

Integrated Resource Plan Technical Advisory Group

Draft Charter June 2018

This charter outlines the charge of and expectations for the Puget Sound Energy (PSE) Integrated Resource Plan Technical Advisory Group (TAG). The TAG members will review, provide feedback on, and affirm this charter at their first meeting.

ABOUT THE INTEGRATED RESOURCE PLAN

An Integrated Resource Plan (IRP) is a utility plan for meeting forecasted annual peak energy demand—plus some established reserve margin—through a combination of energy supply, conservation, and other demand-side resources.

Washington Utility and Transportation Commission (WUTC) requires PSE to submit an IRP on a biennial basis, consistent with WAC 480-100-238 and WAC 480-90-238. Every two years, a team of in-house economists, energy specialists, environmental advocates, demographers, and other experts develops a new IRP. PSE knows these forecasts will change as conditions change.

The IRP:

- Examines the many energy-resource options available to PSE, including the maximum amount of new energy supply PSE can acquire through energy efficiency
- Makes a thorough, objective assessment of the benefits, costs, and risks associated with each energy-supply option
- Analyzes the region's population and economic trends, including a forecast of PSE customers' natural gas and electricity needs two decades into the future
- Evaluates political and economic policies and trends and their potential impact on energy production, usage, and availability
- Assesses commercially available conservation, including load management, as well as assessing currently employed and new policies and programs needed to obtain the conservation improvements
- Considers resource cost, market volatility risks, demand-side resource uncertainties, resource dispatchability, resource effects on system operation, risks imposed on ratepayers, public policies regarding resource preference adopted by Washington state or the federal government, and cost of risks associated with environmental effects including emissions of carbon dioxide

CHARGE OF THE TECHNICAL ADVISORY GROUP

TAG members have technical expertise in energy resourcing, transmission, utilities, conservation, and economics. They consider stakeholder input and other information sources in providing recommendations to PSE. TAG members represent a balance of industry and conservation expertise.

The members of the TAG are charged with providing input on:

- Conservation
- Electric resource costs and performance assumptions
- Natural gas resource costs and performance assumptions
- Resource adequacy modeling and effective load carrying capability (ELCC)
- Local system planning: transmission and distribution
- Portfolio analysis
- Sub-hourly portfolio flexibility analysis
- Other topics that may emerge as part of the IRP process

In addition to the TAG, there will be an Integrated Resource Plan Advisory Group (IRPAG). The TAG will have an opportunity to review IRPAG input and consider it in their feedback to PSE. In the interest of full transparency, IRPAG members may observe, but not participate in TAG meetings.

MEMBERSHIP

Membership in the TAG is by invitation only and at PSE's discretion. PSE will select TAG members based on defined criteria, including:

- Competencies or work experience in one or more items for input in the section above
- Demonstrated ability to contribute productively in a group setting

The following organizations will be invited to nominate specific individuals to participate in each TAG. Individual members may, with prior PSE agreement, send a proxy to a TAG meeting.

- Alliance of Western Energy Consumers
- Office of the Attorney General Public Counsel Unit
- Climate Solutions
- County and local governmental agencies from throughout PSE's service territory
- Individual or groups of tribes from throughout PSE's service territory
- Invenergy
- The NESCO Group
- Northwest Energy Coalition
- Northwest Gas Association
- Northwest Pipeline
- Northwest Power Consulting
- The Northwest Power and Conservation Council

- Orion Renewable Energy Group
- Puget Sound Energy Conservation Resource Advisory Group (CRAG)
- Renewable Energy Coalition
- Renewable Northwest Project
- The Sierra Club
- UniEnergy Technologies, LLC
- The Washington State Department of Commerce
- Washington Utilities and Transportation Commission

In addition to the organizations listed above, PSE will consider individuals and representatives from other organizations provided they have technical competencies and experience in the material addressed by the TAG.

ROLES AND RESPONSIBILITIES

TAG members will:

- Serve as subject-matter experts
- Participate in TAG meetings between July 2018 and June 2019
- Review background materials in advance of meetings, including stakeholder input from IRPAG meetings
- Engage in positive, productive communication with other TAG members, facilitator, and project team members
- Review and provide written comments on the draft IRP
- Communicate disagreement respectfully

The facilitator will:

- Create meeting structures and lead meetings in ways that provide all TAG members a meaningful opportunity to participate in discussions
- Remind TAG members of their charge, roles, and responsibilities
- Keep meetings focused on the agenda
- Work with the project team to prepare meeting agendas
- Start and end meetings on time, unless the TAG agrees by unanimous vote to extend the meeting time

The project team will:

- Provide background materials, presentations, and data to TAG members in advance of meetings to inform their input
- Be present and available at TAG meetings to answer questions and inform the discussion
- Coordinate meeting logistics
- Hold all meetings at transit- and ADA-accessible venues
- Provide call-in options for TAG members who are unable to participate in person
- Summarize the outcomes of the TAG meetings in meeting summaries and distribute draft summaries to TAG members for review within three weeks of the meeting
- Post final versions of the meeting summaries online

MEETING GUIDELINES

- The facilitator will make it possible for all TAG members to ask questions and provide comments that pertain to the agenda items being discussed.
- Discussions will allow for respectful disagreement.
- Meetings will begin and end on time. If agenda items cannot be completed on time, the TAG can decide by majority agreement to extend the meeting.
- At the meetings, TAG members will:
 - Share the available speaking time
 - Focus on successfully completing the agreed-upon agenda
 - o Avoid side discussions when others are speaking
 - Voice concerns and complaints at the meeting, not outside the meeting
 - Put cell phones on silent
- Persons who are not members of the TAG may attend meetings as observers, but may not participate in group discussion and deliberations unless called upon by the facilitator.
- The public will be able to attend the meetings.

MEETING SUMMARIES

- The project team will prepare a written summary of the discussion and comments following each meeting.
- Meeting summaries will describe areas of agreement and disagreement and clarify where and why there is a disagreement.
- The meeting summaries will state all points of view clearly and fairly.
- PSE will distribute a draft meeting summary to TAG members for review within two weeks of the meeting.
- The project team will post final versions of the meeting summaries online.

COMMUNICATIONS

In the interest of streamlining communications, Michele Kvam (or her delegate), will serve as the arbiter of communications between the project team and the TAG. Outside of meetings, if a TAG member would like to communicate with the rest of the group, they may send Michele an email (<u>michele.kvam@pse.com</u>) for distribution to the TAG. All TAG materials will be available online at <u>www.pse.com/irp</u>.

TAG members should not represent themselves as speaking for the TAG unless directed by the group to do so. TAG members should not represent themselves as speaking for PSE under any circumstances. This working rule in no way restricts individual TAG members, in their capacity as community members, from interacting with elected officials, the media, or community organizations.

PRELIMINARY MEETING SHEDULE

Meeting	Content
Meeting #1 July 26, 2018	 <u>Electric Resource Costs</u> Present overview of updated IRP public and stakeholder participation process Review outcomes of stakeholder input from IRPAG kickoff meeting (May 30, 2018) Present how resource costs are used in the IRP Review draft cost results by resource type and provide feedback
Meeting #2 Mid- to late September 2018	Preliminary Power and Natural Gas Prices and Natural Gas Resource Alternatives and Costs F18 Load Forecast • How the load forecast is used in the IRP • Temperatures utilized • Methodology and challenges • Results Power Prices • Present methodology concerning development of power prices • Present draft power prices • Present methodology concerning development of power prices • Present draft power prices • Present methodology concerning development of power prices • Present draft power prices • Bresent methodology concerning development of power prices • Present draft power prices • Bresent methodology concerning development of power prices • Present draft power prices
Meeting #3 Late October 2018	 <u>Resource Needs, Resource Adequacy Modeling, and Effective Load</u> <u>Carrying Capability (ELCC)</u> Review updated electric and gas utility load forecast results and methodology Review resource adequacy models and analytical processes, along with results Review ELCC analysis for intermittent resources, energy limited resources, and short-term wholesale market Review reexamination of PSE's gas planning standard and forecast of gas resource needs Review electric resource needs: capacity, energy, and renewable
Meeting #4 Mid-November 2018	 <u>Conservation</u> Presentation of draft potential assessment results

Meeting	Content
Meeting #5 Late November 2018 Meeting #6 Mid-December 2018	Transmission and Distribution • Review system planning assumptions • Review T&D stakeholder process Sub-Hourly Flexibility Value of Different Resources • Overview of how results of this analysis feed into the portfolio modeling • Sub-hourly analytical framework, models, and key assumptions • Results of analysis for each alternative examined
Meeting #7 Early to mid- February 2019	 <u>Portfolio Analysis Results (Gas and Electric)</u> Detailed overview of electric and gas utility portfolio models Results of portfolio optimization analysis for all scenarios Overview and results of stochastic risk analysis Detailed overview of gas portfolio model Results of optimization analysis for all scenarios Next Steps
Meeting #8 Mid- May 2019	 <u>Draft IRP</u> Present high level results of the 2019 IRP Collect feedback on the draft and request any comment within two weeks of the publication of the draft