RESOURCE ADEQUACY PROGRAM

STAKEHOLDER ADVISORY

COMMITTEE

January 27, 2020 1:00 - 4:30 pm

NWPP Offices - Portland, Oregon



AGENDA

- Introductions and Resource Adequacy
 Project Overview
- Purpose and Role of the Stakeholder Advisory Committee
- Resource Adequacy Program and Preliminary Design Overview
- > Future Meeting Topics and 2020
 Meeting Schedule

OVERVIEW OF THE NWPP AND THE RESOURCE ADEQUACY PROGRAM DEVELOPMENT PROJECT

PRESENTER: FRANK AFRANJI (PRESIDENT NWPP)



What is the Northwest Power Pool?

- The Northwest Power Pool (NWPP) Corporation assures Member organizations achieve maximum benefits of coordinated operations
- Core values: customer-driven, relationship-based, independent and operating with great integrity

WHAT IS THE NORTHWEST POWER POOL?

> The NWPP Membership is a voluntary organization and is made up of the following members:

Members include:

 Alberta Electric System Operator, Avangrid, Avista, BANC, BC Hydro, BPA, Calpine, Chelan PUD, Columbia Grid, Cowlitz PUD, Douglas County PUD, Energy Keepers, Inc. EWEB, Fortis BC, Grant PUD, Grid Force, Idaho Power, NaturEner, NorthWestern Energy, NV Energy, PacifiCorp, Pend Orielle PUD, Perennial Power, PGE, Powerex, Xcel Energy, Puget Sound Energy, Seattle City Light, Snohomish County PUD, Tacoma Power, Turlock Irrigation District, US Army Corps of Engineers, US Department of the Interior Bureau of Reclamation, Western Area Power Administration.

WHY THE NORTHWEST POWER POOL?

- The Northwest Power Pool was established in 1941 and since that time has been coordinating resources to maximize efficient electricity production
- The NWPP today coordinates a number of different programs essential to the reliable operation of the NW power grid including:

Reserve sharing program

Pacific Northwest Coordination Agreement

Western Frequency Response Sharing Group



RESOURCE ADEQUACY PROGRAM DEVELOPMENT

OVERVIEW

Background/Identified Needs

- > The NWPP report: Exploring a Resource Adequacy Program in the Northwest, 2019 includes two primary conclusions:
 - 1. The region may begin to experience shortages as soon as next year
 - 2. By the mid-2020s, the region may face a capacity deficit of thousands of megawatts. Deficits of that magnitude may result in both extraordinary price volatility and unacceptable loss-of-load
- As a result of this analysis, the NWPP and its member utilities are moving forward to design an RA program for NWPP member utilities



RESOURCE ADEQUACY PROGRAM DEVELOPMEN T

Program Participants

 A total of 18 NWPP members have committed to fund the next phase of the program's development

Funding members include:

Avista, B.C. Hydro/Powerex, BPA, Chelan PUD, Douglas PUD, EWEB, Grant PUD, Idaho Power, Northwestern Energy, NV Energy, PacifiCorp, Portland General Electric, Puget Sound Energy, SMUD/Banc, Seattle City Light, Snohomish PUD, Tacoma Power, Turlock Irrigation District



RESOURCE ADEQUACY PROGRAM DEVELOPMEN T

How will the RA program function?

- Resource Adequacy looks out 1 4 years to ensure adequate resource capability is available to meet customer demand
- In a large portion of the NWPP footprint, utilities manage Resource Adequacy individually and with different methods. An RA Program would allow utilities to forecast and manage Resource Adequacy rogram Development Project in a coordinated manner
- > The RA program will respect local autonomy over investment decisions and operations and will continue to respect the rights and characteristics of individual utilities, transmission service providers, BAs and other entities
- The RA Program will be voluntary to join, but once a utility joins, it will be contractually committed to the requirements of the RA Program

STAKEHOLDER ADVISORY COMMITTEE

Presenters: Sarah Edmonds (Portland General Electric) Susan Ackerman (EWEB)



PURPOSE/ROLE

- Stakeholder engagement is essential to the success of this effort
- > Stakeholder committee is advisory to the NWPP RA program steering committee, members will bring expertise/unique perspectives of their organizations to provide feedback to steering committee on program design
- Stakeholder advisory committee may socialize/communicate with their sectors regarding program design



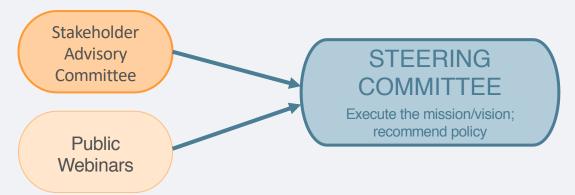
EXECUTIVE COMMITTTEE

Set mission/vision; approve policy decisions

EXECUTIVE ADVISORY COMMITTTEE

Sounding board / program champions

FRANK AFRANJI





RESOURCE ADEQUACY PROGRAM AND PRELIMINARY DESIGN OVERVIEW

PRESENTERS: CATHY KIM (PORTLAND GENERAL ELECTRIC)
GREGG CARRINGTON (CHELAN PUD)



