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.	 Share information about target customer groups / attributes based on experience in other deployments Recruit customers in close coordination with PSE
Ensure focus on PSE brand in messaging.	energy efficiency program staff and other relevant groups.
 Recruit customers in coordination with the vendor: PSE's energy efficiency program staff will serve as a primary touchpoint to customers during all stages of customer recruitment. 	Enroll, schedule, install, enable, verify, and test the program participants.

Technology/Equipment Installation and Enablement

PSE Responsibility	Vendor Responsibility
 PSE Account Managers, Energy Management Engineers and/or energy efficiency program staff works closely with the vendor during preliminary site assessments. Where appropriate, PSE staff introduce vendor to customer for detailed site audit. PSE staff works in close coordination with vendor at different stages of technology enablement: schedule, install, enable, verify, and test the program participants. 	 Provide vehicles with proper signage in support of installation activities. PSE to approve signage for vehicle. Set up network/workforce to install and service program equipment. Provide field and office training, including safety training for field personnel. Follow COVID-19 safety best practices 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. Establish a robust QA/QC process for installations to ensure excellent customer experiences 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. Undertake program performance analysis using key metrics. 	 Provide secure, data uploads into PSE's data tracking system. For energy efficiency measures, provide participant data from a sufficient sample of customers for purposes of estimating average load impacts. For demand response measures, provide participant data from each participating customer to determine load impacts.

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
p. • C o w	Define proposed compensation structure for TDR participants. 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 with program.
•	Develop customer satisfaction metrics along with vendor and obtain information from vendor to assess customer satisfaction.	•	Exchange customer information with PSE as mutually agreed. Perform all activities related to customer complaint tracking and handling.

PSE Responsibility	Vendor Responsibility
 Conduct surveys and focus groups in coordination with vendor to assess customer satisfaction.⁵ 	Perform all activities related to customer 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 communications 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

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

- 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, including the scale of program deployment, 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 (25% weighting)

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 including Key Proposal Inputs outlined in Exhibit E. This summary should NOT address Implementation Services, which are covered in Section 4.2.

В.	3. 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.	
		Note: 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.	
	Note: PSE is updating our electric metering equipment across our entire service territory. This is a six-year project, scheduled to complete in 2023.	
	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: https://www.pse.com/pages/meter-upgrade/map-and-schedule	
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.
12. System Integration	Describe current and planned future capabilities for integration with PSE's systems, including any completed integrations with ADMS / DERMS. Include a discussion of the added functionality available through integration.

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. Load Curtailment Performance and Impact Assessment		
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	In the table below, provide your proposed winter peak load reduction
	Reduction Estimates by	capacity per year from 2021 to 2025 ⁶ . The proposed amount indicates what
	Year	bidder can provide that meets PSE's objectives discussed previously in
		Section 2.2.

Winter Load Curtailment Estimate Per Year⁷ (MW)

	2021	2022	2023	2024	2025*
Day Ahead					
1 Hour Ahead					
Total					

 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. (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 describe your approach to comply with these measurement requirements.

If you are providing load curtailment products for which a day-matching baseline with same-day adjustment is not appropriate, please describe 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.

Winter capacity for 2021 covers November 1, 2021 to February 28, 2022; winter capacity for 2025 covers November 1, 2025 to February 29, 2026

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

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 (25% weighting)

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. 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				
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 share of the total curtailment amount in 2025 by customer sector, presented in terms of their percentage contribution to the total winter peak load reduction in 2025. % share by sector in winter peak load curtailment			
	% share by sector	2025		
	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 subsectors to be targeted. Provide examples of how you might coordinate with PSE account managers and existing PSE programs to improve program marketing and recruitment. Include a discussion of any tactics or program features that are designed to increase program accessibility, ensure an equitable distribution of program benefits, and/or engage low-income customers and other vulnerable populations.
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. 9 • Provide examples of how your firm has successfully partnered with other existing utility programs to enhance program delivery.

⁹ For a description of existing programs refer to PSE's energy efficiency program information in PSE's 2020-2021 Biennial Conservation Plan Exhibit 3, which contains EE program descriptions at https://www.pse.com/-/media/Project/PSE/Portal/Rate-documents/EES/ees 2020 2021 biennial conservation plan.pdf

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.
Verification of equipoperation	oment	Describe your practices for verification and testing of equipment while installer is onsite.
4. Equipment mainten	ance	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, 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 (15% weighting)

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

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 (35% weighting)

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 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	a. 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.	B. 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. 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 concise in their</u> <u>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.

