Steven Weiss Senior Policy Associate NW Energy Coalition (503) 393-8859 503 851-4054 (cell) steve@nwenergy.org

September 9, 2005

Oregon Public Utility Commission Filing Center 550 Capitol St. NE, Suite 215 Salem, OR 97301-2551

Enclosed for filing in the UM 1056 proceeding are the original and five copies of the joint opening comments of the Citizens' Utility Board, Renewable NW Project and the NW Energy Coalition, and Certificate of Service. Copies have been emailed to the parties today.

Thank you,

Sincerely,

Steven Weiss

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 1056

In the Matter of an Investigation)	OPENING COMMENTS OF
into Least Cost Planning Requirements)	CITIZENS' UTILITY BOARD,
)	RENEWABLE NORTHWEST
		PROJECT AND THE NW
		ENERGY COALITION

The Citizens' Utility Board, the NW Energy Coalition, the Renewable Northwest Project submit these opening comments jointly in UM 1056. We strongly support Staff's straw proposal in this docket and applaud Staff's thorough analysis of these complex issues. We would like to offer additional comments on some specific issues including, carbon values, action plan implementation, evaluation of resources, transmission, utility ownership vs. "rental", tenure and optionality, the planning margin and the frequency of IRPs.

Global Warming and Carbon Compliance Costs

Global warming could impose significant costs on customers and shareholders. IRPs can result in decisions to invest in power plants with an expected life of forty or more years. The financial risk of who pays for carbon dioxide emissions (due to subsequent legislation, regulation or court order) is something that the Commission must address.

Global warming represents a real and substantial threat to Oregon. Governor Kulongoski's Advisory Group on Global Warming details some of these risks.

"The impacts of such changes on Oregon citizens, businesses and environmental values are likely to be extensive and destructive. Coastal and river flooding, snowpack declines, lower summer river flows, impacts to farm and forest productivity, energy cost increases, public health effects, and increased pressures on many fish and wildlife species are some of the effects anticipated by scientists at Oregon and Washington universities."¹

Electricity generation is one of the primary sources of CO2 emissions and contributors to global warming. In 2000, Oregon's greenhouse gas (GHG) emissions were 67.7 million metric tons of carbon dioxide equivalent. This represents a 15 percent

¹ "Oregon Strategy for Greenhouse Gas Reductions" Page i – Executive Summary. http://egov.oregon.gov/ENERGY/GBLWRM/Strategy.shtml

increase over the state's 1990 GHG emissions of 58.7 million metric tons of carbon dioxide equivalent. According to its worst case forecast, the U.S. Department of Energy estimates that GHG emissions from Oregon will be 61 percent higher by 2025.² In 2002, electricity sources as a whole in Oregon emitted 1.05 pounds of CO2 per kilowatt-hour. Oregon gets 42% of its electricity from the most carbon-intense source – coal. In this same year, Oregonians emitted almost 17 metric tons of CO2 per capita, compared to the worldwide average of about 4 metric tons.³

PacifiCorp, PGE and Idaho Power have all analyzed the risk of future carbon regulation in some manner in their IRPs. PacifiCorp was a regional leader for being the first to assign a value for CO2 emissions to its base case in 2003. While these are important first steps to addressing the impacts of global warming on utilities and their customers, we believe this issue requires more consistency in the analysis and assumptions used in the IRP.⁴

Staff directs utilities to "analyze the effect of potential compliance costs related to global warming on costs and risks for the resource portfolios under consideration, as well as risk mitigation strategies. They further recommend that "[u]tilities should include in their base-case analyses, the regulatory compliance costs they expect for carbon dioxide (CO2) emissions." We agree with Staff's position but we recommend that the Commission go further. Rather then deferring to the utilities to select the compliance costs they expect, we believe the Commission should: (1) require the utilities to include an imputed CO2 cost in their base-case analyses; and, (2) open an investigation at the conclusion of this docket into the appropriate value for CO2 that utilities should use in their IRPs. We believe that the Commission must formally recognize the risk associated with greenhouse gas emissions and take steps to reduce that risk. The PUC ultimately has the responsibility for judging utility resource acquisition decisions, so it is appropriate for the Commission to formally recognize these risks and to assign them appropriately.

