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

December 8, 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

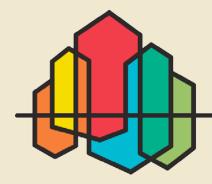
committee work.

This presentation will include new proposed timing for the release of the

draft plan.

503-222-5161 800-452-5161 Fax: 503-820-2370

2021 NW Power Plan Status



THE 2021
NORTHWEST

POWER PLAN

FOR A SECURE & AFFORDABLE ENERGY FUTURE

Topics From Last 3 Months

September

- Adequacy <u>Update</u> (ASCC/ARM) for 2021 Power Plan Part 2
- Wholesale Electricity Forecast Results Part 2
- Challenges with RPM Methodology
- October
 - Electricity Price Forecast <u>Updates</u>
 - <u>Comments</u> on Draft Framework for Conservation Program
- November
 - Wholesale Electricity Price Forecast <u>Update</u>
- December 3
 - First look at redeveloped GENESYS result
- Other past <u>Plan Related Presentations to the Power Committee or Full Council...</u>



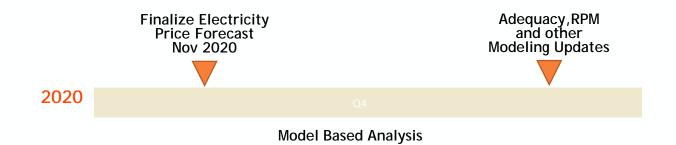
This Month

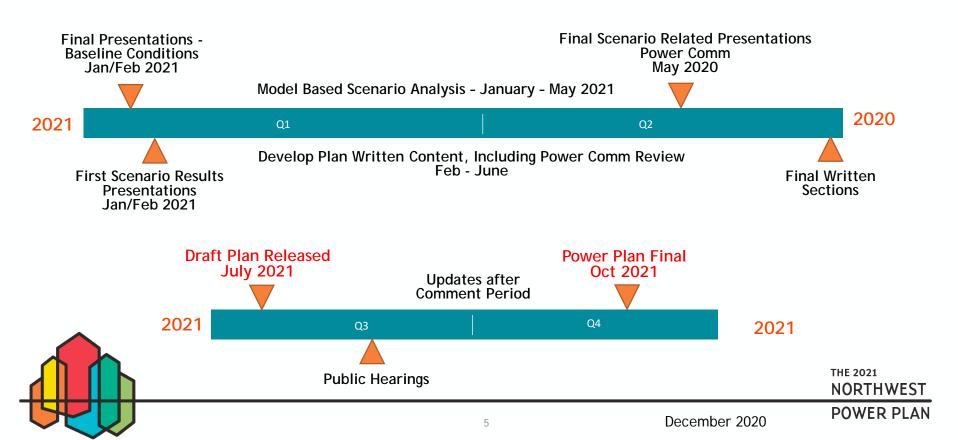
- Power Plan Timing Overview Including new proposed draft release date
- State of Electric Utilities 2019
- DEI at Advisory Committees Key Takeaways
- Overview of Updates to Regional Portfolio Model
- First Look at Baseline Conditions RPM Results
- Adequacy Results from Redeveloped GENESYS



Proposed Schedule Updates

Revised 2021 Power Plan Work Schedule December 2020





January

- Baseline Conditions Runs
- Robustness of EE
- System Adequacy

April

- Bonneville Portfolio
- Greenhouse Gas Tipping Point
- Pathways to Decarbonization
- Early written material review

February

- Baseline Conditions (if needed)
- Other Modeling updates
- Coal Retirement Scenario

May

- Bonneville Portfolio
- Pathways Continued
- Scenario findings summary
- Written material for plan review

March

- Extra Regional Markets and Adequacy
- Markets for Energy/Capacity

June

 Written material for plan review



Each Month Includes Two Power Committee Meetings

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Extra Slides for Reference

Scenario Analysis

- BPA scenario <u>update</u> (06/2020)
- Review of Plan Scenarios Part 1 (01/2020) & Part 2 (02/2020)
- Scenarios proposed for <u>inclusion</u> (07/2019)

• Resource Strategy

- First look at redeveloped GENESYS result (12/03/2020)
- Wholesale Electricity Price Forecast <u>Update (11/2020)</u>
- Electricity Price Forecast <u>Updates</u> (10/2020)
- Wholesale Electricity Forecast Results Part 2 (09/2020)
- Challenges with RPM Methodology (09/2020)
- Adequacy <u>Update</u> (ASCC/ARM) for 2021 Power Plan Part 2
- Electricity Price Forecast 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)
- Overview of Plan and how the proposed resource strategy is developed (05/2019)



Conservation and Energy Efficiency

- Comments on Draft Framework for Conservation Program (10/2020)
- <u>Initial Conservation Target Framework</u> (08/2020)
- <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)
- <u>Draft natural gas reference plants</u> & <u>Draft conventional geothermal reference plant</u> (02/2020)
- <u>Draft Pumped storage reference plant</u> (12/2019)
- Onshore Wind Generation Reference Plant (11/2019)
- $\bullet \quad Solar, Battery \, Storage, \, and \, Solar + \, Battery \, Storage \, \underline{Reference \, Plants} \, (10/2019)$
- Review of Existing System and WECC-Wide Coal Retirements (09/2019)



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Load and Price Forecasts

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



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PLUS:

- Results 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)
- Environmental Methodology 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)
- Consistent Treatment of Quantifiable Resource Costs (03/2019)
- <u>Proposed discount rate</u> for the 2021 Power Plan (02/2019)

