BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1302

In the Matter of	)
PUBLIC UTILITY COMMISSION OF OREGON,	)
Staff Investigation into the Treatment of CO_2 Risk in the Integrated Resource Planning Process.	)

FINAL COMMENTS OF
THE CITIZENS' UTILITY BOARD OF OREGON
ECUMENICAL MINISTRIES OF OREGON
NW ENERGY COALITION &
RENEWABLE NORTHWEST PROJECT

September 26, 2007

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I. Introduction

Planning for risk and uncertainty is a key objective of the Integrated Resource Planning (IRP) process, and a thorough analysis of the risk of future CO_2 regulation should be an integral part of any utility's planning. We are, therefore, very pleased with the high level of agreement from all parties in this Docket that a more rigorous analysis of carbon risks is acceptable and necessary, including:

- An expanded range of CO_2 adders that more closely reflects the current and evolving policy environment;
- The use of trigger point analysis to explore CO_2 risk;
- The examination of portfolio flexibility with regard to CO_2 risk; and
- The inclusion of a candidate portfolio specifically designed to be consistent with Oregon energy policies, including state greenhouse gas emissions reduction goals.

These basic elements were present in the second round comments of all parties, including those of Staff, the Joint Parties, the Joint Utilities (Utilities), and the Oregon Department of Energy (ODOE). Though we have not yet seen Staff's or the Utilities' response to our recommendation on upstream emissions, we would like to reiterate the importance of including the upstream emissions associated with fuel purchases in utilities' CO_2 risk analysis, as these emissions may present a substantial risk to utilities. We will discuss this issue further below.

II. Discussion

- Preferred Portfolio: The Joint Parties support the proposal in the Utilities' Comments of September 13th to remove the separate paragraph on preferred portfolio selection (Staff's proposed Guideline 8b), as it is redundant with existing Guidelines 1b and 1c adopted by OPUC Order No. 07-002. We support moving the additional language on the treatment of PVRR and end-effects to Guideline 8a (relating to Scenarios).
- Plant Lifespan: The Joint Parties support the proposal in ODOE's Comments of September 13th to include additional language to Staff's proposed Guideline 8b regarding the expected useful lifespan of a plant. We agree with ODOE that consistent and reasonable assumptions regarding a plant's useful lifespan, especially as they relate to CO_2 regulatory scenarios, are a critical element of robust IRP analysis. This issue may be more succinctly addressed by including the expected useful life of a resource when addressing logical consistency within each scenario in Guideline 8a, and we have included alternate language in our final proposed Guideline 8.

- $100 Per Ton: The Joint Parties oppose the proposal in the Utilities' Comments to strike "*(i.e., at least $100 per ton [of CO_2], as levelized in 2005 dollars)*" from Guideline 8a. This parenthetical provides useful guidance to utilities on the minimum range of adders that is appropriate, given the current policy environment, while leaving utilities the freedom to adjust this range upwards if appropriate. The survey of current policy proposals in our Opening Comments of July 26th supports this range of adder values.

- Alternate Portfolio Analysis: We oppose the Utilities' proposal to replace the text:

  > "under the base-case conditions and under each of the CO_2 compliance scenarios" with "under the base case and alternative trigger point scenarios". (Joint Utility Comments at 2-3).

  This change would result in a comparison of the alternate portfolio(s) under the trigger point scenario(s) to the preferred portfolio under the original CO_2 compliance scenarios, which would be an apples to oranges comparison. It is important to compare the performance of the alternate portfolio(s) with the preferred portfolio under the **same** scenarios, *i.e.*, the base-case and other CO_2 compliance scenarios.

- Oregon Portfolio: The Joint Parties support the proposal in the Utilities' Comments to change Staff's proposed Guideline 8e on an Oregon Compliance Portfolio to make it a simple statement directing utilities to develop an Oregon compliant portfolio, rather than to develop one only if none of the others are compliant and/or consistent.