Bidder Checklist

Item	Description	
Intent to Bid	Complete and submit Intent to Bid Form provided as a separate attachment. To be submitted by January 11, 2021.	
Mutual Non-Disclosure Agreement	To be submitted by January 11, 2021.	
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 Information and Qualifications	Responds to all questions in RFP Section 5 regarding your organization, experience, and references.	
IT Security Questionnaire	Respond to all question in Exhibit G	

Item	Description	
Pricing Proposal Document, consisting of:		
Pricing Proposal	Provide pricing by responding to all questions and instructions contained in the Pricing Attachment (Exhibit H) to this RFP.	
Demand Response Key Proposal Details	Respond to all fields in Exhibit E	

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:

- Demonstrated 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's complex and critical needs require a breadth of responses from our supplier community. PSE is committed to provide opportunities for diverse-owned business enterprises to competitively participate in its bidding processes.

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:

Activity	Date*
RFP Release	December 29, 2020
Intent to Bid Form, Non-Disclosure Agreement & Bidder Questions Due	January 11, 2021
Bidder Questions Answered	January 22, 2021
Proposal Submission	February 5, 2021
Notifications: Short-list vendors identified for Interview	February 19, 2021
Bidder Interviews, Reference Checks & Selection Process Begins	March 1, 2021
Scope, Pricing & Contract Marketing, Sales and/or	March 15 through
Promotional Plans	April 12, 2021
Negotiation Finalization	April 16, 2021
Proposal/Program Launch	May 7, 2021

^{*}All submittals must be received by PSE no later than 5:00 p.m. Pacific Time, on the due date.

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 January 11, 2021 to the TDSM RFP email address at CEMRFP@pse.com.

Bidders providing an Intent to Bid will receive follow-up communications from PSE regarding any 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 CEMRFP@pse.com.

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 CEMRFP@pse.com after issuance of this RFP. Questions should be provided in writing by January 11, 2021.

Commercial or administrative questions related to this RFP may be submitted at any time by email to CEMRFP@pse.com.

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.

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** February 5, 2021 by 5:00 p.m. (Pacific Time) for electronic copies to be received by PSE.
- 2) **Proposal Submission** Bidders are required to submit electronic copies of their proposal as follows:

Electronic copies. Bidders shall email **two electronic copies** of their full proposal to <u>CEMRFP@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. PSE will confirm receipt via email reply within 24 hours

- 3) 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.
- 4) 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.
- 5) **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.

6) **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. 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 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

This schedule of estimated avoided cost, as prescribed in WAC 480-106-040 and approved by UTC under Docket No. UE-190665, identifies the estimated avoided cost and does not provide a guaranteed contract price for electricity. The schedule only identifies general information to potential bidders about the avoided costs. The schedule of estimated avoided costs includes the following three tables:

- **Table 1:** 2019-2039 Avoided Energy Costs based on the Company's forecast of market prices for the Mid-C Market in PSE's 2019 Integrated Resource Plan Progress Report as of November 15, 2019, pursuant to WAC 480-106-040 (a).
- **Table 2:** 2020-2045 the Avoided Capacity and Energy Costs for Conservation in PSE's draft 2019 Integrated Resource Plan ("IRP") by resource type.
- **Table 3:** 2018-2039 the Avoided Capacity and Energy Costs for Natural Gas Conservation in PSE's 2017 Integrated Resource Plan ("IRP") by resource type.

