EXH. WTE-6 DOCKET UE-20\_\_\_ 2020 PSE PCORC WITNESS: WILLIAM T. EINSTEIN

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

Docket UE-20\_\_\_\_

PUGET SOUND ENERGY,

Respondent.

# FIFTH EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF

WILLIAM T. EINSTEIN

ON BEHALF OF PUGET SOUND ENERGY

**DECEMBER 9, 2020** 



August 31, 2015

Hello:

Puget Sound Energy invites you to participate in a Request for Information survey regarding small and local Renewable Energy Resources.

As background, PSE is headquartered in Bellevue, Washington and serves approximately 1.1 million electric customers and more than 760,000 natural gas customers in 10 counties in Washington State. A service territory map is included at the end of this note. Washington's investor owned utilities are vertically integrated and regulated by the Washington Utilities and Transportation Commission (UTC). The state has a renewable portfolio standard from I-937; however this RFI is regarding resources additional to the RPS.

The primary objective of this RFI is to provide PSE with potential size, cost and availability of small, local renewable energy projects capable of delivering energy to the PSE distribution network. Responses will help PSE to identify potential sources of supply with which PSE may consider establishing one or more sourcing relationships to support future renewable energy procurement strategy in support of evolving customer needs.

The RFI has two categories, the first being open to all ideas. The resources desired include solar photovoltaic, wind, biogas from a naerobic digester and landfills, and low-impact micro hydro. The second category is for solar photovoltaic only located on three properties owned by PSE.

This process is separate from an All Source RFP that is expected to be published in early 2016, as required by the Washington Administrative Code, WAC 480-107.

PLEASE NOTE THAT THIS NOTICE AND THE RELATED REQUESTS FOR INFORMATION SHOULD NOT BE CONSIDERED A REQUEST FOR PROPOSAL, AND NOTHING IN THIS NOTICE, THE SURVEY OR THE SPECIFICATIONS OBLIGATES PSE TO ISSUE ANY SUCH SOLICITATIONS NOW OR IN THE FUTURE OR TO CONSIDER ANY UNSOLICITED RESPONSES. FURTHER, PSE MAINTAINS NO OBLIGATION TO REIMBURSE RESPONDENT FOR ANY COSTS INCURRED IN ASSOCIATION WITH THIS RFI.

For more information about Puget Sound Energy, visit <a href="www.PSE.com">www.PSE.com</a>.

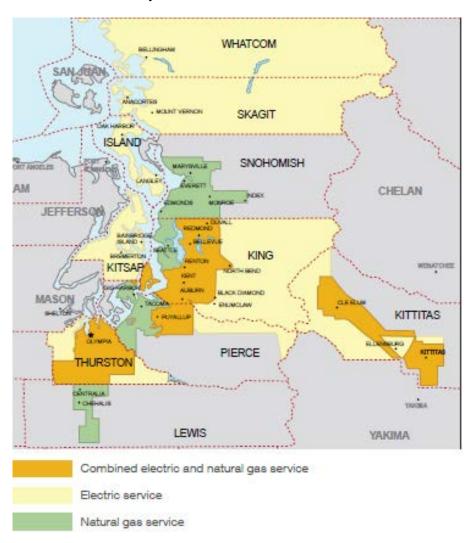
We look forward to your survey response and thank you for your company's participation.

Cordially,

Pam Mead, Senior Purchaser Puget Sound Energy

(425) 456-2409 – phone (425) 456-2706 – fax Pamela.mead@pse.com

# PSE Service Territory





## REQUEST FOR PROPOSAL

**FOR** 

# New RENEWABLE ENERGY RESOURCES

September 21, 2015

#### 1. REQUEST FOR INFORMATION-PURPOSE AND SCOPE

#### 1.1 Purpose

Puget Sound Energy (PSE), headquartered in Bellevue, Washington, is conducting a Renewable Energy Market Survey through this Request for Information ("RFI").

PSE is requesting information in two categories:

- CATEGORY 1: Potential small (under 10MW), local projects, capable of supplying electricity generated from various renewable energy resources, including: solar; wind; biogas from landfill or anaerobic digesters; and micro hydro that would be eligible for Low Impact Hydroelectric Institute (LIHI) certification. Project must be located within PSE's balancing authority area aka service area.
- CATEGORY 2: Solar Photovoltaic (PV) projects that could be sited on property that PSE currently owns.

As a result of this RFI, PSE expects to better understand the size, cost, and availability of local renewable energy resources. PSE may or may not explore further options based on these responses.

This RFI does not obligate PSE or any parties to negotiate or discuss a Power Purchase Agreement (PPA).

Qualifying participants to this survey may elect to submit information on either Category 1, Category 2, or both Categories. A separate Response form must be submitted for each project.

#### 1.2 CATEGORY 1: Primary RFI Objective Small, Local Renewable Energy Resources

The primary objective of this RFI is to provide PSE with potential size, cost and availability of small, local renewable energy projects capable of delivering energy to the PSE distribution network. Responses will help PSE to identify potential sources of supply with which PSE may consider establishing one or more sourcing relationships to support future renewable energy procurement strategy.

