

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**LC 52**

In the Matter of

PACIFICORP dba PACIFIC POWER

OPENING COMMENTS OF  
THE NW ENERGY COALITION

2011 Integrated Resource Plan

The NW Energy Coalition ("Coalition) appreciates the opportunity to provide opening comments on the PacifiCorp 2011 Integrated Resource Plan (IRP). Our comments recognize PacifiCorp planning process improvements that begin to make the analytic shifts needed to plan for the "green future" that we commonly agree is upon us. We are concerned, however, that the IRP does not adequately plan for our most likely future -- one where public policy continues to lead us toward a clean energy economy.

Most critically, we question the appropriateness of PacifiCorp's planned expenditures in its aging coal fleet. These expenditures are a foregone conclusion in the IRP and are not analyzed or explained in any significant manner. As a result, clean energy resources are underrepresented in the IRP and its Action Plan, including lower than expected demand-side management resources and relatively little renewable resources. We also comment on additional areas where we believe transmission planning can be strengthened. The final section provides our recommendations to the Commission based on our initial observations of the information contained in the IRP.

## **I. The IRP is Incomplete Without a Transparent Unit by Unit Analysis of Coal Plant Costs**

PacifiCorp has a fleet of 26 coal-fired boilers in 11 locations in Montana, Wyoming, Utah, Arizona and Colorado. Those plants provide almost two-thirds of the electricity consumed by customers in its six-state territory. Due to new clean air rules proposed by the U.S. Environmental Protection Agency, PacifiCorp faces at least \$1.3 billion in additional environmental compliance costs, almost 40 percent of the value of its coal fleet.<sup>1</sup> The total capital investment expected is \$2.7 billion, with O&M and other costs raising the total cost to customers to \$4.2 billion.<sup>2</sup>

PacifiCorp should be required, in this and all future IRPs, to consider whether ongoing coal plant investments are least-cost, least-risk investments. The IRP does not include modeling scenarios that consider the costs of coal plant upgrades against other potential resources. Nor does the IRP contain the information necessary to allow the Commission or other stakeholders to compare ongoing investments against other proposed resource selections. In fact, the preferred portfolio assumes that the Company will continue to operate all of its coal units and complete all of the costly upgrades necessary to do so. A unit-by-unit analysis of all potential compliance costs associated with current and future regulation is needed to determine if further coal plant investments are prudent expenditures. Information included in this analysis should include:

- unit efficiency
- unit coal costs
- known costs of environmental compliance
- year investments are expected

---

1

☐ Testimony of Cathy S. Woolums, Senior Vice President and Chief Environmental Counsel, MidAmerican Energy Holdings Company, Committee on Environment and Public Works, United States Senate, June 15, 2011.

2

☐ *Ibid.*

- risk and range of additional environmental compliance costs that are not firm
- specific deadlines for environmental compliance
- costs and risks of future carbon regulation
- any other information necessary for a thorough analysis.

A thorough analysis of coal plant investments compared to alternative resources will likely impact all demand and supply side resource and transmission actions selected in the 2011 IRP. Consequently, without this coal plant analysis it is impossible to evaluate PacifiCorp's 2011 IPR Action Plan.

We were pleased to hear PacifiCorp commit to conduct a unit-by-unit analysis of coal plant upgrade costs and provide that information in this IPR proceeding<sup>3</sup>. We urge the Commission to hold them to this commitment and provide scheduling flexibility to ensure that this analysis is done completely with adequate time for Commission and intervener review and comment in this 2011 IRP proceeding.

PacifiCorp is currently in process of making these and other costly upgrades to their coal fleet. Many significant investments occur over the next couple of years, consequently, time is of the essence. From the perspective of consumer and environmental protection, we cannot afford to wait until the next IRP process because the majority of PacifiCorp's coal plant investments will likely be made before that time.

The Coalition supports the comments made by CUB in this docket and refers the reader to their opening comments for more information on this topic.

---

3

<sup>3</sup> Comments of PacifiCorp Staff, OPUC Public Meeting, August 19, 2011

## **II. The IRP Underestimates the Amount of Cost Effective Energy Efficiency Available**

We appreciate that the IRP calls for more resources from energy efficiency programs relative to the 2008 IRP. Energy efficiency efforts appear to be gaining momentum across the Pacific Northwest. For example, the Bonneville Power Administration recently announced that it is on track to meet or exceed its five-year targets and they are seeing unprecedented demand for energy efficiency programs among their utility customers. In light of the evidence of increasing success in finding and acquiring cost effective energy efficiency, we are concerned that the IRP does not go far enough in acquiring resources from demand side management actions. Underestimating the amount of cost effective conservation available across the company's territory could be contributing to the perceived need for additional, significantly more costly, resources – including the three CCCT's called for in the IRP Action Plan.