1. 2019 IRP Progress Report Forecast of Mid-C Market Prices

	(Nominal \$/MWh)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg. Annual
2019	32.32	32.31	23.64	19.78	13.31	16.52	22.66	24.54	25.87	24.56	24.79	27.48	23.98
2020	25.94	26.26	21.04	17.86	13.07	14.56	20.47	23.3	24.06	23.82	23.61	24.97	21.58
2021	23.41	24.05	19.17	15.62	10.92	12.37	19.40	22.33	23.71	24.41	23.52	24.56	20.30
2022	22.37	23.22	17.52	14.61	9.40	9.94	17.85	21.53	23.04	23.15	22.14	24.19	19.08
2023	21.22	22.30	15.50	13.99	10.21	9.65	17.91	21.41	23.38	23.10	21.97	24.02	18.72
2024	21.38	23.73	15.65	14.99	8.37	10.02	18.22	22.43	25.39	25.22	23.81	25.65	19.57
2025	22.18	24.74	15.64	16.00	9.01	11.43	18.30	24.12	27.54	26.57	24.81	27.13	20.62
2026	23.48	26.52	17.43	17.39	10.22	11.45	19.42	26.02	28.95	28.87	26.17	28.65	22.05
2027	25.07	27.79	17.62	17.30	10.09	11.08	21.51	27.23	30.92	30.70	28.12	30.59	23.17
2028	25.21	27.81	16.86	17.36	10.26	11.59	22.96	27.96	31.49	30.87	27.71	31.63	23.48
2029	24.36	29.53	17.06	19.66	10.30	10.95	22.08	29.15	33.17	29.94	25.99	32.39	23.72
2030	25.09	29.38	16.58	18.18	9.85	11.24	22.29	28.79	33.89	32.34	28.98	33.05	24.14
2031	25.49	29.93	17.28	18.10	10.51	11.78	23.12	30.02	35.11	31.46	28.03	33.80	24.55
2032	25.67	30.75	17.65	20.12	12.56	11.98	25.41	31.25	34.87	34.97	31.55	36.27	26.09
2033	26.83	32.50	18.68	19.59	12.34	12.72	28.22	32.20	37.71	36.65	35.36	38.45	27.65
2034	28.59	34.47	19.43	20.56	13.72	13.79	31.58	34.50	40.27	39.42	35.53	42.03	29.49
2035	30.76	38.55	20.22	24.47	15.43	15.35	33.43	38.87	44.40	39.88	34.61	42.97	31.58
2036	31.01	39.11	20.78	22.75	13.80	14.85	32.56	40.71	45.64	43.11	38.46	45.97	32.39
2037	32.88	41.05	21.12	22.42	14.17	15.15	33.71	41.55	47.79	43.60	36.45	48.28	33.18
2038	35.52	43.49	23.28	25.76	16.86	15.78	37.41	43.41	51.69	47.17	40.27	50.54	35.93
2039	36.88	45.29	22.84	24.74	15.37	15.77	38.15	42.47	53.51	51.72	43.46	52.70	36.91

2. 2019 IRP Avoided Capacity and Energy Costs for Electric Conservation

		Avoided Energy Costs Avoided Energy Costs								
	Capacity (\$/kw-yr)	Power price (\$/MWh)	SCC Premium (\$/MWh)	Renewable Premium (\$/MWh)	Total Avoided Costs for Renewable (\$/MWh)					
2020	114.35	21.57	31.90	4.43	57.90					
2021	114.35	20.28	30.69	6.35	57.32					
2022	114.35	19.06	29.31	8.27	56.64					
2023	114.35	18.71	27.75	10.19	56.65					
2024	114.35	19.56	26.02	30.11	75.69					
2025	114.35	20.60	24.45	34.89	79.93					
2026	114.35	22.02	22.28	39.66	83.96					
2027	114.35	23.15	19.90	44.43	87.48					
2028	114.35	23.47	17.28	57.75	98.50					
2029	114.35	23.68	14.42	73.41	111.52					
2030	114.35	24.11	11.31	81.28	116.70					
2031	114.35	24.52	10.97	83.99	119.48					
2032	114.35	26.08	10.58	86.91	123.57					
2033	114.35	27.62	10.15	89.74	127.51					
2034	114.35	29.47	9.66	92.82	131.95					
2035	114.35	31.54	9.12	95.75	136.41					
2036	114.35	32.38	8.52	97.23	138.12					
2037	114.35	33.15	7.96	102.45	143.55					
2038	114.35	35.90	7.23	103.98	147.10					
2039	114.35	36.87	6.43	105.51	148.80					
2040	114.35	38.39	5.55	107.04	150.98					
2041	114.35	39.99	4.61	108.56	153.16					

2042	114.35	41.65	3.58	110.09	155.33
2043	114.35	43.38	2.48	111.62	157.48
2044	114.35	45.18	1.28	113.15	159.61
2045	114.35	47.05	-	114.68	161.73

Note:

SCC Premium = SCC Adder * Inverse of CETA Ramp

Renewable Premium = Levelized Net Renewable Cost * CETA Ramp Rate

3. 2017 IRP Avoided Capacity and Energy Costs for Natural Gas Conservation

3. 2017 IF	Commodity	d Energy Costs for Natural Gas Conservation Carbon		Total	
	Sumas \$/MMBtu	SCC (\$/MMBtu)	Upstream (\$/MMBtu)	Total Carbon Adder (\$/MMBtu)	Total (/MMBtu)
2018	\$3.63	\$4.20	\$0.85	\$5.05	\$8.68
2019	\$2.87	\$4.37	\$0.89	\$5.27	\$8.13
2020	\$2.10	\$4.56	\$0.93	\$5.49	\$7.58
2021	\$1.97	\$4.75	\$0.97	\$5.71	\$7.69
2022	\$1.99	\$4.94	\$1.01	\$5.95	\$7.93
2023	\$2.10	\$5.15	\$1.05	\$6.19	\$8.29
2024	\$2.40	\$5.36	\$1.09	\$6.45	\$8.84
2025	\$2.70	\$5.66	\$1.15	\$6.81	\$9.50
2026	\$3.00	\$5.88	\$1.20	\$7.08	\$10.08
2027	\$3.16	\$6.12	\$1.25	\$7.36	\$10.52
2028	\$3.25	\$6.36	\$1.29	\$7.65	\$10.91
2029	\$3.52	\$6.61	\$1.35	\$7.96	\$11.47
2030	\$3.83	\$6.87	\$1.40	\$8.27	\$12.09
2031	\$4.09	\$7.14	\$1.45	\$8.59	\$12.68
2032	\$4.40	\$7.42	\$1.51	\$8.92	\$13.32
2033	\$4.82	\$7.70	\$1.57	\$9.27	\$14.09
2034	\$5.51	\$8.00	\$1.63	\$9.63	\$15.14
2035	\$6.36	\$8.30	\$1.69	\$10.00	\$16.35
2036	\$6.76	\$8.62	\$1.75	\$10.38	\$17.13
2037	\$7.15	\$9.06	\$1.84	\$10.91	\$18.05
2038	\$7.77	\$9.40	\$1.91	\$11.32	\$19.09
2039	\$8.18	\$9.75	\$1.99	\$11.74	\$19.92

Exhibit B: Intent to Bid Form

DemandResponse@PSE.com



INTENT TO BID FORM

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

Yes: No: Yes/No:	My Company will not submit a r	a response to this Request for Proposal esponse to this Request for Proposal ran, minority owned business. (If yes, identify category)
RFP response	in accordance with the contract	he identified program(s), the undersigned will furnish an documents and any addenda thereto. Labor, materials, ervision, services, goods, and other items as may be
1. Company	nformation	
Company Nam	9	
Business Addre	ess	
City	State	Zip Code
2. Designate	d Contact for this RFP	
Name, Title		
Email		Phone
3. Signature:	(person legally authorized to co	mmit company)
Signature		Date
Printed name a	nd title	
Submit compl	eted form per date identified in	Request for Proposal Timeline via email to:

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.

- At. In connection with the Transaction, each party (a "Disclosing Party") is prepared to make available to the other party (a "Receiving Party") extain 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.
- vit. "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 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 Disclosing Party of any actual, probable or reasonably suspected disclosure or unauthorized access to the Disclosing Party's Confidential Information.
- 4. 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
- 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 comptly 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 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 independently developed 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.
- sortion.

 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 a 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 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 non-breaching 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/Utility Cost Test (PAC/UC) 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%.

PSE recognizes that potential non-energy impacts (NEI) may help provide a more comprehensive set of cost-effectiveness calculation inputs. PSE has an on-going effort to identify and quantify NEIs as they relate to demand response and hope to incorporate them into future IRP and demand response potential studies. To assist in these efforts PSE is requesting bidders, who which to do so, to submit NEIs they have identified and quantified along with the source for those quantifications. Submitted NEIs may or may not be included in the final analysis.