We believe, at this point, that a carbon adder is the best proxy for anticipating the impact of future carbon regulation. The California Public Utilities Commission's (CPUC) new global warming policy, adopted in December 2004, provides a good example of assigning carbon values. The decision requires the state's utilities to begin accounting explicitly for the financial risk associated with greenhouse gas emissions in developing long term resource plans and in making new power plant investments.⁵ The CPUC adopted an interim range of \$8 - \$25 per ton of CO2 for utilities to use pending a subsequent Order that would adopt a single value. In April 2005, the CPUC adopted the final costs of the greenhouse gas adder: an escalating cost of \$5/ton of CO2 in the near term, \$12.50/ton by 2008 and \$17.50 by 2013.⁶ These imputed costs were developed by

² Ibid. Appendix B.

³ Ibid. Page 6

⁴ "Balancing Cost and Risk: The Treatment of Renewable Energy in Western Utility Resource Plans," Bolinger, Mark and Ryan Wiser. Lawrence Berkeley National Laboratory, Environmental Energy Technologies Division, August 2005. <u>http://wwtd.lbl.gov/EA/EMP</u>. pg. 62.

⁵ CPUC Decision N. 04-12-048

⁶ CPUC Decision N.05-04-024.

the Rocky Mountain Institute and Energy and Environmental Economics (E3) as part of the new avoided costs for use in evaluating energy efficiency programs.⁷

While we believe the 1993 Order (No. 93-695) was ahead of its time and has provided the Commission some important information, it doesn't go far enough. We believe that utilities should continue to analyze the range of regulatory costs prescribed in this Order, but the resulting data should actually influence the type of resource the utility chooses. Carbon regulation must be considered seriously in the portfolio selection process and the best way to ensure that is to include it in the base-case analysis, instead of simply running separate scenarios as the 1993 Order currently requires. Actual CO2 costs may be different from the base case, so it is in the risk analysis that varied CO2 costs can be weighed. We believe the different scenarios in the 1993 Order should be given probability weightings in the risk analysis, not just included separately for informational purposes.

Implementation of Plans

The recent IRPs of Oregon utilities represent a significant improvement over previous plans. They are robust and sophisticated analyses resulting in Action Plans. In its proposed guidelines for this docket, staff has outlined procedural and substantive requirements that will further improve on this progress. For the utilities, PUC staff, and other interested parties, the IRP process will continue to be an important and time intensive process.

However, at the end of the day the plan must be acted upon. The plan must be taken as a whole, with its different resources making up a *package* of elements that *together* provide customers with the best combination of cost and risk. Thus any single resource acquisition cannot be seen as prudent. The Commission should make it clear that its acknowledgment of the plan is not an acknowledgment of separate elements of the plan.

We agree with Staff's recommendation that utilities submit a yearly update on the IRP action plan, providing insight for the Commission and intervenors into any progress towards meeting the IRP goals. But we also support the Commission taking a more active role in closely following the utility's progress on the IRP action items. The PUC has done this during the past year by requiring updates from PGE and PacifiCorp on renewables acquisition. While rate cases are ultimately the venue for determining if utility acquisition decisions were prudent, they don't necessarily provide relief if the utility didn't follow through on all of its IRP action items in a timely manner.

⁷ "Methodology and Forecast of Long Term Avoided Costs for the Evaluation of California Energy Efficiency Programs," Prepared by Energy and Environmental Economics, Inc. and Rocky Mountain Institute for the California Public Utilities Commission, October 25, 2004, www.ethree.com/cpuc_avoidedcosts.html.

Evaluation of Resources

We support Staff's direction that all resources must be "evaluated on a consistent and comparable basis." We think it is particularly important in the case of renewable resources because the amounts of renewables considered in portfolio analyses are often subject to artificial limitations. Bolinger and Wiser note that, "Though one would generally expect the extent to which renewable resources are included within candidate portfolios to be a direct function of their cost and performance as well as their ability to mitigate certain risks, this is not always the case. Instead, utilities often establish exogenous limits to the amount of renewable sources that can be selected.⁸

Utilities often impose such limits due to unfamiliarity with wind or other renewable resources. Fortunately, utilities are gaining more experience with renewables and a lot of good analysis has gone into the areas of integration and capacity value of wind power. As this experience grows, we urge utilities to: (1) consider the full range of renewable resources available, not just wind: and, (2) not artificially impose caps on the amount of renewables a model considers. For example, a better way to model limits on the amount of a resource is with a cost curve based on evidence of increasing costs for larger amounts due to increased transmission or integration costs.

