

October 31, 2014

Northwest Power & Conservation Council 851 SW 6th Avenue, Suite 1100 Portland, OR 97204-1348

Dear Council Members:

Thank you for the opportunity to comment on Quantifiable Environmental Costs and Benefits. We would like to commend the Council for seeking comments on how to address quantifying environmental costs and benefits, as it is not a straight-forward matter. However, attributing a cost of zero is also not sufficient.

Seattle City Light believes where reasonably possible environmental costs and benefits should be quantified and if possible monetized. For those costs that are more difficult to determine with a reasonable level of accuracy, those costs should be used in scenario analysis rather than the base case economic dispatch for the 7th plan.

As a general premise, we believe it is challenging, to completely and accurately quantify all the costs of environmental damage. In our view, some aspects of environmental damage will inevitably need to be addressed through assessment, such as an environmental impact statement (EIS). The EIS helps to keep track of many environmental impacts, describing them in terms understandable to the public. This is why Seattle City Light keeps an updated EIS for its Integrated Resource Plan when considering the environmental effects of renewable resources and quantifies them were possible. This is one reason SCL does an EIS on its IRP even though we plan to meet our load growth through conservation and renewable resources. SCL has rejected renewable projects with high level impacts on birds and other wildlife.

Recognizing any quantification of environmental costs and benefits will be imperfect; City Light has taken the approach of using control or mitigation costs as proxies. A basic premise of this approach is that society and regulators have considered the relative costs of the environmental damage and the cost of controls and that information is incorporated into environmental regulations. In theory, this would imply the marginal cost of damage is roughly equal to the marginal cost of the control technology, for the last unit of damage. This would produce a logically-sound framework for regulation. An example of a reasonable method of quantifying such costs would be for SO2. If those control technology costs to reduce SO2 pollution is \$200/ton under regulations, it would be reasonable to use at least \$200/ton for this societal cost.

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With regard to CO2 costs, the EPA regulations may provide a good starting point. We would urge the Council to look at the range of costs/ton that have been developed to bring CO2 emissions down to the level that climate scientists have agreed is needed to prevent extreme climate change impacts. We believe including the environmental benefits of displacing fossil fuel resource with a non-fossil fuel resource is a logical approach. In assessing the benefits of renewable resources, the monetized value should simply be the reverse of the non-renewable resource costs, unless the benefits are different in nature. In general, attention is needed to be logically consistent and to not double-count. If the benefits are completely different in nature from the costs, then there should be direct and material causality between the resource choice and the benefits. In addition, the benefits should not be realized to some individuals, but simultaneously a cost to others. In summary, the benefits should be beneficial to society as a whole.

With respect to evaluating suitable sites for new resources, this analysis is often done by new resource developers using screening methods. It is not immediately clear how the desired environmental benefits will accrue to the region by completing such an analysis, unless it led to regulatory or legislative changes. While City Light has no objections to such an analysis, this activity should not impinge upon the Council's ability to meet its obligations and other regional commitments.

We hope that these comments are useful and look forward to working with you on the development of the 7th Power Plan.

Sincerely,

Michael D. Jones

Officer

Power Supply & Environmental Affairs