Benefits	PAC	TRC
Avoided Capacity Costs	✓	✓
Avoided Energy Costs	✓	✓
Localized Avoided Energy Costs	√	✓
Avoided Transmission & Distribution Costs	✓	✓
Avoided Environmental Compliance Costs	✓	✓

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

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

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

ELCC Estimates for Various DR Event Parameters								
				Call Frequ	uency			
Event Duration		Elapsed 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 Demand Response Events

Exhibit E: Demand Response Key Proposal Details

						Ke	y Proposal Inpu	its				
Project Name	Developer	Techn ology	Technology Details	Project Term	DR Capacity (MW)	Pricing: Capacity Charge \$ /kw-yr	Pricing: Customer Incentives \$/kw-yr	Any other costs? Such as start-up, annual operational, software and others?	Call frequency: Number of calls of resources per Winter Season	Call Duration	Elapsed Hours after last event	Program Readiness: Day Ahead / Hour Ahead/ 10-min Ready
	Examples Examples											
ABC	XYZ Inc.	Direct Load Contr ol	Bring your own thermostat	2023- 2028	If capacity varies by year, provide all details	100 / kW-yr if pricing varies by year, provide all details	50 / kW-yr if pricing varies by year, provide all details	\$10,000 per year	10 calls	2 hours	4 hours	10-min ready

Exhibit F: Targeted Energy Efficiency Measures

i. Bainbridge Island TDSM Electric Measure Incentives

Category	Measure	Incentive
Demand Response	Smart Thermostat DR Water Heat DR Additional (TBD) DR Measures	\$114.35/kw-yr.
Controls	Smart Thermostat	Up to \$250.00 including installation. Not to exceed product cost
Heating	Ductless Heat Pumps using inverter technology Site built Homes	\$2,400.00
	Ductless Heat Pumps in Manufactured Homes	\$2,400.00
	Forced-air furnace to Heat Pump Conversion (Site Built Homes)	\$2,400.00
	8.5 HSPF, 16 SEER	# 0.400.00
	Forced-air furnace to Heat Pump Conversion	\$2,400.00
Water Heating	(Manufactured Homes) 8.0 HSPF, 14 SEER NEEA Northern Climate Specs Heat Pump Water Heater - Tier 2	\$625.00
	NEEA Northern Climate Specs Heat Pump Water Heater – Tier 3 or equal to .95 EF)	\$1,500.00
Weatherization	Attic Insulation (R-0 to R-49)	75% of cost up to \$1200
	Attic Insulation (R-11 to R-49)	75% of cost up to \$1200
	Floor Insulation (R-0 to R-30)	75% of cost up to \$1200
	Wall Insulation (R-0 to R-13)	75% of cost up to \$1200
	Whole House Air Sealing	75% of cost up to \$1200
	Prescriptive Air Sealing – attic and crawl space	75% of cost up to \$1200
	Prescriptive Duct Sealing and Insulation	75% of cost up to \$1200
	Prescriptive Duct Sealing Only	75% of cost up to \$1200
	Energy Star Whole House Ventilation	75% of cost up to \$1200
	Home Performance with Energy Star Rebate	75% of cost up to \$1200
	Floor Insulation R-0 to R-22 – Manufactured Home	75% of cost up to \$1200
	Prescriptive Duct Sealing – Single Wide – Manufactured Home	\$450
	Prescriptive Duct Sealing – Double/Triple Wide – Manufactured Home	\$450
Windows	Upgrade single-pane wood or metal frame windows to a 0.30 U-factor or better.	\$200 per window
		up to \$2000 per structure
	Upgrade single-pane with wood or metal frame windows to a 0.30 U-factor or better – Manufactured Home	\$200 per window

Category	Measure	Incentive
MF HVAC	Electronic Line Voltage Thermostat	
	Smart Thermostat	Up to \$250.00 including installation. Not to exceed product cost
	Ductless Heat Pump	\$2,400.00
MF New Construction	Whole Building Incentives	Calculated \$.30/kWh
SF New Construction	Whole Home Incentive - 4 Star Built Green or equivalent	\$1,500
SF New Construction	Whole Home Incentive - 5 Star Built Green or equivalent	\$2,000

