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December 5, 2023

MEMORANDUM

TO: Power Committee Members

FROM: Jennifer Light, Director of Power Planning

SUBJECT: Committee Update and Planning

BACKGROUND:

Presenter: Jennifer Light

Summary: The Power Committee will start with another Committee Update and Planning agenda item. This is meant to be a standing item on the Committee. Jennifer will briefly address the topics for the month and their alignment with the division workplan and updates on other ongoing work in the division. This will provide an opportunity for Council members to raise questions or discussion items to inform follow-up and future agenda items.

Committee Update and Planning

December 12, 2023

Topics for Today:

- December meeting topics connection to the work plan
- Highlight ongoing work in preparation for the mid-term assessment and the ninth power plan

December Meeting Topics

- Our meeting time continues to be focused on implementation of the plan and preparation of the mid-term assessment
- Includes:
 - Check in on the demand response and reserves elements of the resource strategy
 - Initial step for our annual resource adequacy study

Primary Function	Tasks	Timeframe (CY)
A. Implementation of the 2021 Power Plan and Development of the Mid-Term Assessment	A.1. Reporting on Plan Implementation	
	1. Tracking and reporting on energy efficiency accomplishments relative to the 2021 Power Plan Conservation Program.	Annual Report - Q3
	2. Tracking and reporting on generating resource builds, both in region and across the WECC, as compared to the 2021 Power Plan analysis and strategy.	Annual Report - Q1
	3. Tracking and reporting on demand response efforts in the region relative to the 2021 Power Plan.	Annual Report - Q4
	4. Tracking and reporting on progress across other elements of the 2021 Power Plan, including model conservation standards, research, etc.	Ongoing
	5. Convening and/or participating in regional discussions on topics related to the 2021 Power Plan recommendations, including hydro flexibility and assessment of refined datasets to inform consumer impacts.	Scoping - 2023
	A.2. Conduct Periodic Studies on Regional Adequacy	
	1. Develop an updated fuels price forecast.	Q4 2023
	2. Create an updated in region hourly load forecast and updates to WECC-wide loads to inform the Adequacy Assessment.	Q1 2024
	3. Update the wholesale electricity price forecast and the related emissions forecast.	Q2 2024
	4. Conduct the regional Adequacy Assessment and prepare report detailing the analysis and findings.	Q3 2024
	A.3. Tracking Regional Efforts and Policies	
	1. Track emerging technologies, both supply and demand side, providing periodic updates to the Council.	Ongoing - Quarterly Reports
	2. Coordinate with regional utilities on integrated resource planning and other activities to share plan findings and leverage utility insights and advancements.	Ongoing - Annual Report
	3. Track markets efforts, including day-ahead market offerings and transmission planning, to inform Council analysis	Ongoing - Quarterly Reports
4. Track local, state, and Federal policies that impact the energy system and provide periodic reports to Council on new developments.	Ongoing - Annual Report	

Division Updates



Hired Christian Douglass to join the resources team



Finalizing updates to GENESYS in preparation for annual studies and starting to explore capabilities of OptGen



Participating in WTEC Technical Task Force



Starting to prepare for 9th Power Plan

Continuing to Assess the Best Approach for a Mid-Term Assessment

- The Committee discussed two primary objectives for this assessment:
 - Provide a clear narrative around the implementation of the 2021 Power Plan considering the changing dynamics around the power system
 - Look forward and highlight key areas of analysis for the ninth power plan
- The proposed timeline was to release draft in September or October 2024
- This timing creates challenges for both achieving these objectives and being able to move forward the ninth plan
 - Moving up the timeline doesn't allow for sufficient information to be collected to provide a coherent story regarding the implementation of the 2021 Power Plan
 - The timing seems too late to use the mid-term as a valuable tool for getting regional perspectives to inform the ninth plan

Consider an Alternative Approach

Decouple these two objectives of reporting out on 2021 Power Plan implementation and implications from the effort to inform the ninth plan