PROJECT

OVERVIEW OF PROJECT TIMELINE

Phase 1: Information Gathering (concluded Oct. 2019) Phase 2A:
Preliminary
Design
Phase
(Early
2020)

Phase 2B: Detailed Design (Late 2020) Phase 3: Implement ation Work (2021)

Preliminary Design:

- INARY
- PHASE 2A

- » Proposal for RA Program entity type and organizational structure and governance
- » Technical design elements options identified, analyzed, and proposed
- Stakeholder engagement: create stakeholder advisory committee and hold public webinars
- Phase is completed when: NWPP funding members sign on to preliminary program design proposal and agree to fund Phase 2B: Detailed Design



STEERING COMMITTEE CHARTER PROGRAM DESIGN OBJECTIVES

- 1. Ensure that Balancing Authorities (BAs) and Load Serving Entities (LSEs) can continue to operate safely, efficiently, and reliably
- 2. Ensure that the recommended RA Program and its components delivers investment savings through diversity benefits
- 3. Ensure RA Program respects local autonomy over investment decisions and operations and continues to respect the rights and characteristics of individual utilities, transmission service providers, BAs and other entities through program design

STEERING COMMITTEE CHARTER - PROGRAM DESIGN OBJECTIVES

- 4. Make recommendations that are acceptable within the current and evolving regulations and requirements of each applicable federal, state, and local jurisdiction
- 5. Ensure that the participation, evaluation and qualification of resources is technology neutral
- 6. Ensure that all products and services transacted to meet the requirements of the RA Program are well defined, voluntarily transacted through existing competitive market frameworks and accurately tracked

STEERING COMMITTEE CHARTER PROGRAM DESIGN OBJECTIVES

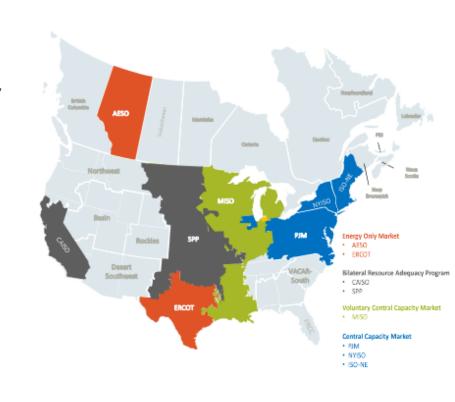
- 7. Ensure that the proposed RA Program can be extended to other regions in the West
- 8. Ensure that entities that voluntarily choose to participate in the RA Program equitably pay and receive benefits for services provided by the program
- 9. Ensure the RA Program provides efficient long-term investment signals as well as a process for exit and entry of resources

Steering Committee Effort

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PROGRAM DESIGN ELEMENTS

- A program design element work group was formed from the Steering Committee (SC) members to identify key program design elements
- The working group reviewed and compared RA requirements in other North American RA markets and capacity programs
- Key RA program design elements were identified, defined and evaluated around the unique elements specific to the NWPP
 Mregion



Steering Committee Effort

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PROGRAM DESIGN ELEMENTS

- The initial focus was to compare and contrast these identified design elements, referencing the CAISO and SPP RA programs
- The SC group held several face-toface meetings to further understand and investigate into these design elements that will be incorporated into our detailed modelling design (Phase 2B) and final NWPP RA program



EVALUATING THE RA FRAMEWORK

Program Participation	Program Design	Program Administration	Structural Framework	Regulatory Framework
NWPP footprintBA/LSEs,	Standardized regional RA metrics	Centralized entity administrating		> Ensuring regulation meets state
IPPs, IOUs, PUDs	Forward showing period	and executing the RA program > Validates annual	and government structure	and federal jurisdiction Regulators
Voluntary entry and program	> Rules and bylaws	showings and deficiencies		and stakeholders gain insight
commitment Compliance	Operating program to unlock diversity	> Enforces the program		into the regions RA
obligation	benefits/ investment savings	Includes an independent evaluator process		position



NEXT STEPS IN PHASE 2A

Meet RA Industry Experts Structural and Legal Review

Review and update initial modelling efforts

Incorporate Advisory Committee feedback Finalizing
Key RA
Design
Elements &
Operational
Benefits

Prep for Key Decisions for next phase funding, RFPs (Program Administrator, Detailed Design model, Independent Program Evaluator)

SEE HANDOUT



QUESTIONS?



FUTURE MEETING TOPICS AND SCHEDULE

PRESENTERS: SARAH EDMONDS (PORTLAND GENERAL ELECTRIC) SUSAN ACKERMAN (EWEB)



FUTURE MEETING TOPICS

- Steering Committee straw proposal on program design elements
- Specialized work groups: topics, timing, scope of work
- Topics for follow-up discussion from today's meeting?
- > What else?

2020 ADVISORY COMMITTEE MEETING SCHEDULE

- 5 meetings in 2020: Jan, April, June,
 September, December
- > April: week of 6-10th
- > June: week of 15-19th
- > September: week of 14-18th
- > December: week of 14-18th

THANK YOU

