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April 1, 2025

MEMORANDUM

TO: Council Members

FROM: Jennifer Light, Director of Power Planning

SUBJECT: Approach to Social Cost of Carbon in the Ninth Plan

BACKGROUND:

Presenter: Jennifer Light

Summary: There are two potential approaches for how the Council could incorporate a “social cost of carbon” cost on emissions in the Ninth Power Plan. The first approach is applying a social cost of carbon cost on emissions from all new and existing resources where it is required by law or regulation, along with applying all the other state and federal laws and utility policies related to generating resources and greenhouse gas emissions. The Council would otherwise not apply the social cost of carbon to the emissions from new or existing resources where it would not be required by law, but rather it would treat any unregulated emissions as a policy and “due consideration” factor. This is consistent with how the Council treats other environmental effects and costs.

The second approach would be to apply the social cost of carbon cost on emissions associated with all new and existing resources in the region, including from new or existing resources where it would not be imposed by law.

The staff recommend pursuing the first approach of applying the social cost of carbon to emissions from all new and existing resources and otherwise treating any unregulated emissions as a policy and due consideration factor. This would be

consistent with the Council's treatment of other environmental effects and better aligns with the evolving federal policy landscape. This is a shift in staff recommendation from the initial proposal during the Ninth Power Plan kick-off at the February Council meeting. Since February, the Council has asked for more time to discuss and consider the two approaches. Between those discussions and additional internal consideration, staff have evolved its recommendation. Ultimately, this is a Council decision. Staff needs Council direction to continue to prepare models and assumptions. The purpose of this agenda item is to get final direction from the Council on how to proceed for the upcoming power plan.

Relevance: Some jurisdictions in the Northwest require that electric utilities consider the social cost of carbon in their resource planning. The Council has autonomy to consider whether and how to incorporate the social cost of carbon in its power planning. Staff recommend that the Council apply the social cost of carbon to those jurisdictions where required by law, to ensure that the final power plan meets all the existing policies and has sufficient relevance to those entities in the region. The Council may choose to apply it more broadly.

Workplan: B.1.1. Advance ninth power plan development by developing model scope, models and inputs, and other data and assumptions.

Background: In the Sixth and Seventh Power Plans, the Council did not incorporate a social cost of carbon in new resource costs generally, nor generally apply it to emissions from existing resources. The Council did use scenario analyses to consider changes to resource additions with and without different carbon pricing strategies and with and without different assumptions about resource choices (for example, simply limiting the building of new coal plants). Washington and Oregon already had carbon reduction goals; three of the states had laws requiring renewable resource choices and, in some cases, limiting the use of fossil-fuel plants; and there was a sense that additional carbon policies or carbon pricing strategies were on the horizon, especially from the federal government. The analyses in both plans found a robust amount of cost-effective energy efficiency across all scenarios, with and without carbon pricing. The Council's recommended resource strategies in those plans focused on those resources that were not only available and reliable but also supported the region in reducing carbon emissions.

In the 2021 Power Plan, the Council incorporated the social cost of carbon into all the scenario modeling for the regional portfolio analysis, for emissions from both new and existing greenhouse-gas emitting resources. The Council relied on the social cost of carbon as defined in 2016 by the federal interagency working group, assuming a 2.5 percent discount rate, which was consistent with Washington's Clean Energy Transformation Act requirements (CETA). CETA requires electric utilities in Washington to consider the social cost of carbon when developing their integrated resource plans. To provide consistency with CETA, and also recognizing that incorporating the social cost of carbon more broadly was a

possible method for giving “due consideration” to at least one aspect of environmental quality, the Council agreed to apply this assumption universally to the Northwest analysis. Placing a social cost of carbon on emissions even where not required by law was in some ways different from the Council’s usual treatment of environmental damage costs. As outlined in the Council’s environmental methodology for quantifying environmental costs and benefits directly attributable to new resources, the Council typically does not quantify and assess unregulated environmental damage costs, as it is nearly impossible to do that in a consistent fashion across all resources and all unregulated environmental effects. But conditions were such in the 2021 Power Plan, where a social cost of carbon figure was required or used at the federal and some state levels, and for the ease of modeling the Council simply incorporated the figure for all emissions.

For the Ninth Power Plan, the situation is again different, especially with the federal government now opposed to the application of a social cost of carbon figure. The Council has to and will incorporate and apply all laws and policies relating to greenhouse gas emissions. This includes state renewable portfolio standard requirements, state restrictions on siting, building or using carbon-emitting resources, federal emissions regulations that remain effective, utility clean energy policies, and the Washington state requirements to add in a social cost of carbon to all emissions, from new and existing resources.

The only question is whether to incorporate that social cost of carbon figure on emissions where not required by law. After further consideration, staff recommend not doing so. The models are in such a condition that it is possible to apply this cost where required and not apply it where not required. It is also the staff’s sense that all the other laws and policies are a larger driver of resource decisions, and the addition of a social cost of carbon cost where not required by law would have little impact on the modeling results. The unregulated carbon emissions remain an environmental effect that the Council should give due policy consideration to as it crafts a resource strategy for the power plan. This is consistent with the approach the Council takes for all environmental effects that are unregulated or residual after regulation.

Staff needs the Council to finalize its approach to the social cost of carbon to support modeling efforts that will commence this summer.