#### 1.2.1 CATEGORY 1: Response Criteria

Those responding to the RFI Survey for CATEGORY1 Small, Local Renewable Energy Resources must meet the following requirements:

- Resources Eligible resources are limited to: solar, wind, biogas from landfill or anaerobic digesters, or micro hydro that would be eligible for Low Impact Hydroelectric Institute (LIHI) certification.
- Generating Capacity 100 kW to 10 MW for any one project.
- Pricing Pricing may be for energy and renewable energy certificates (RECs) on a megawatt-hour (MWH) basis, or the price may be based on the sale of the project ("Turnkey") to PSE. Expected costs for interconnection should be listed separately.
- Term The project term proposed should be clearly defined.
- Location must be located in PSE's Balancing Authority Area

#### 1.3 CATEGORY 2: Projects Located on PSE-owned Property

This category focuses on potential solar PV projects to be sited on property that PSE currently owns. There are three sites which are further detailed in Appendix A.

#### 1.3.1 CATEGORY 2: Response criteria:

Those responding to RFI Survey for Category 2 Projects to be located on PSE property must meet the following requirements:

- Projects must be located on one of these 3 Locations :
  - o Thorpe ~5 acres
  - Wild Horse Wind Facility ~2,000 acres
  - Goldendale Generating Station ~TBD acres
- Resources Eligible resources are limited to solar
- Generating Capacity No constraints.
- Pricing Pricing for energy and renewable energy certificates on a megawatt-hour (MWH) basis, or the
  price may be based on the sale of the project ("Turnkey") to PSE. Expected costs for interconnection
  should be listed separately.
- Term The project term proposed should be clearly defined

#### 2. RFI SCHEDULE AND SUBMITTAL

RFI Issued: September 21, 2015

Responses due: October 16, 2015 4:00 p.m.

#### 3. GENERAL GUIDELINES

#### 3.1 Confidentiality

**Individual information provided will be treated as confidential.** As stated previously, the purpose of the RFI is to ascertain the availability of different renewable energy resources at different price levels. Collectively this information may be shared with PSE's customers on a generic (non-identifiable) basis; no Personally Identifiable Information (PII) will be published.

In conjunction with your response to this RFI, please complete and sign the attached Mutual Non-Disclosure Agreement (NDA) Attachment) and return with your response. Those submittals lacking in a signed NDA may not be taken into consideration.

By completing and returning this survey, your company agrees that it will take all appropriate action to ensure the confidentiality and security of, and not disclose or release to any third party, any of PSE's information contained in or referenced in this survey or provided through other means during the course of the survey process.

Unless your company has PSE's prior written permission, it will not (1) associate your company's products or services with PSE or PSE's operations or (2) represent to anyone that PSE has employed or endorsed your company's products or services.

#### 3.2 Limitation of Liability

Under all circumstances, each Respondent is responsible for all costs and expenses it incurs in connection with the RFI process. Under no circumstances, including termination of the RFI process at any time, will PSE be responsible for any costs or expenses of any Respondent incurred in connection with the RFI process.

#### 3.3 Production Tax Credits, Renewable Tax Credits, Grants and Other Credits

Respondents anticipating using subsidies, grants, Production Tax Credits ("PTCs") state or Federal, sales tax exemptions, or any other third-party monetary benefits shall detail finances associated with such monetary benefits and discuss how such funding or lack of funding shall impact their response. All environmental attributes, typically referred to as "Renewable Energy Certificates" ("RECs") and associated with the total production of renewable energy, shall be included in the response.

#### 4. RFI RESPONSE EVALUATION

#### **Initial Response Review**

PSE will perform an initial review of each response to determine if all required information has been provided. Each response must have clear and complete pricing and other required information and propose terms reflecting the Delivery Point noted in Section 1.2.

PSE understands and expects that some responses will include projects that are "shovel ready" while other projects will be more "theoretical." PSE may request more detailed information to determine the value of the project; however the purpose is to achieve a high-level understanding of developers' interests and views.

#### 5. INSTRUCTIONS TO RESPONDENTS

**5.1 Format**: Attachment 2 provides the format which respondent must use to submit their Survey response. In order to facilitate Puget Sound Energy's review of the submitted Survey Responses, Respondents are required to provide the requested information in the specific format set forth in Attachment 2 Response Format. This will aid the project team in their efforts to efficiently evaluate the survey responses. Reponses that deviate from the requested format will increase the time required to review and evaluate its contents and may not be reviewed.

Responses should be tailored specifically to answer this RFI Response format. High-level "sales" material should not be used within the body of the response. If desired, Suppliers may attach such material in a separate appendix. It is essential that the response be thorough, and yet concise. Avoid broad, unenforceable, or unmeasurable responses.