The Northwest Power and Conservation Council's (Council) 6<sup>th</sup> plan establishes regional cost effective energy efficiency targets. While that plan is a regional level analysis, it is an important benchmark by which to evaluate how individual utilities contribute to meeting those targets and to measure utility progress to ensure that the region is capturing all cost-effective energy efficiency resources. The 2011 Cadmus Report<sup>4</sup> discusses PacifiCorp progress toward the Council goals for only one state – Washington. It is concerning that the report acknowledges that following the course set in the 2011 IRP will result in a 25% deficiency in PacifiCorp's Washington share of the Council 20 year energy efficiency targets. Information comparing the IRP DSM to the Council's targets is not provided for Oregon and Idaho, but the Coalition is working to obtain this information. We are concerned about the overall amount of energy efficiency called for in the IRP relative to the 6<sup>th</sup> Plan targets.

---

4

□ Assessment of Long-Term, System-Wide Potential for Demand Side and other Supplemental Resources, Final Report, Appendix II, The Cadmus Group Inc., March 31, 2011.

The Coalition is exploring several areas of the PacifiCorp IRP analysis that we believe could be contributing to undervaluing energy efficiency programs. The following is a summary of the areas we have currently identified.

## **A. Class 2 DSM**

### **1. Ramp Rates**

The Coalition is studying Class 2 DSM ramp rates for all states as reported in the IRP and associated data requests<sup>5</sup>. Specifically, we feel that the Company, to date, has failed to fully explain or document the precise information used to classify ramp rates for California and Idaho as "normal" and Wyoming as "slow".

Additionally, ramp rates are used by the company to explain significant reductions in achievable DSM between August 2009 and August 2010 for California, Idaho, and Washington<sup>6</sup>, without any explanation of why the ramp rates were altered in this timeframe. We are particularly concerned about the low ramp rates for Wyoming and Idaho because it is our understanding that the east side currently has some of the fastest growing opportunities energy efficiency programs – largely due to the fact that energy efficiency is just gearing up in those states. Finally, no ramp rates are reported for Oregon making it difficult to assess the Class 2 DSM reported as achievable in the IRP.

### **2. Failing to Incorporate Opportunities in the IRP**

In the recent PUC public meeting, PacifiCorp reported on results from an independent consultant study investigating 10 distribution feeders in

---

5

☐ OPUC data requests 129 and 139

6

☐ Assessment of Long-Term, System-Wide Potential for Demand Side and other Supplemental Resources, Final Report, Appendix II, The Cadmus Group Inc., March 31, 2011, Figures 6.4, 6.8 and 6.9 and OPUC data request 139

Washington State. Although the company reported that the analysis looked promising for both Washington and potential replication in other states, Company representatives reported that no savings from these potential DSM actions are included in the 2011 IRP.

### **B. Class 1 DSM**

The IRP Action Plan calls for very minimal amounts of Class 1 DSM. In fact, although the Action Plan appears to call for 250 MW of Class 1 DSM, only 80 MW appear to be a firm commitment from the Company as the Action Plan goes on to state the remaining 170 MW identified for the 2011-2020 period will be pursued "*depending on final economics.*"<sup>7</sup> The Coalition is investigating the assumptions and modeling approaches that led to the selection of this small amount of Class 1 DSM. We believe the actual potential could be considerably higher.

The Executive Summary of the 2011 IRP states that the need for the three CCCT resources called for by 2019 under the IRP is driven in part by "lowered expectations for irrigation load control program capacity." Our analysis of the IRP documents has not identified any explanation for these lowered expectations in irrigation load control program capacity. More detailed information is necessary to evaluate whether the 2011 adjusted resource expectations are justified.

### **III. Significant Improvement is Needed in the IRP Analysis of Wind Resources**

In our comments regarding the 2008 PacifiCorp IRP<sup>8</sup>, we pointed out that the wind costs – both capital and integration – were too high. We find that the Company did not address

---

7

□ PacifiCorp 2011 IRP, pg. 256

8

□ Comments of the NW Energy Coalition on LC 47: PacifiCorp's 2008 Integrated Resource Plan, October 8, 2009

these issues in the 2011 IRP, rather they repeated the same mistakes. Flawed analysis in the IRP resulted in inflated wind costs that prevented the model from producing portfolios with accurate levels of cost-effective wind energy. Indeed, PacifiCorp found the model's level of investment in wind energy so deficient that it adjusted the preferred portfolio, adding more wind, based on "business analysis". While we agree with the decision to add more wind, we question the modeling constructions that led to undervaluing wind in the preferred portfolio.

