



February 21, 2006

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 2006 Integrated Resource Plan

In accordance with WAC 480-100-238, PacifiCorp hereby submits for electronic filing, PacifiCorp's Work Plan for the 2006 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,

A handwritten signature in black ink that reads "Greg Duvall".

Greg Duvall
Director of Integrated Resource Planning

Enclosures



36 USC 220506

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Work Plan For the 2006 Integrated Resource Plan

**For the
Washington Utilities and Transportation Commission**

February 20, 2006

INTRODUCTION

In compliance with the new Integrated Resource Planning (IRP) rules (WAC 480-100-238), PacifiCorp is submitting this “work plan” for its 2006 IRP.¹ As required in the rule, PacifiCorp outlines the content of its IRP in this work plan, as well as the general method for assessing potential resources.

PacifiCorp’s 2006 IRP cycle commenced with a presentation of the Company’s preliminary work plan at a public meeting on December 7, 2005. The preliminary work plan was prepared by the Company and reflected comments received from various state commissions in their acknowledgement orders and letters for the Company’s 2004 IRP. The work plan described herein has been modified to reflect feedback received at this public meeting.

The Company also notes that this IRP work plan is dynamic, and may change for the following reasons:

- To comply with Washington’s new IRP rules and to reflect feedback from the Commission on this work plan.
- To comply with the Oregon Public Utility Commission’s 2004 IRP acknowledgement order. This order includes several new analytical requirements being evaluated by the IRP team.
- To comply with new IRP guidelines expected to be issued by the OPUC during 2006.
- To address IRP-related commitments contingent on completion of the MidAmerican Energy Holdings Company (MEHC) transaction.
- To account for stakeholder input during the course of the public process.

CONTENTS OF THE 2006 INTEGRATED RESOURCE PLAN

The contents of the 2006 IRP will be similar to that for the 2004 IRP, but will be modified as appropriate to address all state commission acknowledgement requirements and new planning rules and guidelines. In addition, the 2006 IRP will reflect a new resource modeling process as well as a revised public process designed to solicit more comprehensive stakeholder input earlier in the IRP development cycle. PacifiCorp conducted an IRP stakeholder satisfaction survey in 2005 that indicated general satisfaction with the 2004 IRP process and report. Consequently, the Company does not intend to implement any other major changes to the IRP process or reporting format.

As in the 2004 IRP, PacifiCorp plans to provide the following main IRP elements for the 2006 IRP:

¹The new IRP rule states: “*Unless otherwise ordered by the commission, each electric utility must submit a plan within two years after the date on which the previous plan was filed with the commission. Not later than twelve months prior to the due date of a plan, the utility must provide a work plan for informal commission review. The work plan must outline the content of the integrated resource plan to be developed by the utility and the method for assessing potential resources.*” (WAC 480-100-238 (4))

- Analysis of marketplace developments and economic fundamentals.
- Development of a “resource needs assessment” (load and resources balance) and resulting determination of any resource deficits for the CY2007-2026 study period.
- A discussion on resource planning risks and uncertainties.
- A profile of realistic, feasible resource alternatives to be included in portfolio analysis
- A description of the portfolio development and analysis process.
- A summary of portfolio analysis results.
- Identification of the Preferred Portfolio, consisting of the optimal mix of supply, demand-side, and transmission resources after considering cost and risk tradeoffs.
- A 2006 IRP Action Plan.
- A technical appendix with sections on input data and base assumptions, detailed analysis documentation, study summaries, and other items required to meet the various state IRP standards and guidelines.

The supporting work activities and associated timelines are shown in Figure 1 below. The figure includes major analytical or modeling processes as well as the public meetings already held and currently scheduled for the 2006 IRP cycle. The expected filing of the IRP with each state is mid-January 2007.

A new feature of PacifiCorp’s IRP public process is a technical workshop series.² After outlining PacifiCorp’s proposed working group approach at the December 7th IRP Public Input Meeting, participants expressed the desire for an open process that minimized attendance problems. In response, PacifiCorp organized workshops that are open to all PIM participants to supplement the general Public Input Meetings. In keeping with the original working group strategy, the workshops are outcome-focused. Their purpose is to:

- Help PacifiCorp resolve, or strategize how to address, contentious or complex issues early in the IRP process.
- Set stakeholder expectations on what will be accomplished during the 2006 IRP cycle.
- Facilitate information sharing and consultation; for example, explain PacifiCorp’s policy positions and constraints.
- Serve as a sounding board for PacifiCorp’s proposed assumptions and modeling/analytical approaches, and to come up with refinements or alternative proposals.

Figure 1 shows the scheduled workshops and dates. These workshops include: (1) renewables, (2) load forecasting, (3) Demand-Side Management (DSM) programs, (4) Integrated Gasification Combined Cycle (IGCC) and CO₂ sequestration technologies, (5) Base case CO₂ cost adder, (6) transmission resources, and (7) portfolio development.