#### 5.2 Submittals

Submitted documents must be Electronic (via e-mail) and should be sent as an attached Microsoft Word, Excel or Adobe PDF document. Please note that our e-mail server will not accept e-mails over 10MB or containing .zip files. Send to:

Cecily.scott@pse.com Thomas.maclean@pse.com Heather.mulligan@pse.com

Your email should be labeled:

Subject: Renewable Energy Market Assessment RFI, Category (1) or (2) or both (1,2), XYZ Company (your company name)

## 5.3 Supplemental documents attached:

- Appendix A PSE Site Detail, Category 2 (Supplemental information for CATEGORY 2 responses)
- Attachment 1 Non-Disclosure Agreement (Sign and return with submittal)
- Attachment 2 Response Form (Complete -1-Response Form per project)

#### 5.4 Questions

For the purposes of this RFI no further questions will be answered regarding the RFI content. Upon reading the responses, PSE many or may not reach out for further information or clarification. At this time no further action(s) have been identified as a result of your response.

# **Response Format**

Identify category:	
Category 1:Small, Local, Renewable Energy Resource	
Category 2: PSE Premises	
Submitted by(Name of person submitting)	_
Company Name:	_
Title: (Owner, Developer, etc.)	
City, State, Zip	
EmailPhone	_

#### 1. Background:

- a. Please provide a brief general overview of your firm. That is, size, location(s), operations overview, etc.
- b. Experience of respondent's company and staff with technology, development, operations and maintenance.
- c. Identity number of employees and role(s)
- d. Project status: Under development, seeking funding, etc.
- e. Number of years in business

#### 2. Project and Site

- a. Project description includes names and locations, technology and brands or vendors where appropriate.
- b. Timeline Site control, project design, permitting, equipment procurement, construction, etc.
- c. Point of interconnection to PSE
- d. Site Control location map
- e. Commercial operation date (COD).
- f. Environmental issues Site-specific environmental considerations.

#### 3. Technology

- a. Overview of technology, inverters, controls and safety
- b. Nameplate capacity of facility MVA (AC) This is needed to address power factor of generation. Maximum technical connection is 4,999 MVA.
- c. Maximum output of facility MW when different than nameplate capacity
- d. Monthly and Annual expected output in MWh showing any degradation over time

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#### 4. Financial

- a. Term Length of contract
- b. Pricing
  - o For energy and renewable energy certificates on a \$/MWh basis; or
  - For purchase by PSE of a turnkey project with ongoing costs such as O&M and leases.
- c. Identify subsidies, grants, Production Tax Credits ("PTCs") state or Federal, sales tax exemptions, any other third-party monetary benefits, etc.

#### **APPENDIX A**

Site Descriptions

#### 1. Wild Horse

The Wild Horse Wind & Solar Facility (Wild Horse) is located on approximately 11,000 acres of rangeland in the Whiskey Dick Mountain area of eastern Kittitas County, approximately 16 miles from Ellensburg, WA. The project lies within an area comprised of shrub-steppe habitat spanning several ridges and canyons. The elevation ranges over the site from approximately 2,600 ft. to 3,600 ft. and winds blow from the west-northwest over the site. To the west of the site is the Kittitas Valley at an elevation of under 2,000 ft. To the east of the site the land slopes down to the Columbia River at an elevation of about 500 ft. Shrub-steppe is used part of the year for cattle grazing, and is also considered sensitive habitat for plants and animals.

Wild Horse consists of 149 wind turbines with a maximum aggregate electrical capacity of 273 MW, an underground 34.5 kV power collection system, a 34.5 kV/230 kV on-site electrical substation, an approximately eight mile transmission line to the point of interconnection, a Supervisory Control And Data Acquisition system ("SCADA"), a network of gravel and/or paved roads sufficient for access and long-term maintenance, a visitor center, and an on-site operation and maintenance center and staff. In addition, the site consists of a 450 kW solar demonstration facility located on top of Whiskey Dick Mountain and a 50 kW solar demonstration facility located adjacent to the visitor center.

The area(s) available for additional solar energy generation is approximately 2,000 acres and is confined to those areas of the property identified on the attached map from the Conservation Easement Agreement (Exhibit B). The available area is comprised of the identified portions of: Sections 9 and 4 of Township 17 North, Range 21 East and Sections 33 and 29 of Township 18 North, Range 21 East. These areas consist primarily of deep canyons flanked by broad open-top, south-facing ridges with shallow, rocky soils and low-lying shrubs and native grasses.

#### 2. Goldendale

The Goldendale Generating Station is located within the city limits of Goldendale, Washington, in Klickitat County about 220 miles southeast of Seattle. It is roughly 10 miles north of the Columbia River and the Washington-Oregon border. The elevation at Goldendale is approximately 1700 feet.

The Goldendale Generating Station is a 277 MW combined-cycle power plant. The power plant is generally operated in a base-load mode with some seasonal fluctuations. The plant is typically base-loaded during the summer and winter, while in the fall and spring the plant is cycled to meet market demands.

The Goldendale Generating Station came online in 2004. Puget Sound Energy purchased the station in March 2007.

The area available for solar is approximately 140 acres of open pastureland.

## 3. Thorpe

Thorpe sits along Interstate 90 in Kittitas County between Cle Elum and Ellensburg. PSE has an office north of I-90 and a pole yard on the south side of I-90. Adjacent to the pole yard PSE has 5 acres of flat pastureland available. The address is 9655 Thorpe Highway N, Thorpe WA, 98946.