Transmission

The ALJ's June 6 memorandum specifically requested input on the "extent to which the IRP should address transmission issues, including the construction of new transmission lines." We agree with Staff on page 8 of its comments where it states:

"Portfolio analysis should include costs to the utility for the fuel transportation and electric transmission required for each resource being considered. In addition, utilities should consider fuel transportation and electric transmission system development as resource options. Such analysis should consider the value of such development for additional short-term purchases, additional sales, accessing less costly resources in remote locations, and acquiring alternative fuel supplies. Potential savings in distribution system costs should be identified in the plan for resources that can significantly reduce such costs, including conservation, demand response, combined heat and power facilities, customer standby generation, solar resources, liquefied natural gas and gas storage."

Most IRPs at least qualitatively address the issue of transmission planning and expansion to meet growing resource needs. A significant issue for all resources, but especially location-dependent resources like renewables, is the availability of capacity on existing lines as well as the need for expansion of the transmission system to access more remote resources and bring it to load centers. As wind power expands in the region, IRPs will need to include updated analysis of transmission costs for accessing growing quantities of wind generation.⁹ When assessing the cost of upgrades, it is also critical to

⁸ Bolinger and Wiser, page 14.

⁹ Bolinger and Wiser. Pages 29-30.

estimate the value that these improvements may have on increasing the reliability of the transmission system.

Non-Wires Alternatives

We also agree with Staff that the Commission should develop guidelines for electric utilities to evaluate during transmission system planning whether distributed generation, targeted energy efficiency and demand response can cost-effectively and reliably defer or avoid certain types of transmission investments.

Utility Ownership vs. "Rental" of Resources

There has been an increasing focus in recent years on the issue of utility ownership of new resources (either self-build or purchase after construction). Ownership carries with it significant risks, costs and benefits to customers compared to nonownership, making a direct comparison difficult. While the RFP is the venue for making the selection between ownership vs. rental, we recommend that utilities include a discussion in its IRP of this issue. The results of this discussion should be reflected in the scoring used in the RFP to compare owned vs. non-owned resources if the RFP will ultimately make the decision. Utilities should indicate in the IRP if they plan to consider ownership of any of the new resources identified in their preferred strategy and include the "pros and cons" of this decision in their IRP analysis. If a utility owned resource is contemplated, the IRP should identify the transmission arrangements for that resource and where the resource will be sited.

Tenure and Optionality

The previous discussion regarding owned vs. non-owned resources is one example of a resource characteristic that has not previously been adequately addressed in utilities' IRPs or RFP scoring. The treatment of the tenure and optionality characteristics of various resource choices has also been missing, or discussed only qualitatively.

Resources with shorter lead times and tenure have an optionality value, since they can be adjusted or changed depending upon future circumstances. This value is considerable in the face of large uncertainties in future technology breakthroughs, carbon regulation and price volatility of fuels. The IRP must develop tools to measure this value, and the RFP needs to reflect this factor in its scoring criteria.

The NW Power and Conservation Council's modeling effort would be a good place to start. The Council's model allows future resource choices to change depending on future scenarios. Thus portfolios that contain resources with more optionality may end up costing less as the model tests it against hundreds of possible futures. The Council's model is public, so it might be possible to come to a reasonable "optionality adder" by using it to run portfolios that are exactly the same except for containing a resource with different tenure.

Planning Margin

We support the Staff's treatment of planning margin with one additional note. The Staff draft states: "The optimal level for reliability metrics is a function of the resource makeup of the system." The draft's discussion then makes it clear that by "system," the Staff was referring only to the utility's system. However, one must take a larger view. The optimum level depends also on other utilities' planning margins. It is the actions of the whole interconnection that determine both reliability and market prices. We have often seen what seems like a "herd mentality" when it comes to utility actions-and it is this herd action of all taking the same general approach to resource acquisition that, in our opinion, has led the region over the cliff on multiple occasions. Therefore, each utility's IRP analysis should take note of regional adequacy efforts and what other utilities are planning in order to properly measure its own risk. (And a healthy dose of contrariness may be in order.)

Frequency of IRPs

Staff recommends in its draft that the utilities should file IRPs every two years. We believe that this should be clarified to mean two years from the date of the previous IRP's acknowledgment.

Summary

We appreciate the PUC Staff's thorough analysis of the issues in this docket. We urge the Commission to require the utilities to include an imputed CO2 cost in their base-case analyses and open an investigation at the conclusion of this docket into the appropriate value for CO2 for utilities to use in their IRPs. We also support the Commission taking a more active role in closely following the utility's progress on the IRP action items.