- Electricity Sector: We are ambivalent about the Utilities' proposal to include the language "*applicable to the electricity sector*" to Staff's Guideline 8e on an Oregon Compliance Portfolio. As long as the final recommended language includes specific mention of state greenhouse gas reduction goals as one of the policies applicable to

the electricity sector, we would not oppose this addition. We do, however, feel that it would be informative for utilities to present at least one portfolio that achieves Oregon greenhouse gas emissions reduction goals, despite the uncertainty about how these goals will eventually be translated into binding regulation. Emissions reductions in the electricity sector will be key to achieving these goals and, as electricity sector reductions will likely be achieved at a lower cost than reductions in other sectors (most notably transportation), it would be unwise to assume, for planning purposes, that utilities will face more lenient emissions reduction targets when state goals are translated into regulation.

- Optimized: The Joint Parties oppose the proposal in the Utilities' Comments to remove the word "optimized" from throughout the guidelines. We understand the language "*a portfolio optimized for each of these trigger point scenarios*," (Staff's Guideline 8c) to mean "*a portfolio of resources with the best combinations of expected costs and associated risks for the utility and its customers*" (OPUC Order No. 07-002, Guideline 1a), given the particular trigger point scenario. We understand that the term "optimized" may be new to the lexicon of integrated resource planning but we feel that it offers a useful shorthand for a least-cost, least-risk portfolio designed specifically for a particular scenario. The direction to fully optimize a portfolio, given a particular scenario, is key to a robust analysis, as these alternative portfolios are not worthwhile if they are simply consistent with but not fully developed and optimized for the scenario in question. We would therefore support the inclusion of the term "optimized" throughout Guideline 8 with the understanding that it is defined as above. Another alternative would be to replace the term

"optimized" with suitable language that directs utilities to "*develop a portfolio of resources with the best combination of costs and risks given the particular scenario."*

- Upstream Emissions: Finally, we recognize that our addition of language directing utilities to address upstream emissions associated with fuel purchases (Joint Parties' proposed Guideline 8b) is a late addition and is a topic that may warrant continued discussion. However, we reiterate our position in our Comments of September 13th that upstream emissions associated with fuel purchases present a significant risk to utilities, and should be included in a thorough analysis of future CO_2 regulatory risks. Emissions in upstream sectors will likely be regulated, just as emissions in the electricity sector will, and these regulations will add costs to various fuels corresponding to the emissions associated with that fuel's mining, extraction, production, refining, transportation and distribution.

  We would like to clarify that we recommend restricting analysis of upstream emissions to emissions directly associated with fuel mining, extraction, production, refining, transportation, and distribution, and do not intend this analysis to include emissions embedded in vehicles, materials, or facilities associated with fuels due to added complexity and possibility of double counting. We have included revised language in our final proposed Guideline 8 that attempts to clarify this point, and refer to our concern about Avista's recent IRP proposal (Joint Parties' Comments on Staff Proposed Guideline at page 4).

- Wording Changes: We support the Utilities' minor changes to the second to last sentence in Staff's proposed Guideline 8d on Risk Adaptability and include these edits in our final recommended Guideline 8 (paragraph 8f). We also support the

Utilities' removal of the redundancy from "reducing greenhouse gas emission reductions."

III. Joint Parties' Final Proposed Guideline 8

We have attached two versions of the Joint Parties' final proposed Guideline 8. The first version is a redline of our proposal of September 13th. The second version is a clean version of our final proposed Guideline 8 for ease of reading.

Respectfully Submitted,
September 26, 2007

/s/ Jason G. Eisdorfer	Citizens' Utility Board of Oregon
/s/ James Edelson	Ecumenical Ministries of Oregon
/s/ Jesse Jenkins	Renewable Northwest Project
/s/ Steve Weiss	NW Energy Coalition

