NWPP RESOURCE ADEQUACY *UPDATE: OPUC WORKSHOP (UM* 2024)

AUGUST 20, 2020 1:00 – 1:20 OVERVIEW OF NWPP REGIONAL RESOURCE ADEQUACY PROGRAM EFFORTS

Frank Afranji, NWPP Scott Kinney, Avista





oThe NWPP Resource Adequacy (RA) effort is seeking to establish a regional RA program which will span the footprint of the member companies across the West oCurrently, 19 funders of NWPP RA effort: Avista, B.C. Hydro/Powerex, BPA, Calpine, 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

The effort is structured on the premise that only the companies that yo choose to be a part of the pregram will be subject to its requirements

BENEFITS OF A REGIONAL RA PROGRAM

TRANSPARENCY

Transparent determination of adequacy >>

- **Regional information on Resource Adequacy needs can inform a >>** comprehensive solution
 - picture of need.

EFFICIENCY

Consistent standards among members >>

- Utilities in the West each use different standards today.

Opportunity to more efficiently use existing resources >>

CONFIDENCE

- **Confidence in market transactions >>**
 - transactions can vary greatly.

In a regional RA program, common methods are established for measuring needs and contribution to needs for the entire footprint.

When the region is in deficit, an RA program that is based on consistent standards and has captured the efficiency of existing resources can provide the region a clear

A regional RA program will establish a common method for determining adequacy needs and measuring the contribution of resources in meeting that need.

A regional RA program provides the opportunity to capture load and resource diversity and ensure efficient use of existing resources, thereby lowering the cost of reliability, in both the forward showing and operational timeframes.

Consistent standards will provide clarity about the contribution of market transactions to RA rather than today where utility assumptions about availability of market

owerPool

NWPP RA PROJECT IMELINE

Phase 1: Information Gathering (concluded Oct. 2019)

Phase 2A: **Preliminary Design Phase** (Early 2020)

Phase 2B: **Detailed Design** (Late 2020)



Phase 3: **Begin Work to** Implement **Program (2021)**

PHASED APPROACH TIMELINE



*Timeframes are estimated and do not include any project timeline contingencies

5 NWPP



OVERVIEW OF NWPP **REGIONAL RA PROGRAM** FUNCTIONS

- Forward Showing (Non-Binding): 7 months ahead of season to 2-3 years ahead
 - Common regional metrics set the showing requirement for a multi-state footprint
- Forward Showing (Binding): 7 months ahead of season
 - Common regional metrics set the showing requirement for a multi-state footprint (same as above)
 - Entities comply with regional metrics months in advance of a season; and are subject to penalties for noncompliance
 - Ensures reliability benefits
- **Operational (Binding): Day-ahead/TBD**
 - Operating procedures to access to pooled regional resources using the footprint's transmission grid
 - Unlocks investment cost savings through diversity benefits

PROGRAM FRAMEWORK

DEMAND SIDE

Calculate: "PURE" CAPACITY **NEEDED BASED ON:**

- **P50 LOAD FORECAST +**
- **Contingency Reserves +**
- **PRM needed to meet The RA** metric (1 in 10 LOLE)



SUPPLY SIDE

BASED ON:

- - Wind ELCC
 - Solar ELCC
 - Thermals UCAP
 - **Run of River Hydro ELCC**



Calculate: "PURE" CAPACITY AVAILABLE

Total Supply, de-rated and qualified as follows:

Storage Hydro – UCAP + NWPP developed hydro methodology

"PURE" SUPPLY AVAILABLE