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.
2021 NW Power Plan Status
Topics From Last 3 Months

• September
  • Adequacy Update (ASCC/ARM) for 2021 Power Plan Part 2
  • Wholesale Electricity Forecast Results Part 2
  • Challenges with RPM Methodology

• October
  • Electricity Price Forecast Updates
  • Comments on Draft Framework for Conservation Program

• November
  • Wholesale Electricity Price Forecast Update

• December 3
  • First look at redeveloped GENESYS result

• Other past Plan Related Presentations to the Power Committee or Full Council...
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

2020

Finalize Electricity Price Forecast Nov 2020
Adequacy, RPM and other Modeling Updates

Model Based Analysis

2021

Final Presentations - Baseline Conditions Jan/Feb 2021
Model Based Scenario Analysis - January - May 2021
Final Scenario Related Presentations Power Comm May 2020

2021

First Scenario Results Presentations Jan/Feb 2021
Develop Plan Written Content, Including Power Comm Review Feb - June
FinalWritten Sections

2021

Draft Plan Released July 2021
Updates after Comment Period
Power Plan Final Oct 2021

Public Hearings

December 2020
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<tr>
<th>Month</th>
<th>Baseline Conditions Runs</th>
<th>Robustness of EE</th>
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<th>Baseline Conditions (if needed)</th>
<th>Other Modeling updates</th>
<th>Coal Retirement Scenario</th>
<th>Extra Regional Markets and Adequacy</th>
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*Each Month Includes Two Power Committee Meetings*
Questions?
Extra Slides for Reference
Plan Related Presentations to the Power Committee or Full Council

- Scenario Analysis
  - BPA scenario update (06/2020)
  - Scenarios proposed for inclusion (07/2019)

- Resource Strategy
  - First look at redeveloped GENESYS result (12/03/2020)
  - Wholesale Electricity Price Forecast Update (11/2020)
  - Electricity Price Forecast Updates (10/2020)
  - Wholesale Electricity Forecast Results Part 2 (09/2020)
  - Challenges with RPM Methodology (09/2020)
  - Adequacy Update (ASCC/ARM) for 2021 Power Plan Part 2
  - Electricity Price Forecast Part 1 (08/2020)
  - Adequacy Update (ASCC/ARM) for 2021 Power Plan Part 1 (08/2020)
  - Briefings on Power Plan Analytical Process (02 - 04/2020)
  - Updates to RPM Methodologies (01/2020)
  - Overview 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
  - [Comments](#) on Draft Framework for Conservation Program (10/2020)
  - [Initial Conservation Target Framework](#) (08/2020)
  - [EE Supply Curves](#) 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)
  - [Update](#) on planning parameters for EE supply curves (08/2019)

- Generation Resources
  - [Update](#) on WECC-Wide Clean Policy Wrap Up (08/2020)
  - [Summary](#) of primary generating resource reference plants and emerging tech reference plant for draft 2021 Power Plan (06/2020)
  - [Update](#) on Existing System, Coal Retirements, and Policies (05/2020)
  - [Update](#) 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 Reference Plants (10/2019)
  - [Review](#) 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 Updates (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)
  • 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 Climate change and the 2021 power plan (04/2019)
Plan Related Presentations to the Power Committee or Full Council

PLUS:

- **Results** from stakeholder survey on use of previous power plan content (08/2020)
- **Development** of technical written material for the Power Plan (07/2020)
- **Stakeholder survey** regarding use of previous plan's written content and supporting materials (07/2020)
- **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 **assumptions** 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)