i. Duvall TDSM Natural Gas Measure Incentives

Measure	Measure	Incentive	
Demand Response	Smart Thermostat DR Water Heat DR Additional (TBD) DR Measures		
Controls	Smart Thermostat	Up to \$250.00 including installation. Not to exceed product cost.	
Heating	Energy Star® qualified Gas Furnace, 95% AFUE	\$600.00	
	Energy Star® qualified Boilers	\$1,350.00	
	(greater than or equal to 95% AFUE)		
	Integrated Space/Water Heating Systems with Energy Star® Tankless or Energy Star® Boiler	\$1,525.00	
Water Heating	.67 EF Tank Water Heater	\$150.00	
	.91 Tankless Water Heater	\$800.00	
Weatherization	Whole-House Air Sealing	75% of cost up to \$1200	
	Prescriptive Duct Sealing and Insulation	75% of cost up to \$1200	
	Prescriptive Duct Sealing Only	75% of cost up to \$1200	
	Prescriptive air sealing – attic and crawl space	75% of cost up to \$1200	
	Attic Insulation (R-0 to R-49)	75% of cost up to \$1200	
	Attic Insulation (R-11 to R-49)	75% of cost up to \$1200	
	Floor Insulation (R-0 to R-30)	75% of cost up to \$1200	
	Wall Insulation (R-0 to R-13)	75% of cost up to \$1200	
	Home Performance with Energy Star Rebate	75% of cost up to \$1200	
	Floor Insulation R-0 to R-22 – Manufactured Home	75% of cost up to \$1200	
	Prescriptive Duct Sealing – Single Wide – Manufactured Home	75% of cost up to \$1200	
	Prescriptive Duct Sealing – Double/Triple Wide – Manufactured Home	75% of cost up to \$1200	
Windows	Upgrade single-pane with wood or metal frame windows	\$200 per window	
	to a 0.30 U-factor or better.	up to \$2000 per structure	
	Upgrade single-pane with wood or metal frame windows	\$200 per window	
	to a 0.30 U-factor or better – Manufactured Home	up to \$2000 per structure	
MF HVAC	Smart Thermostat	\$250.00	
	Integrated Space/Water Heating Systems with Energy Star® Tankless or Energy Star® Boiler (In- Unit)	\$1,525.00	
	High Efficiency Natural Gas Fireplace (In-Unit)	\$550.00	
	Energy Star® qualified Boilers (In-Unit)	\$1,350.00	

	Energy Star® qualified Gas Furnace, 95% AFUE (In-Unit)	\$600.00
MF Water Heat	.90 EF Tank less Water Heater	\$800.00
	.67 EF Tank Water Heater	\$100.00
MF New Construction	Whole Building Incentives	Calculated \$5/Therm
SF New Construction	Whole Home Incentive - 4 Star Built Green or equivalent	\$1,500
SF New Construction	Whole Home Incentive - 5 Star Built Green or equivalent	\$2,000

Exhibit G: IT Security Questionnaire

Security Questionnaire Responses:

Do you have a SOC2 Type II audit report?	
Do you have a method of tokenizing/anonymizing customer data to eliminate storing identifying information?	
Do you require a credit card on file for a customer to register with your service?	
 Does your solution support encryption in transit for both browser<->server traffic and charger<->server traffic (TLS1.2/1.3 or SSH or VPN/IPSEC tunnel)? 	
Does your solution support encryption at rest (AES256 or better)?	
Does your solution support SSO for enterprise management users?	

Exhibit H: Bidder Pricing Instructions

Bidder Pricing Instructions

For

Request for Proposals (RFP)

Technology and Implementation Services

In support of

Puget Sound Energy (PSE)
Targeted Demand Side Management (TDSM) Program

Pricing Instructions

Bidder should provide pricing for the collective products and services being offered in sufficient detail such that PSE will understand precisely what is being proposed and how much the proposed products and services will cost. Bidders should provide this pricing information with the understanding that products and services must achieve the following:

- 1. All items listed in Section 3.1 for Vendor Responsibilities under Roles and Responsibilities
- 2. The Objectives of PSE's TDSM Resources identified in Section 2.2.

Firm pricing should be provided for a five-year term as indicated in this pricing section.

A. 1	A. Pricing Summary			
	Summary of pricing proposal	Provide a brief summary of your complete pricing proposal, giving an overview of the price per kW-year delivered, any other charges to PSE, and any caveats or further explanation needed for PSE to understand the cost of selecting your firm for the desired products and services. This summary could include summary cost figures as appropriate (e.g., illustrating cost to PSE over the five-year contract) and should assist PSE in understanding the detailed pricing in the following information request items. Bidders are encouraged to limit their responses to as short as necessary to provide clarity to your pricing proposal.		

