



STATE OF WASHINGTON

## WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

1300 S. Evergreen Park Dr. S.W., P.O. Box 47250 • Olympia, Washington 98504-7250  
(360) 664-1160 • TTY (360) 586-8203

November 3, 2014

Steve Crow, Executive Director  
Northwest Power and Conservation Council  
851 SW Sixth Ave, Suite 1100  
Portland Oregon, 97204-1348

Dear Mr. Crow,

This letter provides comments as requested in the Northwest Power and Conservation Council's (NWPCC or Council) September 2014 issue paper, "Methodology for Determining Quantifiable Environmental Costs and Benefits" (Issue Paper). We understand the Northwest Power Act requires the Council to estimate all quantifiable direct costs in its calculation of incremental system cost, including all quantifiable environmental costs and benefits.<sup>1</sup> Washington's Energy Independence Act, Initiative 937 (I-937) also requires Washington electric utilities to include quantifiable environmental benefits and costs when determining what efficiency measures are "cost-effective."<sup>2</sup>

The Issue Paper seeks comment on four issues:

1. Residual environmental effects beyond regulatory controls;
2. Environmental effects of resource choices not yet subject to regulatory control, especially carbon emissions;
3. Use of quantifiable environmental benefits and costs, and
4. Environmental effects of new renewable resources.

The Washington Utilities and Transportation Commission (Commission) supports the NWPCC's use of quantifiable environmental benefits and costs in developing and implementing the Council's 7th Power Plan in all four of the environmental impact instances posed in the Issue Paper. In the past, it has been difficult to quantify and monetize environmental benefits and costs. However, during the last year the Regional Technical Forum (RTF) has reviewed a large body of widely-accepted research quantifying and monetizing the costs of human health impacts

---

<sup>1</sup> NWPCC, Seventh Power Plan Issue Paper: Methodology for Determining Quantifiable Environmental Costs and Benefits, at 2 (Sept. 2014).

<sup>2</sup> RCW 19.285.030(6). Cost-effectiveness is defined at RCW 80.52.030 and includes incremental system costs and quantifiable environmental costs and benefits.

associated with small particulate air pollutants. Specifically, peer-reviewed research quantifies a causal relationship between small particulate air pollutants, called PM<sub>2.5</sub> emissions, and human health impacts. Additional peer-reviewed research has monetized those health effects.<sup>3</sup>

The Commission supports including the monetized values for PM<sub>2.5</sub> in the development of the 7<sup>th</sup> Power Plan and in the cost-effectiveness calculations going forward. The estimated range of human health effects is wide, and thus the Council may be better served by using a mean value or a center-weighted range for energy resource planning and cost-effectiveness calculation purposes.

As discussed in the NWPCC's Issue Paper regarding quantifiable environmental costs and benefits, the Northwest Power Act directs the Council to estimate "all *direct costs* of a measure or resource over its effective life."<sup>4</sup> At the October 14, 2014, RTF meeting, members raised questions about whether wood smoke that impacts humans as it is transported downwind should be considered a directly attributable cost. A study by the Washington State Energy Office recognized that human health impacts from air pollutants are, in fact, a direct cost of energy resource acquisition.<sup>5</sup> This study found that "[d]irect values are those associated with the physical impacts of a resource development and use." The study further states that health risks comprise a major category of "direct monetized value."<sup>6</sup> The recent draft preliminary report published by the RTF further demonstrates the direct causal relationship between wood smoke emissions and quantified human health impacts.<sup>7</sup>

That said, the Commission is sympathetic to the difficulty of incorporating the effect of the EPA's proposed 111(d) rule at this time, considering the planning timeline for the 7<sup>th</sup> Power Plan.<sup>8</sup> The Council is in the unenviable position of being one of first entities to initiate a long-range planning study after EPA's issuance of its draft rule. However, the task of making reasonable and useful predictions on EPA's 111(d) rules for use in the 7<sup>th</sup> Power Plan is no less difficult than the task of making reasonable and useful predictions of many other assumptions necessary for long-range planning, such as natural gas prices, or future resource construction costs. The challenge of developing input assumptions is not a sufficient reason to exclude analysis on what could be the most important new environmental regulation in decades. The

---

<sup>3</sup> NWPCC, Draft Preliminary Report: Quantifying the Health Benefits of Reduced Wood Smoke from Energy Efficiency Programs in the Pacific Northwest (Oct. 7, 2014).

<sup>4</sup> NWPCC, 7<sup>th</sup> Power Plan Issue Paper: Methodology for Determining Quantifiable Environmental Costs and Benefits at 2 (Sept. 2014) (emphasis added).

<sup>5</sup> D. Dodds and J. Lesser, Final Report, Issue Paper ITF-3, Appropriate Use of Numeric and Monetary Values for Environmental Impacts of Energy Resource Development and Use Decisions, Volume II, Interagency task Force on Environmental Costs at 74 (Washington State Energy Office Sept. 1992).

<sup>6</sup> *Id.*

<sup>7</sup> NWPCC, Draft Preliminary Report: Quantifying the Health Benefits of Reduced Wood Smoke from Energy Efficiency Programs in the Pacific Northwest (Oct. 7, 2014).

<sup>8</sup> 7<sup>th</sup> Power Plan Schedule, [https://www.nwcouncil.org/energy/rsac/meetings/2014\\_10/](https://www.nwcouncil.org/energy/rsac/meetings/2014_10/).

Steve Crow, Executive Director  
November 3, 2014  
Page 3 of 3

Council will not issue its 8<sup>th</sup> Power Plan until 2020, long after the 111(d) compliance plans will need to be developed. Therefore, it is essential that the Council incorporate 111(d) regulation into its Power Plan analysis to provide guidance on resource decisions, per the Council's enabling statutes.

The Council asks for guidance on which scenarios it should run to consider compliance with 111(d) regulations in its planning process. The Commission does not hold any hard opinion on the modeling or structure of scenarios to accomplish the goal of incorporating 111(d) compliance in the 7<sup>th</sup> Power Plan.

The Commission supports the Council including in its 7<sup>th</sup> Power Plan a robust range of scenarios, including among others a scenario incorporating a social cost of carbon. The Commission notes that EPA used a social cost of carbon in the development of 111(d) regulation. The social cost of carbon is a determination of the portion of the total cost of producing electricity from CO<sub>2</sub> emitting generation sources that is attributable to CO<sub>2</sub> emission. Economic efficiency is served by internalizing these costs into the producer's cost of production. The Commission recognizes that over the long run internalization of CO<sub>2</sub> costs will occur. The Council's 7<sup>th</sup> Power Plan should provide a scenario that describes the mix of regional resources that can meet the least-cost requirement when the cost of carbon is internalized. Using the Council's analysis, utilities could choose resources that have risk exposure to CO<sub>2</sub> costs at the level they believe is appropriate and determine how internalization of the cost of CO<sub>2</sub> may benefit their portfolio's position in the market.

In sum, we recognize the uncertainty and complexity of modelling the costs of compliance with the proposed 111(d) rules. Nonetheless, the Commission supports the Council's inclusion of quantified and monetized environmental and human health impacts in its resource cost estimates. These values will inform both the current development of the 7<sup>th</sup> Power Plan and future resource acquisition cost-effectiveness analyses.

Sincerely,



Steven V. King  
Executive Director and Secretary

cc: Tom Karier  
Phil Rockefeller