### **A. Capital Costs**

In the 2008 IRP<sup>9</sup>, PacifiCorp noted that, "...subsequent to completion of its 2008 IRP portfolio analysis in late 2008 and early 2009, the Company has witnessed price declines for wind turbines... These cost declines were not incorporated in portfolio cost estimates." The 2011 IRP notes that wind turbines, due to a decrease in demand, have seen "significant cost decreases since the 2008 IRP<sup>10</sup>". Despite repeated notations of the declining price of wind turbines, wind capital costs are slightly higher in the 2011 IRP than they were in the 2008 IRP. For unexplained reasons, PacifiCorp fails to reflect this noted pricing trend in yet another IRP.

### **B. Wind Integration Costs**

PacifiCorp's wind integration study has serious errors and resulted in an inflated wind integration rate. We concur with the detailed comments of the Renewable Northwest Project on this topic and refer the reader to their Opening Comments in this proceeding for a detailed discussion of the wind integration study deficiencies. Further, we concur with RNP's recommendation that the Commission require PacifiCorp to use an

---

9

□ 2008 PacifiCorp Integrated Resource Plan, Volume 1, pg. 99

10

□ 2011 PacifiCorp IRP, Volume 1, pg. 112

independent technical review committee whose membership is approved by the Commission staff and which is operated according to industry standard principles.

#### **IV. A New Framework Is Needed to Improve Transmission Planning**

##### **A. Current Perspective for Transmission Planning**

In the 2010 Update of the 2008 Integrated Resource Plan, expansion of transmission resources over the next decade and beyond was given a modest amount of attention. In the new IRP, transmission has two full chapters and a substantially increased role in the technical planning studies. We think this increasing focus is warranted and recognize PacifiCorp's extensive work on transmission planning.

The planning studies incorporate two main scenarios: a Green Resource Future and an Incumbent Resource Future, reflecting different public policy pathways relating to energy resources in the coming years. We agree with the conclusion of the IRP that the Green Resource Future is the more likely path forward. The economic and environmental benefits of strong climate and clean energy policy will only increase in the future, and we believe PacifiCorp should embrace this reality and significantly revamp its transmission planning accordingly.

We are less concerned in this discussion about certain "local" elements of Energy Gateway such as the three segments being proposed for acknowledgement in this IRP cycle. While we reserve comment on those specific projects, the IRP makes credible cases for Wallula-McNary providing network transmission service and for Mona-Oquirrh/Oquirrh-Terminal and Sigurd-Red Butte improving reliability and decreasing congestion, as well as other purposes.

Our concern is with the system strategy and regional alignment of the two long-haul branches, which are laid out in a kind of "wishbone" configuration with eastern Wyoming at the apex. One branch, Gateway West, runs west to southeastern Idaho, and the other, Gateway South, runs diagonally to southeastern Utah. In addition to intermediate



connections, the terminus of each branch is expected to interconnect with other major non-PacifiCorp paths.

The scale of Energy Gateway as a whole is extremely large. Even some of the local segments cost into the hundreds of millions of dollars, while the two main branches of Gateway West and Gateway South will cost well into the billions. In total, Energy Gateway as currently envisioned would construct 2,000 additional miles of transmission within less than a decade at a cost exceeding \$6 billion.

PacifiCorp argues that these major investments – as a whole many times the cost of several new large power plants – are justified under many of the planning scenarios in the IRP. We are wondering, however, whether the cart is going before the horse.

## **B. Issues Arising for Energy Gateway**

The IRP places Energy Gateway into the broader IRP context as, in effect, a static resource without full consideration of the range of options available on the supply and demand side, and for basic alignment of the new lines. While Energy Gateway represents internal assessment and development from the perspective of the previous decade, how well does it address the needs of the coming decades, including reliability, support for resource and system diversity, financial risk, and eventual coal plant retirement?

Specific concerns include the following:

- Some local segments of Energy Gateway may well be justified for reliability, congestion management and requests for network transmission service. However, what are the criteria for assessing the major Gateway West and Gateway South branches, which are primarily for bulk long haul power transfer from new development areas or "bubbles" to load centers?
- The alignment of new transmission will have a determinative effect on where major new renewable energy development occurs, the mix of resource types

(solar, wind, geothermal, biomass) and the overall balance between renewable and nonrenewable generation, especially coal.

- To the extent there is surplus capacity on the main branches of Gateway West and Gateway Central both before 2018 and thereafter (net of new resources dedicated to PacifiCorp customer use), these lines could provide wheeling services to new renewable generation areas. That may well be beneficial, but it raises concerns about alignment of the new lines with respect to the most promising renewable energy zones, and the financial risk for cost recovery from very expensive new transmission resources not dedicated to native load.
- As discussed above, the IRP treats PacifiCorp's coal generation resources as immutable. To what degree could Energy Gateway provide cover for extended operation of those resources despite regulatory emission requirements and carbon price risk? If, as we believe, more thorough analysis will show that PacifiCorp should take a structured approach to coal retirement over the 20-year planning period, that would free up existing transmission capacity over time that could carry new renewables and defer and possibly lead to realignment of the major Energy Gateway branches. A stronger and more coherent new energy supply component to the plan should accompany a reassessment of Energy Gateway.
- Likewise, Energy Gateway has not been subjected to a thorough non-transmission alternatives assessment. Not only is such an assessment good practice, with a substantial working example provided by the pioneering work of the Non-Wires Roundtable of the Bonneville Power Administration close at hand, but also it is required under FERC's new Order 1000. We recommend that the Commission add comprehensive non-transmission alternatives assessment to the existing screening requirements for the IRP.
- PacifiCorp is exploring joint arrangements with Idaho Power (for the proposed Boardman-to-Hemingway transmission line) and Portland General Electric (for the proposed Cascade Crossing line). The IRP says advancing those initiatives

diminishes the likelihood of moving forward on the long-planned Hemingway-Captain Jack line. But this raises fundamental questions: What are the main purposes of these lines? What reliability, congestion and renewable energy objectives will any of these lines achieve for Oregon customers and for PacifiCorp customers as a whole? These questions are never addressed in the IRP.

- While studies of the interaction of Energy Gateway with major interconnecting and adjacent transmission paths and the broader western interconnection are clearly part of the transmission expansion process both within PacifiCorp, NTTG and WECC, this important aspect of transmission planning receives little discussion in the IRP.

### **C. Guidance for Transmission Planning**

We turn now to the broad consideration of the current transmission planning approach.

The Draft IRP lays out seven points for a "robust" transmission network:

1. Reliable delivery of power to continuously changing customer demands under a wide variety of system operating conditions.
2. Ability to supply aggregate electrical demand and energy requirements of customers at all times, taking into account scheduled and reasonably unscheduled outages.
3. Economic exchange of electric power among all systems and industry participants.
4. Development of economically feasible generation resources in areas where it is best suited.
5. Protection against extreme market conditions where limited transmission constrains energy supply.
6. Ability to meet obligations and requirements of PacifiCorp's Open Access Transmission Tariff.
7. Increased capability and capacity to access Western energy supply markets.<sup>11</sup>

---

11

<sup>11</sup> *Ibid*, pg. 49

These seven points are certainly valid but do not clearly capture additional attributes that should also be at the core of transmission planning:

- A comprehensive system view, giving full attention to non-transmission alternatives including energy efficiency, distributed generation, demand response, smart grid measures, and storage, as well as improved operations and market-based mechanisms that may defer or eliminate the need for new transmission.
- Support for a diverse and environmentally preferable mix of new and existing supply resources.
- Standards, operations and market-based mechanisms that integrate baseload, peaking and variable resources and interact with other transmission resources in the western region efficiently and reliably.
- Planning and siting that identifies risk and minimizes environmental impacts and economic spillover costs in a "smart from the start" manner, especially on sensitive habitat and important landscape features such as rivers, wetlands and cultural resources.

#### **D. Elements of a New Framework for Transmission Planning**

In considering all the above views, the question arises: is PacifiCorp's current approach to transmission planning adequate to address the challenges and requirements of the next decade? If not, how can its demonstrated strengths be used effectively in a revised planning framework?

We believe that the current approach is not adequate, but that PacifiCorp has made substantial strides in the right direction. What is needed now is to blend existing elements into a new, more comprehensive planning approach that seeks to maximize total system value. This should reflect important drivers for the new planning paradigm now emerging at the regional and federal level.

First, the IRP has an excellent summary of the fast-changing context for transmission planning at the western interconnection level by the Western Electricity Coordinating Council (WECC). Of particular importance is the Regional Transmission Expansion

Project (RTEP), jointly managed by WECC and the Western Governors Association (WGA) under a 3-year grant from the US Department of Energy.

The RTEP project is enhancing traditional WECC 10-year transmission planning by incorporating many new planning elements including consideration of environmental, cultural and water impacts in transmission development.

Second, a more recent development is the issuance by FERC on July 21 of Order 1000. The order concisely outlines a new comprehensive approach to transmission planning. FERC directs:

. . . that public utility transmission providers participate in a regional transmission planning process that produces a regional transmission plan. Through the regional transmission planning process, public utility transmission providers will be required to evaluate, in consultation with stakeholders, alternative transmission solutions that might meet the needs of the transmission planning region more efficiently or cost-effectively than solutions identified by individual public utility transmission providers in their local transmission planning process. This could include transmission facilities needed to meet reliability requirements, address economic considerations, and/or meet transmission needs driven by Public Policy Requirement discussed further below. When evaluating the merits of such alternative transmission solutions, public utility transmission providers in the transmission planning region also must consider proposed non-transmission alternatives on a comparable basis. If the public utility transmission providers in the transmission planning region, in consultation with stakeholders, determine that an alternative transmission solution is more efficient or cost-effective than transmission facilities in one or more local transmission plans, then the transmission facilities associated with that more efficient or cost-effective transmission solution can be selected in the regional transmission plan for purposes of cost recovery.<sup>12</sup>

While this specific language focuses on subregional planning, for example by the Northern Tier Transmission Group (of which PacifiCorp is a member), FERC clearly indicates that this approach applies as well to planning at the "local" level by individual transmission providers such as PacifiCorp. We believe it makes sense to coordinate

---

12

□ Federal Energy Regulatory Commission, Order 1000, 136 FERC ¶ 61,051, July 21, 2011, pg. 117-118.

utility, state and federal transmission planning to reach public policy goals and an efficient, reliable and environmentally acceptable grid.

The best way to capture the value of all the work that has gone into Energy Gateway is neither to accept it as-is nor to start over from scratch. Instead, to achieve total system value and net consumer benefits, a major expansion program like Energy Gateway deserves a thorough top-to-bottom review to insure it will meet future system needs, steer development of new resources of the right types in the right places, enhance system reliability, minimize environmental impacts, and maximize the value of the existing system.

## **V. Recommended Actions**

The Coalition recommends that the Commission:

- Not acknowledge the IRP without a complete, transparent, unit-by-unit analysis of coal plants, along with ample time for interveners to review, analyze and comment on this information.
- Require PacifiCorp to re-examine energy efficiency potential in this IRP.
- Require PacifiCorp in all future IRP related filings to report on the comparison between its share of the Northwest Power and Conservation Council's targets for energy efficiency and the amounts called for in the IRP for Oregon.
- Require PacifiCorp, for its next wind integration study, to use an independent technical review committee composed and operated consistent with industry standards.
- Require PacifiCorp to investigate opportunities for reducing wind capital and integration costs.
- Require Energy Gateway as now constituted to be reassessed as a package and as a collection of individual segments.
- Require, in the next IRP cycle, a new transmission planning framework derived from the principles and requirements of FERC Order 1000, the approaches and

tools being developed in the WECC/WGA RTEP process, as well as PacifiCorp's own methods, tools and comprehensive knowledge of its own system.

The Coalition looks forward to working with PacifiCorp, PUC staff and other interveners throughout this IRP process.

Respectfully submitted,



Wendy Gerlitz  
Senior Policy Associate  
NW Energy Coalition



Fred Heutte  
Senior Policy Associate  
NW Energy Coalition

## CERTIFICATE OF SERVICE

I hereby certify that I have this day caused **Opening Comments of NW Energy Coalition** to be served by electronic mail to those parties whose email addresses appear on the attached service list, and by First Class Mail, postage prepaid and properly addressed, to those parties on the service list who have not waived paper service from OPUC Docket No. LC 52.

DATED this 25th day of August, 2011.

A handwritten signature in black ink, appearing to read "W Gerlitz". The signature is written in a cursive, flowing style.