B. Pricing for Winter Capacity

 Pricing for Peak Winter Curtailment Capacity in Fulfillment of PSE's Objectives (in reference to Section 2.2 of the main RFP document)

> (for meeting winter capacity requirements with an hour ahead notification)

Under this item, bidders should provide pricing for meeting winter capacity requirements with hour-ahead notification, in fulfillment of PSE's Objectives, as stated in Section 2.3 of the main RFP document.

<u>Important</u>: Assume that megawatt curtailment levels shall be calculated as described in Section 2.2 of the RFP.

Capacity Charge. In the table below, provide pricing for winter peak load reduction capacity from 2021 to 2025. ¹⁰ Pricing should be in terms of \$ per kW-year. Note that the winter capacity amounts indicated below should be the same as what you indicated in Section 4.1 Table G2 of the main RFP document. ¹¹

Year	Winter Peak Curtailment Capacity	Capacity Charge (\$/kW-year)
	(MW from Section 4.1 Table G2)	(excluding customer incentives)
2021		
2022		
2023		
2024		
2025		

Customer Incentives. Note that PSE will be administering the incentive directly to the customer. Indicate in the table below the proposed incentive level (based on your judgement/industry expertise) that would be necessary/sufficient to attain the MW curtailment amounts you provided in the previous table. PSE intends to negotiate payment terms with the selected bidder such that payments to bidder will be reduced if the incentive payments required to attract participation are higher than proposed here; conversely, if bidder's marketing/delivery efforts result in participation at lower incentive levels, PSE will share some of the cost savings.

Total Cost. In the final column, provide the total cost to PSE, which includes the capacity charges indicated in the previous table, plus the customer incentives.

	Customer	Total Cost (\$/kW-	
Year	Per Participant Annual Incentive (\$/participant)	Normalized ¹² Incentive based on delivered capacity (\$/kW-yr.)	yr.), Capacity Charge plus Incentive
2021			
2022			
2023			
2024			
2025			

¹⁰ Winter capacity for 2021 covers November 1, 2021 to February 28, 2022; winter capacity for 2025 covers November 1, 2025 to February 29, 2026.

¹¹ Per the main RFP document, PSE seeks bidders' best pricing that meets PSE's objectives discussed in Section 2.3.

¹² Provide the equivalent \$/kW-yr. incentive cost based on normalization of the incentive amount by the delivered capacity.

2.	Summary Costs by Year
	for Winter Curtailment
	Capacity

Provide a summary of total costs corresponding to the winter capacity rollout indicated under Item#1 earlier in this table. These costs should include capacity charges, customer incentives, and any "other pricing elements" from Table C2 below. Bidder's pricing proposal contained in this document should be of sufficient detail that PSE can recreate the pricing figures contained in this table for each year.

Costs in \$1000s

	2021	2022	2023	2024	2025	Total
Winter MW*						N/A
Total Costs						

^{*}Note that the winter MWs indicated in this table should match the figures presented earlier under Item#1 in this table.

3. Estimated Breakdown of Costs by Category

Provide an estimated breakdown of the total costs (as indicated under the "Total" value presented in the Costs Summary Table under Item#2 above) for providing winter curtailment capacity by category using the table below. Provide major assumptions and describe the rationale for this allocation of costs including the possible need to provide one-time and/or recurring customer incentives, required maintenance schedules, etc. Please identify any costs included in the "Other" category.

Cost Category	Percent of Total
Program Startup Costs	
Software Licensing	
Marketing/Recruitment	
Equipment Capital	
Equipment Installation	
Equipment Maintenance	
Participant Incentives	
Customer Service	
Tracking and Reporting, M&V	
Other (please specify)	
Total	100%

 Other pricing elements or pricing for optional equipment and services (Optional) Describe any additional or alternative pricing structures being proposed, as listed below:

- Additional MW. Indicate your pricing and the associated MW amounts for providing additional curtailment with hour-ahead notification above/beyond the minimum proposed amount indicated in Table B1 above.
- Indicate if you propose \$/kWh incentive payment to customers along with the \$/kW-yr. incentive payment.
- Also include pricing for additional value added products/services that you included in your response in Section 4.1, Table E Item #4 of the main RFP document.

In general, PSE prefers to have all costs encompassed in the Capacity Charge. However, we recognize that vendors may have valid reasons for alternative pricing arrangements, or may provide optional services that could be priced separately or that could raise the Capacity Charge above the base price proposed above.