- **Early 2024:** Seek input to inform ninth plan analysis
 - Release a paper for public comment outlining ninth plan thinking
 - This would be well timed with the staff's work of starting to think through inputs and scenarios
- **Throughout 2024:** Develop a dynamic reporting approach that address 2021 Plan implementation
 - Include all elements outlined for the mid-term assessment of 2021 plan
 - This could potentially replace a single report, streamlining some work and keeping the bulk of staff efforts focused on the next plan

Reminder of Draft Outline

1. Executive Summary ←

2. Introduction

- A. Background on 2021 Power Plan
- B. Objectives of Assessment

3. Changes in the Power System

- A. Evolving Policy Landscape
- B. Update on Regional Electric Loads
- C. Update on Transmission **New!**
- D. Implementation of the 2021 Power Plan Resource Strategy
- E. Implications for Resource Adequacy
- F. Advances in Research and Development

Potentially replace this with a dynamic update process.

This would include updating the high-level takeaways as appropriate.

4. Looking Ahead to the Council's Ninth Power Plan

Do as stand-alone product



Questions

Work Plan Reminder

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	3. Tracking and reporting on demand response efforts in the region relative to the 2021 Power Plan.	Annual Report - Q4
	4. Tracking and reporting on progress across other elements of the 2021 Power Plan, including model conservation standards, research, etc.	Ongoing
	5. Convening and/or participating in regional discussions on topics related to the 2021 Power Plan recommendations, including hydro flexibility and assessment of refined datasets to inform consumer impacts.	Scoping - 2023
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	A.3. Tracking Regional Efforts and Policies	
	1. Track emerging technologies, both supply and demand side, providing periodic updates to the Council.	Ongoing - Quarterly Reports
	2. Coordinate with regional utilities on integrated resource planning and other activities to share plan findings and leverage utility insights and advancements.	Ongoing - Annual Report
	3. Track markets efforts, including day-ahead market offerings and transmission planning, to inform Council analysis	Ongoing - Quarterly Reports
	4. Track local, state, and Federal policies that impact the energy system and provide periodic reports to Council on new developments.	Ongoing - Annual Report

B. Preparation of Tools and Data for the Ninth Power Plan	B.1. Tool Enhancement	
	1. Update load forecasting capabilities to better reflect the current power system.	Selection - Q1 2023 Built Out - Q1 2024
	2. Explore new capital expansion modeling approach to provide better optimization for future power system needs.	Selection - Q3 2023
	3. Continued enhancement of GENESYS operations to support periodic studies and next power plan.	Ongoing - Annual Report
	4. Updating tools used to estimate new resource options, both supply and demand side, in preparation of the next power plan.	Ongoing
	B.2. Enhanced Data and Modeling	
	1. Develop approaches to improve the data assumptions and modeling of commercial and industrial energy efficiency potential.	Q2 2023, Ongoing
	2. Develop methodologies to quantify flexibility and resilience impacts from energy efficiency, with a goal of informing other resources as appropriate.	Q1 2023, Ongoing
	3. Refine new multi-metric adequacy standard approach, focusing on risk thresholds.	Ongoing - Annual Report
	4. Conduct an updated upstream methane analysis with regional stakeholders.	2024 or Later
	5. Maintaining climate change data to ensure it remains relevant and improve analysis for loads and resources in the ninth power plan.	Ongoing
	6. Improve data and modeling of emerging technologies, including distributed energy resources and storage.	Ongoing
	7. Explore improvements to modeling hydrogen fuel production and impacts on loads, reserves, transmission capability, locational impacts of resources, the value of non-quantifiable environmental benefits (e.g. land use), and other elements critical to understanding the future power system.	Ongoing
	8. Continue to manage the Regional Technical Forum, leveraging its data and analysis to expand and enhance the assessment of energy efficiency and demand response potential.	Ongoing