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

June 9, 2020

MEMORANDUM

TO: Council Members

FROM: Ben Kujala, Chad Madron

SUBJECT: Power Plan Project Timing Check-In

BACKGROUND:

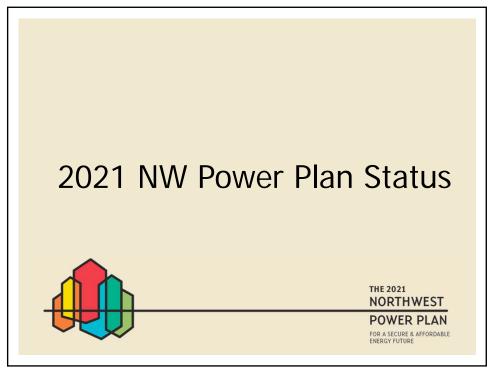
Presenter: Ben Kujala, Chad Madron

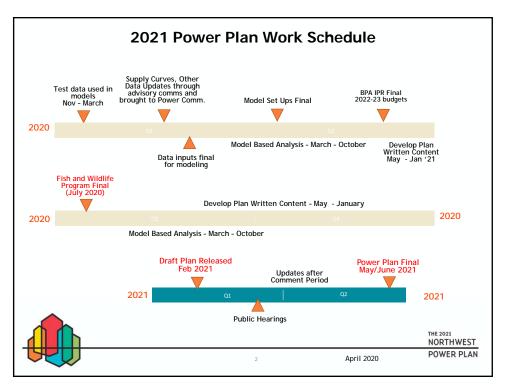
Summary: Staff will provide an overview of power plan related presentations and

findings to date and discuss schedule for the next six months of power

committee work.

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





Plan Related Presentations to the Power Committee or Full Council

- Scenario Analysis
 - Review of Plan Scenarios Part 1 (01/2020) & Part 2 (02/2020)
 - Scenarios proposed for <u>inclusion</u> (07/2019)
- Resource Strategy
 - 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)



NORTHWEST

3

Plan Related Presentations to the Power Committee or Full Council

- Conservation and Energy Efficiency
 - EE Supply Curves for Baseline and for Scenario Analysis (06/2020)
 - 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
 - Update on Existing System, Coal Retirements, and Policies (06/2020)
 - <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)
 - 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)
 - Review of Existing System and WECC-Wide Coal Retirements (09/2019)



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4

Plan Related Presentations to the Power Committee or Full Council

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



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5

Plan Related Presentations to the Power Committee or Full Council

PLUS:

- Update on New Version of GENESYS (05/2020)
- Draft DR Supply Curves (03/2020)
- Review State Clean Energy Policies and Impact on 2021 Plan Analysis
- Briefing 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)
- Proposed discount rate for the 2021 Power Plan (02/2019)



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This Month

- BPA Scenario Update (60 min)
 - Scenario Overview, BK
 - BPA EE Supply Curves, EE Team
 - BPA DR Supply Curves, TJ, JO
- Summary of primary generating resource reference plants and emerging tech reference plant for draft 2021 Power Plan



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7

August September System Adequacy • Baseline • EE Robustness (ÁSCC/ARM) **Conditions Test** • Extra Regional • Electricity Price Runs Markets and Early Coal **Forecast** Adequacy Retirement Markets for Scenario Energy/Capacity December Greenhouse Gas · Pathways to Scenario findings **Tipping Point** Decarbonization summary • Bonneville Portfolio • Bonneville Portfolio Written material Continued for plan review Early written material review THE 2021 NORTHWEST POWER PLAN

8