Richard Devlin Chair Oregon

Ted Ferrioli Oregon

Guy Norman Washington

Patrick Oshie Washington



Bo Downen Vice Chair Montana

Jennifer Anders Montana

> Jim Yost Idaho

Jeffery C. Allen Idaho

November 10, 2020

MEMORANDUM

- TO: Council Members
- FROM: Ben Kujala, Chad Madron
- SUBJECT: Power Plan Project Timing Check-In

BACKGROUND:

- Presenter: Ben Kujala, Chad Madron
- Summary: Staff will provide an overview of power plan related presentations and findings to date and discuss the schedule for the coming months of power committee work.

2021 NW Power Plan Status



THE 2021 NORTHWEST



FOR A SECURE & AFFORDABLE ENERGY FUTURE

Topics From Last 3 Months

- August
 - <u>Results</u> from stakeholder survey on use of previous power plan content
 - Load Forecast <u>Updates</u>
 - Adequacy Update (ASCC/ARM) for 2021 Power Plan Part 1
 - <u>Update</u> on WECC-Wide Clean Policy Wrap Up
 - Electricity Price Forecast Part 1
 - Initial Conservation Target Framework
- September
 - Adequacy Update (ASCC/ARM) for 2021 Power Plan Part 2
 - Wholesale Electricity Forecast <u>Results</u> Part 2
 - Challenges with RPM <u>Methodology</u>
- October
 - Electricity Price Forecast <u>Updates</u>
 - <u>Comments</u> on Draft Framework for Conservation Program
- Other past Plan Related Presentations to the Power Committee or Full Council...



This Month

- Electricity Price Forecast Results
- Additional Power Comm Scheduled for 12/03/2020



THE 2021 NORTHWEST POWER PLAN

Update on Regional Portfolio Model



Questions?

Extra Slides for Reference

Plan Related Presentations to the Power Committee or Full Council

- Scenario Analysis
 - BPA scenario <u>update</u> (06/2020)
 - <u>Review</u> of Plan Scenarios Part 1 (01/2020) & Part 2 (02/2020)
 - Scenarios proposed for <u>inclusion</u> (07/2019)
- Resource Strategy
 - Electricity Price Forecast <u>Updates</u> (10/2020)
 - Wholesale Electricity Forecast <u>Results</u> Part 2 (09/2020)
 - Challenges with RPM <u>Methodology</u> (09/2020)
 - Adequacy <u>Update</u> (ASCC/ARM) for 2021 Power Plan Part 2
 - Electricity Price <u>Forecast</u> Part 1 (08/2020)
 - Adequacy <u>Update</u> (ASCC/ARM) for 2021 Power Plan Part 1 (08/2020)
 - Briefings on Power Plan Analytical Process (02 04/2020)
 - <u>Updates</u> to RPM Methodologies (01/2020)
 - <u>Overview</u> of Plan and how the proposed resource strategy is developed (05/2019)



Plan Related Presentations to the Power Committee or Full Council

- Conservation and Energy Efficiency
 - <u>Comments</u> on Draft Framework for Conservation Program (10/2020)
 - <u>Initial Conservation Target Framework (08/2020)</u>
 - <u>EE Supply Curves</u> for Baseline and for Scenario Analysis (05/2020)
 - EE Typical Meteorological Year Adjustment (04/2020)
 - Draft EE Supply Curves (03/2020)
 - Briefing on Lighting Standards and Considerations for the 2021 Power Plan (02/2020)
 - <u>Update</u> on planning parameters for EE supply curves (08/2019)
- Generation Resources
 - <u>Update</u> on WECC-Wide Clean Policy Wrap Up (08/2020)
 - <u>Summary</u> of primary generating resource reference plants and emerging tech reference plant for draft 2021 Power Plan (06/2020)
 - <u>Update</u> on Existing System, Coal Retirements, and Policies (05/2020)
 - <u>Update</u> on historical regional greenhouse gas emissions (04/2020)
 - Draft natural gas reference plants & Draft conventional geothermal reference plant (02/2020)
 - Draft Pumped storage reference plant (12/2019)
 - Onshore Wind Generation Reference Plant (11/2019)
 - Solar, Battery Storage, and Solar + Battery Storage <u>Reference Plants</u> (10/2019)
 - <u>Review</u> of Existing System and WECC-Wide Coal Retirements (09/2019)



Plan Related Presentations to the Power Committee or Full Council

- Load and Price Forecasts
 - Load Forecast <u>Updates (08/2020)</u>
 - Briefing on upstream methane in Power Plan (06/2020)
 - BPA Load forecast (04/2020)
 - <u>Out-of-region load forecast and California climate-inclusive load forecast (04/2020)</u>
 - <u>Updates</u> to load and other forecasts based on GCM Selection (02/2020)
 - Further Detail on Load Forecast (10/2019)
 - <u>Forecast</u> of Draft Loads w/Frozen Efficiency for 2021 Power Plan/Related GCMs, (09/2019)
 - <u>Economic drivers</u> for the plan (04/2019)
 - <u>Upstream Methane</u> (01/2020)
 - <u>Update</u> on Wholesale Electricity Price Forecast and Avoided Emissions Rate (11/2019)
 - Natural Gas Price <u>Forecast</u> for 2021 Power Plan (11/2019)
- Climate Change
 - <u>Update</u> on Climate Scenario Selection (04/2020)
 - <u>General Circulation Model</u> Scenario Selection (11/2019)
 - Intro to <u>Climate change</u> and the 2021 power plan (04/2019)



Plan Related Presentations to the Power Committee or Full Council

PLUS:

- <u>Results</u> from stakeholder survey on use of previous power plan content (08/2020)
- <u>Development</u> of technical written material for the Power Plan (07/2020)
- <u>Stakeholder survey</u> regarding use of previous plan's written content and supporting materials (07/2020)
- <u>Update</u> on New Version of GENESYS (05/2020)
- Draft DR Supply Curves (03/2020)
- Review State Clean Energy Policies and Impact on 2021 Plan Analysis
- <u>Briefing</u> on methodology for quantifying the environmental costs and benefits of new resources for the 2021 Power Plan (09/2019)
- <u>Environmental Methodology</u> Development Primer (8/2019)
- Establishing global financial and economic <u>assumptions</u> for the 2021 Power Plan (07/2019)
- Establish existing system parameters and interpret state policies (07/2019)
- <u>Consistent Treatment</u> of Quantifiable Resource Costs (03/2019)
- <u>Proposed discount rate</u> for the 2021 Power Plan (02/2019)