² PacifiCorp already hosts a series of load forecasting workshops prior to release of its biennial load forecast.

Figure 1 – PacifiCorp 2006 IRP Work Plan Timelines

Task	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	6-Aug	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07
General Public Input Meeting, December 7th	G													
Update Model Inputs, CEM and Planning & Risk (PAR)														
PIM Technical Workshops (Methods/Assumptions)														
Wind Resource Analysis and Resource Adequacy Studies														
PIM Technical Workshop - Renewables, Jan 13		W												
PIM Technical Workshop - Load Forecasting, Jan. 24		W												
PIM Technical Workshop - DSM, Feb 10			W											
PIM Technical Workshop - IGCC & CO2, March 31				W										
Develop Load & Resource Balance														
Update Strategic Assumptions														
Implement Modeling and Analysis Enhancements														
General Public Input Meeting, April 20					G									
PIM Technical Workshop - Transmission, May 9 & 10						W								
PIM Technical Workshop - Scenario Development, May 9 & 10						W								
Conduct Portfolio Optimization Runs Using the CEM														
General Public Input Meeting, July 18								G						
Write and Distribute Preliminary Draft Report														
Conduct Portfolio Simulations (Deterministic/Stochastic)														
Select Preferred Portfolio														
Conduct Preferred Portfolio sensitivity analysis using the CEM														
General Public Input Meeting, October 17th														
Public Comment Period (Four Weeks)														
Finalize IRP Report														
File IRP Report with State Commissions														File

W – Workshop Date

G – General Meeting Date

These workshops are facilitated by PacifiCorp and attended by PacifiCorp subject matter experts. Workshop summaries will be distributed to all participants via email. The workshop participants can agree to follow-up communications (emails, conference calls, meetings, etc.) Such follow-up activities will be scheduled to correspond to the appropriate IRP work plan deadlines. Participants unable to attend a workshop will be provided the opportunity to comment on workshop outcomes. Brief workshop status reports will be provided at the applicable April and July general Public Input Meetings.

METHOD FOR ASSESSING POTENTIAL RESOURCES

The 2006 IRP work plan includes a modeling plan for assessing resources from both cost and risk perspectives. The modeling plan incorporates a new modeling tool called the Capacity Expansion Module (CEM). The CEM is a Linear Programming-based optimization program designed for automated screening of resource addition options. To complement the set of thermal supply-side resources options, PacifiCorp will develop and use supply curves to represent wind projects (the proxy for all renewable resources) and dispatchable (Class 1) and price-responsive (Class 3) Demand Side Management options. PacifiCorp will also evaluate adopting a supply curve approach for energy efficiency programs, or Class 2 DSM.

Using the set of resource choices, PacifiCorp will perform CEM optimizations to analyze various resource portfolio scenarios. The scenarios will be designed to test resource combinations against changes in major resource cost/risk drivers. The purpose of this optimization is to identify resource type and timing characteristics indicative of robust portfolios—ones that perform relatively well on cost and risk measures given a broad range of future conditions. This optimization process also addresses the WUTC’s desire to see PacifiCorp adopt a “structured approach that allows dynamic interaction of key risk simulations with capacity expansion decisions.” (WUTC acknowledgement letter, page 11). The outcome of portfolio scenario analysis is the selection of candidate portfolios for more detailed cost and risk analysis. The production cost/market simulation model—Planning and Risk (PaR)—will be used for detailed deterministic and stochastic simulations of the candidate portfolios to derive a Preferred Portfolio. As with the 2004 IRP and 2004 IRP Update, PacifiCorp will use Present Value of Revenue Requirements (PVRR) and various stochastic risk measures as the primary portfolio selection criteria.

The main steps of the modeling plan, discussed at the December 7th Public Input Meeting, are as follows:

1. Revisit strategic assumptions (resource adequacy, market depth, green tag values, CO₂ cost adders, etc.) and update model data appropriately.
2. Implement modeling and methodology enhancements to address new analytic requirements.
3. Use the CEM to select candidate resource portfolios based on a range of alternative futures or “Portfolio Scenarios”. PacifiCorp intends to solicit public input on the construction of portfolio scenarios through a portfolio development workshop.

4. Run deterministic and stochastic simulations with the candidate portfolios using the PaR modeling system.
5. Select the Preferred Portfolio based on cost/risk evaluation criteria.
6. Use the CEM and the Preferred Portfolio to assist in Action Plan Path Analysis. CEM runs will be limited to Preferred Portfolio resources to determine the portfolio's responsiveness to alternative futures.

Figure 2 below shows the process flow of the modeling plan, from primary inputs for modeling activities through derivation and analysis of a Preferred Portfolio.

Figure 2 – Modeling Flow Diagram

