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December 8, 2015

MEMORANDUM

TO: Council members

FROM: Tom Eckman, Power Division Director and Ben Kujala, System Analysis Manager

SUBJECT: Request for Additional Scenario Analysis

BACKGROUND:

Presenter: Tom Eckman and Ben Kujala

Summary: Staff recommends that at least three of the scenarios analyzed during the development of the draft 7th Plan be re-run using updated data and assumptions based on public comments. These include the following scenarios:

- Existing Policy (1B)
- Social Cost of Carbon – Mid-Range Carbon Prices (2B)
- Coal and Inefficient Natural Gas Plant Retirement (3A)

In addition to re-running the above scenarios, staff received requests to analyze several additional scenarios in the RPM from public commentary and through consultations. For the most part of these scenarios focus on the potential role and cost of using renewable resources to reduce carbon dioxide emissions or other policies that are aimed at reducing such emissions. Staff is seeking Council guidance on which, if any, of the following scenarios should be analyzed for the final plan:

- Coal plant retirement, without inefficient natural gas plant retirement
- Coal plant retirement, without inefficient natural gas plant retirement and without new natural gas plant development
- Coal plant retirement, with carbon cost set sufficient to develop renewable resources rather than natural gas
- 50% RPS

In addition to these scenarios, a significant number of those commenting on the draft plan are requesting that the Council analyze the cost and benefits of removing the four lower Snake River Dams. While one of the scenarios analyzed for the draft plan did consider the impact on the region's resource strategy and carbon emissions of a planned retirement of a major non-greenhouse gas emitting resource comparable in size to the Lower Snake Dams the scope of this analysis was restricted to determining the type and cost of replacement resources. Moreover, it specifically did not model the hydrosystem impacts of dam removal.

Staff recommends that the Council defer consideration of whether or not to conduct an analysis of the removal of the four Lower Snake Dams until after the 7th Plan is completed. This recommendation is based on three factors. First, the purpose of the plan is to determine how to meet future regional loads, not to evaluate the cost-effectiveness of existing resources. Second, several new studies, including one being conducted by Bonneville, have or will soon be released that review the potential costs and benefits of dam removal. These new studies may adequately address the question of the costs and benefits associated with dam removal. Third, if these new studies prove inadequate, then the data and assumptions used in these studies would need to be publicly vetted prior to using them in any Council analysis. This process would considerably extend the time needed to complete the 7th Plan.

Relevance: Scenario analysis serves as one of the primary tools used to develop the Council plan. Conducting a wide range of such analysis leads to a more robust resource strategy.

Workplan: 1. B. Develop Seventh Power Plan and maintain analytical capability

- Complete draft plan resource strategy and draft action plan