a. SCENARIOS: The utility should construct a base-case scenario to reflect what it considers to be the most likely regulatory compliance future for carbon dioxide (CO_2), nitrogen oxides, sulfur oxides, and mercury emissions. The utility also should develop a broad array of compliance scenarios ranging from the present CO_2 regulatory cost to the upper reaches of credible proposals by governing bodies (*i.e.*, at least $100 per ton CO_2, as levelized in 2005 dollars). Each scenario should include a time profile of CO_2 compliance costs. For each scenario, the utility should identify the underlying source of the CO_2 costs, *i.e.*, taxes, a ban on certain types of resources, or CO_2 caps (with or without flexibility mechanisms such as trading or a safety valve). The utility should document and explain its rationale for choosing its base-case scenario from among the other possible CO_2 regulatory futures. Each scenario should maintain logical consistency, to the extent practicable, between CO_2 regulatory costs and other key inputs including, but not limited to, expected interactive effects with fuel and electricity prices, the price elasticity of demand, and the expected useful life of a resource. The utility should estimate the twenty-year (as a minimum) present value of revenue requirement (PVRR) for each of the studied portfolios for several illustrative regulatory compliance futures within the range of scenarios. End-effect considerations should be incorporated in the analyses to allow for comparisons of portfolios containing resources with different economic lives. In addition, and if material, sensitivity analyses on a range of reasonably possible regulatory futures for nitrogen oxides, sulfur oxides, and mercury should be included to further substantiate the preferred portfolio selection.

b. UPSTREAM CO_2 EMISSIONS: The utility should include, to the extent practicable, a value for the upstream CO_2 emissions associated with fuel purchases and their effect on fuel prices in all the portfolios it considers. Upstream sources of emissions associated with fuel purchases include, but are not limited to: emissions associated with mining, extraction or recovery of fuel and feedstock for fuel production; emissions from liquefaction, gasification or other fuel processing, production and refining processes; emissions from pumping, transportation, and distribution of fuels; and other related processes. The CO_2 emissions associated with upstream CO_2 emissions of each portfolio's fuel purchases should be separately quantified and presented, and the utility should identify whether or not each CO_2 regulatory compliance scenario described above includes regulation of these upstream emissions sources.

c. TRIGGER POINT ANALYSIS AND ALTERNATE PORTFOLIOS: The utility should identify at least one CO_2 compliance cost scenario, if there is one, within the range of alternative regulatory scenarios considered that would lead to, or "trigger," a set of resources that is substantially different from the preferred portfolio. The utility should develop an alternate portfolio optimized for each of these trigger point scenarios. The utility should then analyze the cost and risk performance of the alternate portfolio(s) under the base-case and each of the CO_2 compliance scenarios. The utility should examine the PVRR difference between its originally preferred portfolio and the alternate portfolio(s) in light of the risk performance metrics from sensitivity analysis.

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d. OREGON COMPLIANCE PORTFOLIO: The utility should construct a portfolio that is consistent with Oregon energy policies applicable to the electricity sector (including state goals for reducing greenhouse gas emissions), optimize that portfolio given the relevant energy policies, and perform the same analysis as for the alternate portfolio(s).

e. PORTFOLIO CO_2 RISK ADAPTABILITY: The utility should assess the cost and risks of adapting the preferred portfolio to a scenario (or scenarios) where the utility must change course unexpectedly due to a major change in the CO_2 compliance requirements. The utility should describe the timing and magnitude of new CO_2 requirements that would elicit such a divergence in course. The utility should compare the cost and risks of the resulting divergent portfolio with those of a portfolio that is optimized to be more adaptable in the event of such a change in the CO_2 compliance requirements. Comparative factors such as lead times for site acquisition, preliminary engineering, and construction time should be incorporated in the characterization of the divergent and the adaptable portfolios.

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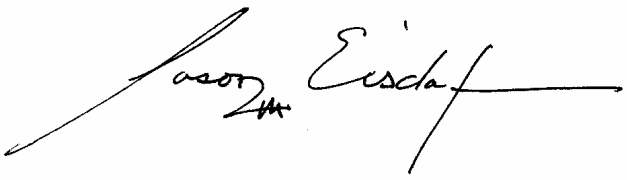
CERTIFICATE OF SERVICE

I hereby certify that on this 26th day of September, 2007, I served the foregoing Comments on and Redline Guideline of the Citizens' Utility Board of Oregon, Ecumenical Ministries of Oregon, NW Energy Coalition, and Renewable Northwest Project in docket UM 1302 upon each party listed below by email, and upon the Commission by email and by sending 6 copies by U.S. mail, postage prepaid, to the Commission's Salem offices.

Respectfully submitted,



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