CERTIFICATE OF SERVICE

UM 1056

I certify that on the 9th day of September, 2005 I served the foregoing document (Opening Comments of CUB, RNP and NWEC) upon all parties of record in this proceeding by e-mail.

Steven D. Weiss **NW Energy Coalition** 4422 Oregon Trail Ct. NE Salem, OR 97305 503 851-4054 SUSAN K ACKERMAN STEPHANIE S ANDRUS NIPPC DEPARTMENT OF JUSTICE PO BOX 10207 **REGULATED UTILITY & BUSINESS** PORTLAND OR 97296-0207 SECTION 1162 COURT ST NE SALEM OR 97301-4096 **KATHERINE BARNARD** JACK BREEN CASCADE NATURAL GAS PUBLIC UTILITY COMMISSION PO BOX 24464 PO BOX 2148 SEATTLE WA 98124 SALEM OR 97308-2148 JENNIE L BRICKER PHIL CARVER STOEL RIVES LLP **OREGON OFFICE OF ENERGY** 900 SW FIFTH AVE STE 2600 625 MARION ST NE STE 1 PORTLAND OR 97204-1268 SALEM OR 97301-3742 **MELINDA J DAVISON** J JEFFREY DUDLEY DAVISON VAN CLEVE PC PORTLAND GENERAL ELECTRIC 333 SW TAYLOR, STE, 400 121 SW SALMON ST 1WTC1300 PORTLAND OR 97204 PORTLAND OR 97204 JASON EISDORFER **ANN L FISHER** CITIZENS' UTILITY BOARD OF **AF LEGAL & CONSULTING** OREGON SERVICES 610 SW BROADWAY STE 308 1425 SW 20TH STE 202

PORTLAND OR 97201

PORTLAND OR 97205

ANN ENGLISH GRAVATT RENEWABLE NORTHWEST PROJECT 917 SW OAK - STE 303 PORTLAND OR 97205	PATRICK G HAGER PORTLAND GENERAL ELECTRIC 121 SW SALMON ST 1WTC0702 PORTLAND OR 97204
DAVID E HAMILTON	JOHN HANSON
NORRIS & STEVENS	NORTHWEST NATURAL
621 SW MORRISON ST STE 800	220 NW 2ND AVE
PORTLAND OR 97205-3825	PORTLAND OR 97209-3991
ROBERT D KAHN	BARTON L KLINE
NIPPC	IDAHO POWER COMPANY
7900 SE 28TH ST STE 200	PO BOX 70
MERCER ISLAND WA 98040	BOISE ID 83707-0070
KATHERINE A MCDOWELL	DAVID J MEYER
STOEL RIVES LLP	AVISTA CORPORATION
900 SW FIFTH AVE STE 1600	PO BOX 3727
PORTLAND OR 97204-1268	SPOKANE WA 99220-3727
JANET L PREWITT	GREGORY W SAID
DEPARTMENT OF JUSTICE	IDAHO POWER COMPANY
1162 COURT ST NE	PO BOX 70
SALEM OR 97301-4096	BOISE ID 83707
IRION SANGER	STEVEN SCHLEIMER
DAVISON VAN CLEVE	CALPINE CORPORATION
333 SW TAYLOR, STE 400	4160 DUBLIN BLVD
PORTLAND OR 97204	DUBLIN CA 94568-3169
JOHN W STEPHENS	JON STOLZ
ESLER STEPHENS & BUCKLEY	CASCADE NATURAL GAS
888 SW FIFTH AVE STE 700	222 FAIRVIEW AVENUE NORTH
PORTLAND OR 97204-2021	SEATTLE WA 98109
MARK P TRINCHERO	STEVEN WEISS
DAVIS WRIGHT TREMAINE LLP	NORTHWEST ENERGY COALITION
1300 SW FIFTH AVE STE 2300	4422 OREGON TRAIL CT NE
PORTLAND OR 97201-5682	SALEM OR 97305

RICHARD T WINTERS	LINCOLN WOLVERTON
AVISTA UTILITIES	EAST FORK ECONOMICS
PO BOX 3727	PO BOX 620
SPOKANE WA 99220	LA CENTER WA 98629
PAUL M WRIGLEY PACIFIC POWER & LIGHT 825 NE MULTNOMAH STE 800 PORTLAND OR 97232	