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June 7, 2016

MEMORANDUM

TO: Power Committee Members

FROM: Ben Kujala

SUBJECT: Council Staff Engagement with Regional IRP Processes

BACKGROUND:

Presenter: Ben Kujala

Summary The Action Plan from the Seventh Power Plan provided recommendations

to the regional utilities and regulators on what should be included in regional IRPs. This was, in part, because regional IRPs are one of the primary sources of data that the Council uses in its' power plans. To assist with staff engaging in IRP processes, the draft template

encapsulates the recommendations from the Seventh Plan and some of the data that are commonly extracted from regional IRPs. We will discuss the content of the template and the general approach to Council staff

engagement in IRP processes.

Relevance In the Seventh Power Plan, Chapter 4, or the Action Plan, provided

recommendations for utilities on information to include in IRPs. The draft template included with this memo is a tool to help Council staff engage in IRP processes in a manner consistent with those recommendations.

Workplan: A. Implement Seventh Power Plan and related Council priorities

Background: Integrated Resource Plans or IRPs are used by many utilities to plan for

their future resource needs. Council staff has been involved in tracking and engaging in technical discussions regarding IRPs.

More Info: N/A

DRAFT Seventh Plan IRP Tracking Sheet

This tracking sheet was prepared based on the Seventh Plan Chapter 4: Action Plan. It is intended as a tool for Power Division staff. For official Council guidance on regional resource planning please reference Chapter 4.

EE/Conservation

Does the IRP estimate the capacity impacts of EE? Yes / No

Is the evaluation of cost effective EE consistent with the Council methods, i.e. does it include the 10% act credit, capacity value, etc.? Yes / No

What is the amount and timing of conservation acquisition (energy & capacity) included in the IRP:

Demand Response

Is there an assessment of the DR potential included in the IRP? Yes / No

If the utility has an existing DR program, does the IRP include the historic dispatch (time & magnitude) of DR? Yes / No / Not Applicable

Does the IRP include a plan for integrating DR into existing operations to enable future acquisition of cost effective DR? Yes / No

If the IRP includes future DR acquisition, what is the amount and timing of DR acquisition planned as part of the portfolio:

Operating Reserves

Does the IRP include an estimate of the requirement for operating reserves? Yes / No

Does the IRP include planning assumptions for how much of the reserves are provided by hydropower generation? Yes / No / Not Applicable

If yes, what type and amount of operating reserves for each hydropower plant are identified as reasonable planning assumptions:

Does the IRP include planning assumptions for how much of the reserves are provided by thermal generation? Yes / No / Not Applicable

If yes, what type and amount of operating reserves for each thermal plant are identified as reasonable planning assumptions:

Does the IRP include any other sources for the provision of reserves? Yes / No / Not Applicable

If yes, what type and amount of operating reserves from other sources are identified as reasonable planning assumptions:

Load Forecast

Does the IRP load forecast account for upcoming enacted codes and standards? Yes / No

What are specific factors discussed in the load forecast, such as behind-the-meter generation, electric vehicles, indoor agriculture, etc.:

What is the forecast load included in the IRP, including any scenarios, sensitivities or forecast ranges:

Generating Resources

If the utility has an RPS need, was solar considered as a potential resource? Yes / No

What is the utility's RPS compliance strategy? (e.g. banked RECs for next 5 years, then RFP 200MW new resources)

What is the nameplate and type of anticipated resources identified in the IRP, excluding EE and DR, and expected construction/operation year:

What emerging technologies were considered as potential new resources? (EGS, SMR, energy storage, etc.)

Adequacy

Does the IRP include a probabilistic evaluation of resource need for adequacy? Yes / No

If the IRP shows a need for adding resources, were additional EE and DR considered as resource alternatives? Yes / No / Not Applicable

What is assumed for access to the market in the IRP:

Other Information

What forecast prices are included for Natural Gas and Electricity:

What assumptions, if any, were made about prices or limitations on GHG emissions:

Are there other key data or analysis from the IRP not covered above that could help with regional resource planning: