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January 18, 2008

VIA ELECTRONIC FILING

Washington Utilities & Transportation Commission
1300 S. Evergreen Park Drive SW
Olympia, Washington 98504-7250

Attention: Carole Washburn
Executive Secretary

Re: Docket No. UE-050918 – Compliance Filing
Work Plan for the 2008 Integrated Resource Plan

In accordance with WAC 480-100-238, PacifiCorp hereby submits for electronic filing,
PacifiCorp's Work Plan for the 2008 Integrated Resource Plan.

If you have any questions or comments, please call me on (503) 813-7069, or write me at the above
address.

Sincerely,

Greg Duvall
Director, Long Range Planning and Net Power Costs

Enclosures



**Work Plan
For the
2008 Integrated Resource Plan**

**For the
Washington Utilities and Transportation Commission**

January 18, 2008

INTRODUCTION

In compliance with the Washington Utilities and Transportation Commission's Integrated Resource Planning (IRP) rules (WAC 480-100-238), PacifiCorp submits this work plan for its 2008 integrated resource plan ("2008 IRP"). As required in the rule, PacifiCorp outlines the content of its 2008 IRP, the general method for assessing potential resources, and the anticipated timing and extent of public participation.

This work plan is based on the best information available to the company at this time, and may change for the following reasons:

- In response to the resource planning issues facing PacifiCorp, a plan to improve the effectiveness of the IRP is being developed with finalization expected in March 2008.¹
- The focus of the improvement plan will be on reforming the process to better coordinate IRP activities with the Company's annual business planning cycle and to develop a more efficient collaboration method with public stakeholders.
- To date, the company has not received 2007 IRP² acknowledgment orders from the Public Utility Commission of Oregon or the Public Service Commission of Utah; therefore, the commissions' rulings may impact analytical or process-related IRP requirements which may require a change to the work plan.
- During the public process, the company will consider stakeholder input and may implement changes, as appropriate, to support the IRP.

CONTENTS OF THE 2008 INTEGRATED RESOURCE PLAN

The contents of the 2008 IRP are expected to be similar to that for the 2007 IRP. PacifiCorp received favorable comments from a number of parties regarding the organization of the 2007 report material. Consequently, changes to the report structure will be limited to those needed to address new planning rules and guidelines and any state commission acknowledgement requirements. For example, the Public Service Commission of Utah issued an order in March 2007 pertaining to the fuel sources standard of the Public Utilities Regulatory Policies Act. The Commission's order requires that PacifiCorp's IRPs contain a fuel sources plan.³

¹ PacifiCorp summarized these issues in its response documents for Utah and Oregon party comments submitted as part of the 2007 IRP acknowledgment proceedings in those states. These response documents can be accessed by pasting the following state commission Web addresses in a Web Browser:

For Utah party comments, <http://www.psc.utah.gov/elec/07docs/07203501/55098ExhibitB.doc>

For Oregon party comments, <http://edocs.puc.state.or.us/efdocus/HAC/lc42hac16415.pdf>

² For filing in Idaho, the 2006 IRP was renamed the 2007 IRP as ordered by the Idaho Public Utilities Commission (Idaho Public Utilities Commission, "In The Matter Of The Scheduled Filing Of Rocky Mountain Power' Electric Integrated Resource Plan (IRP)", Order No. 30262, March 6, 2007.) This name change was adopted for filings in all the other states.

³ Public Service Commission of Utah, "Determination Concerning the PURPA Fuel Sources Standard," Docket No. 06-999-03, March 13, 2007.

The 2008 IRP report will consist of two volumes: the main document and the appendices. The main document report will contain, at minimum, the following chapters:

- The executive summary.
- “IRP Planning Principles, Objectives and Approach.” This chapter, as in the 2007 IRP, will describe the guiding planning principles and objectives for 2008 IRP development, as well as outline the analytical and public processes employed. This chapter will detail the changes to the IRP process introduced by the IRP improvement plan mentioned in the introduction.
- “The Planning Environment.” This chapter will consist of (1) the company’s assessment of electricity and fuel marketplace developments and economic fundamentals, and (2) legislative and regulatory activities affecting planning decisions.
- “Resource Needs Assessment.” This chapter presents PacifiCorp’s findings of resource needs. The basis of the chapter is load/resource balances that characterize the company’s capacity and energy positions on a system and control area basis for the next 10 years.
- “Resource Options”. This chapter will provide background information on the resources considered in the 2008 IRP, detailing their market outlook, selection criteria for portfolio evaluation, and cost and performance attributes.
- “Modeling and Risk Analysis Approach.” This chapter describes the modeling methods and portfolio evaluation techniques that are applied to determine relative portfolio cost/risk performance attributes.
- “Modeling and Portfolio Results.” This chapter will summarize the modeling results and present the company’s preferred resource portfolio developed as a result of its portfolio evaluation process.
- “Action Plan.” This chapter presents the company’s four-year action plan as required by various state IRP standards and guidelines.

The appendix volume will consist of sections that provide non-confidential input data, base modeling assumptions, detailed analysis and modeling results, and other items required to meet the various state IRP standards and guidelines. Chief among these other items are details on how the 2008 IRP complies with state IRP requirements, and the status of active action items from previous company IRPs.

GENERAL METHOD FOR ASSESSING POTENTIAL RESOURCES

The modeling plan for the 2008 IRP represents refinement of the one used for the 2007 IRP. The main elements of the modeling plan include the following:

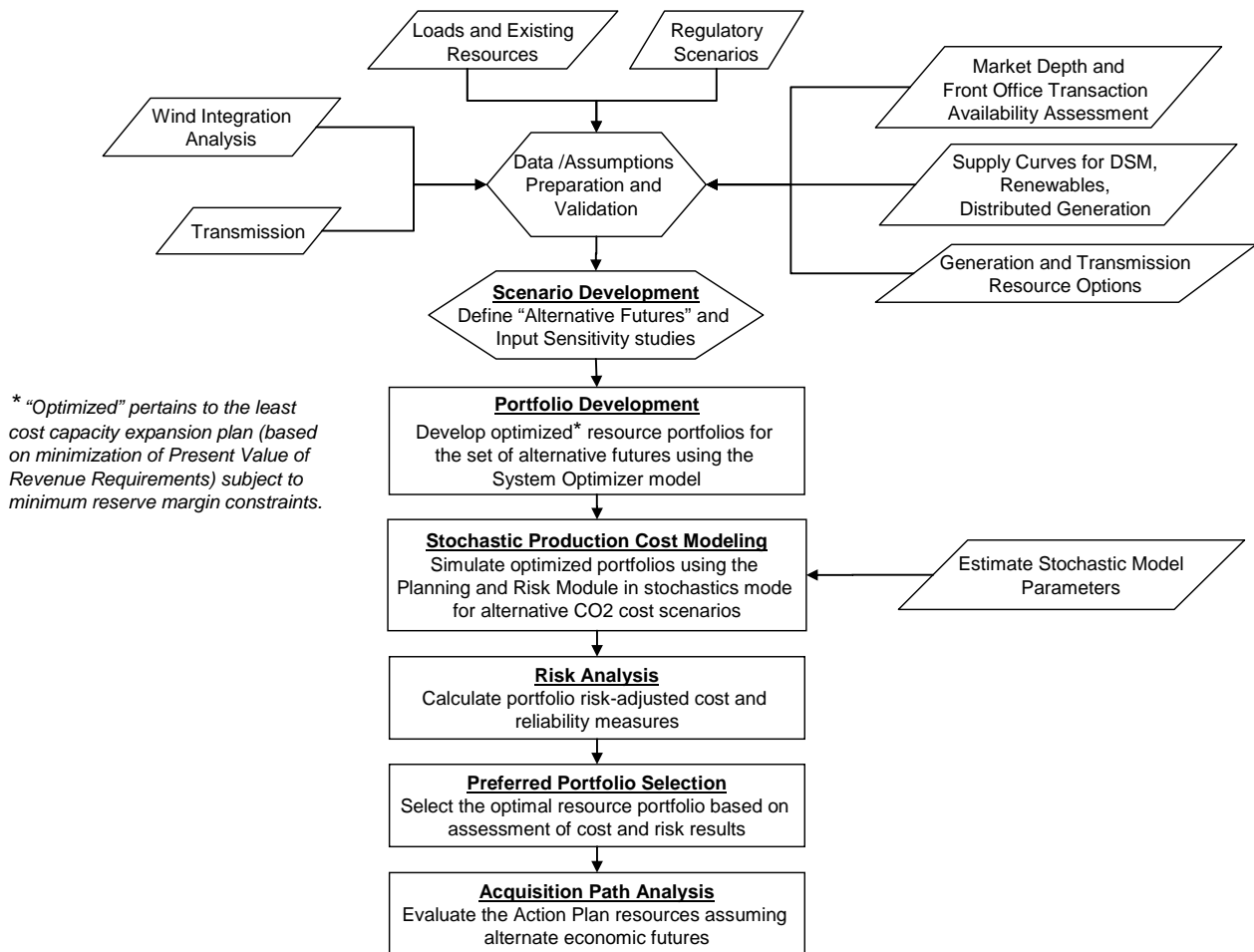
1. Revisit strategic assumptions (resource adequacy, market depth, green tag values, carbon dioxide regulatory scenarios and cost adders, etc.) and update model data appropriately.
2. Implement modeling and methodology enhancements to improve the IRP process and address new analytic requirements from the state commissions or in response to public stakeholder recommendations.
3. Use PacifiCorp’s modeling systems to define a set of least-cost candidate portfolios, and perform risk analysis by simulating them with a detailed stochastic production cost model. PacifiCorp will use Present Value of Revenue Requirements (PVRR) as the cost-

effectiveness measure for comparing portfolios. (PacifiCorp will model and evaluate portfolios on a system-wide basis as in previous IRPs; however, a modeling priority is to more accurately represent new state-specific energy regulations and prospective policies to the extent allowed by the models.)

4. Select a preferred portfolio based on the relative frequency of resources appearing in least-cost and least-risk portfolios, as well as other criteria established for the 2008 IRP.
5. Use the IRP models to evaluate the preferred portfolio's performance under alternative futures.

Figure 1 summarizes the inputs and major modeling steps for the IRP modeling plan. This plan is based on the use of two computer systems: *System Optimizer*, a Linear Programming-based optimization program designed for automated screening of resource addition options (This program was previously named the Capacity Expansion Module), and the *Planning and Risk (PaR) Module*, a market simulation tool integrated with the PROSYM chronological unit commitment/dispatch simulation engine. Both modeling tools are proprietary software products from Global Energy Decisions.

Figure 1 – Modeling Flow Diagram, 2008 IRP



Using existing resources and a representation of the company's transmission system as the starting point, PacifiCorp will perform System Optimizer runs with a set of new resource options (supply-side, demand-side, and transmission). Each run will be defined with a combination of input variables based on low, medium, and high values. The input variables will include carbon dioxide (CO₂) regulatory costs, natural gas/electricity prices and load growth. PacifiCorp will also develop additional CO₂ and renewable portfolio standard regulatory compliance scenarios to further analyze regulatory uncertainty as required by the state commissions.⁴ The purpose of the alternative future scenario analysis is to determine the frequency with which resources appear across the optimized portfolios, serving as an indicator of resource robustness given different economic conditions.

The second stage of IRP modeling consists of simulating the optimized portfolios from stage 1 using the PaR Module. (PacifiCorp will screen the portfolios for duplicate resources and select only unique portfolios for PaR Module simulation.) Sampling of load, electricity price, natural gas price, hydro availability, and thermal unit availability input variables will be used to perform 100 Monte Carlo simulation iterations. Risk-adjusted costs are calculated as the mean PVRR of the 100 iterations plus the portfolio real-levelized fixed costs (capital and fixed operations and maintenance) from the associated System Optimizer run. This risk-adjusted cost, along with high-end cost and supply reliability risk measures, constitute the metrics for determining the portfolio risk performance profile. PacifiCorp will establish which portfolios perform the best on the primary risk measures, and then determine what resources appear most frequently in these top-performing portfolios.

PacifiCorp will select the preferred portfolio based on the modeling results as well as other resource evaluation criteria established for both IRP and corporate business planning purposes, as documented in the "IRP Planning Principles, Objectives and Approach" chapter.

ANTICIPATED TIMING AND EXTENT OF PUBLIC PARTICIPATION

PacifiCorp expects to implement changes in the public process used to support the IRP. Although the details are under development, a main focus will be to rely on a more decentralized meeting format in which PacifiCorp consults with stakeholders on a state by state basis for upfront input, and reserves general attendance meetings for IRP progress reporting. The 2008 IRP meeting schedule has not been determined yet due to ongoing work for the IRP improvement plan and efforts to more closely align the IRP and annual business planning cycles. However, the company expects to schedule its first 2008 IRP meeting for late February/early March. At this meeting, the company will present its updated preferred portfolio, summarize the main elements of its IRP improvement plan, and describe the 2008 IRP work plan in more detail.

Figure 2 shows the high-level work plan for the 2008 IRP effort. Except for the late February/early March meeting, the public meeting dates (highlighted in yellow) are placeholders. PacifiCorp expects to issue a draft IRP for public comment and review, and is providing for a 30-

⁴ The Public Utility Commission of Oregon is developing new IRP guidelines that may require utilities to consider alternative CO₂ compliance scenarios and perform other risk analysis studies.

day review period. While the 2008 IRP filing date is shown as January 20, 2009, PacifiCorp may request a permanent alteration to the filing date to account for IRP process changes and business plan coordination activities that are expected to occur.

CONCLUSION

PacifiCorp's work plan represents its current view as to the processes and activities needed to file an IRP by January 2009 that meets state IRP standards and guidelines. As discussed above, pending state acknowledgment orders and IRP rule revisions, as well as the company's efforts to revamp the IRP process to better align corporate planning initiatives, may require revision of the IRP schedule.

PacifiCorp encourages Washington stakeholders to attend public meetings and actively be involved in this planning process. To join the IRP participants list, send an email request to IRP@PacifiCorp.com or call the IRP phone line at (503) 813-5245.

Figure 2 – Estimated PacifiCorp 2008 IRP Work Plan Timelines