**Wendy Gerlitz**  
**Senior Policy Associate**  
**NW Energy Coalition**  
**Portland, Oregon**



Summary Report

LC 52 PACIFIC POWER

Category: Least Cost Planning
Filed By: PACIFIC POWER
In the Matter of
PACIFICORP dba PACIFIC POWER
2011 Integrated Resource Plan

Filed by Andrea L. Kelly. (Hard copy rec' 4/1/11)

Filing Date: 3/31/2011
Case Colville, Erik E 503 378-6360
Law Judge(s): KIRKPATRICK, TRACI (503) 378-6683

SERVICE LIST:

OREGON DOCKETS
PACIFICORP, DBA PACIFIC POWER
825 NE MULTNOMAH ST, STE 2000
PORTLAND OR 97232

ERIK COLVILLE -- CONFIDENTIAL
PUBLIC UTILITY COMMISSION
PO BOX 2148
SALEM OR 97308-2148

RANDY DAHLGREN
PORTLAND GENERAL ELECTRIC
121 SW SALMON ST - 1WTC0702
PORTLAND OR 97204

MEGAN WALSETH DECKER -- CONFIDENTIAL
RENEWABLE NORTHWEST PROJECT
917 SW OAK, STE 303
PORTLAND OR 97205

GORDON FEIGHNER -- CONFIDENTIAL
CITIZENS' UTILITY BOARD OF OREGON
610 SW BROADWAY, STE 400
PORTLAND OR 97205

JEREMY FISHER
SYNAPSE ENERGY
485 MASSACHUSETTS AVE., STE 2
CAMBRIDGE MA 02139

WENDY GERLITZ -- CONFIDENTIAL
NW ENERGY COALITION
1205 SE FLAVEL
PORTLAND OR 97202

FRED HEUTTE -- CONFIDENTIAL
NW ENERGY COALITION
PO BOX 40308
PORTLAND OR 97240-0308

ROBERT JENKS -- CONFIDENTIAL
CITIZENS' UTILITY BOARD OF OREGON
610 SW BROADWAY, STE 400
PORTLAND OR 97205

JASON W JONES -- CONFIDENTIAL
PUC STAFF--DEPARTMENT OF JUSTICE
BUSINESS ACTIVITIES SECTION
1162 COURT ST NE
SALEM OR 97301-4096

JESS KINCAID
COMMUNITY ACTION PARTNERSHIP OF OREGON
PO BOX 7964
SALEM OR 97301

BRIAN KUEHNE
PORTLAND GENERAL ELECTRIC
121 SW SALMON STREET 3WTC BR06
PORTLAND OR 97204

**Summary Report**

**LC 52 PACIFIC POWER**

---

JIMMY LINDSAY -- CONFIDENTIAL  
RENEWABLE NORTHWEST PROJECT  
917 SW OAK STREET, SUITE 303  
PORTLAND OR 97205

G. CATRIONA MCCrackEN -- CONFIDENTIAL  
CITIZENS' UTILITY BOARD OF OREGON  
610 SW BROADWAY, STE 400  
PORTLAND OR 97205

JANET L PREWITT -- CONFIDENTIAL  
DEPARTMENT OF JUSTICE  
NATURAL RESOURCES SECTION  
1162 COURT ST NE  
SALEM OR 97301-4096

IRION A SANGER -- CONFIDENTIAL  
DAVISON VAN CLEVE  
333 SW TAYLOR - STE 400  
PORTLAND OR 97204

VIJAY A SATYAL -- CONFIDENTIAL  
\*OREGON DEPARTMENT OF ENERGY  
625 MARION ST NE  
SALEM OR 97301

V. DENISE SAUNDERS  
PORTLAND GENERAL ELECTRIC  
121 SW SALMON ST 1WTC1301  
PORTLAND OR 97204

DONALD W SCHOENBECK -- CONFIDENTIAL  
REGULATORY & COGENERATION SERVICES INC  
900 WASHINGTON ST STE 780  
VANCOUVER WA 98660-3455

REBECCA SHERMAN -- CONFIDENTIAL  
\*OREGON DEPARTMENT OF ENERGY  
625 MARION ST NE  
SALEM OR 97301

GLORIA D SMITH  
SIERRA CLUB LAW PROGRAM  
85 SECOND STREET  
SAN FRANCISCO CA 94105

JEFF SPEIR  
SIERRA CLUB  
85 SECOND ST., 2ND FLR  
SAN FRANCISCO CA 94105

JOHN W STEPHENS -- CONFIDENTIAL  
ESLER STEPHENS & BUCKLEY  
888 SW FIFTH AVE STE 700  
PORTLAND OR 97204-2021

PETE WARNKEN  
PACIFICORP ENERGY  
825 NE MULTNOMAH - STE 600  
PORTLAND OR 97232

MARY WIENCKE  
PACIFIC POWER  
825 NE MULTNOMAH ST, STE 1800  
PORTLAND OR 97232-2149