State of Utah

DEPARTMENT OF COMMERCE
Committee of Consumer Services

MEMORANDUM

To: PacifiCorp-IRP Team

From: The Committee of Consumer Services

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Copies To: The Public Service Commission of Utah

Utah Parties

Date: June 16, 2008

Subject: Comments Re: PacifiCorp 2008 IRP; Portfolio Development Cases

**INTRODUCTION**

At the May 22-23, 2008 IRP meetings, the Company presented its *Revised Improvement Strategy* and *Case Definitions for Portfolio Development*, which were distributed to parties on May 19, 2008. While many participants provided initial comments as these items were discussed at the meetings, the Company requested written comments be provided by June 16, 2008 so that it can begin to specify the 2008 IRP case list. The Committee of Consumer Services (Committee) appreciates this opportunity to provide the following response.

The revisions to the *Improvement Strategy* and the Company's commitment to evaluate all portfolios under a range of carbon tax levels address many of the Committee's previous concerns with PacifiCorp's planning strategy. At this time, we have comments in five general areas as described below.

## COMMENTS

1. Path Analysis

   Path analysis provides parties with an understanding of how the type, timing and magnitude of resources in the acquisition plan could vary with changing conditions. Therefore, path analysis should include the key assumptions most likely to undergo change with an analysis of the magnitude of change required to produce a different acquisition result. It is expected that this information would be developed as part of the study process.

   Examples of possible questions path analysis would answer are as follows:
   - How sensitive is the timing of major resource additions to load forecast assumptions?
   - How sensitive is the choice of resource type to variations in major input assumptions such as carbon taxes, natural gas prices and construction costs (studied independently and in combination)?
   - Under what assumptions would solar resources become economically viable?
   - How does the risk analysis modify the results derived from the deterministic analysis?

   In order to capture the kind of information necessary to conduct path analysis, the Company should assure the modeling assumptions and case definitions are broad enough to identify technology switch points and external events that would result in significant timing shifts in adding resources.

2. CO2 Treatment

   The Committee has three specific comments in this area:
   - The case list is insufficient to understand the difference in the affect on portfolio development of a cap and trade regime versus a carbon tax. Only one cap and trade case is defined using values that appear to be inconsistent with the carbon tax cases.
   - The Committee recommends the Company assure the CO2 values are broad enough to capture the switch points between technologies at low, medium and high market and natural gas prices. Depending on outcomes, the Company may need to add a middle CO2 value (between $45/ton and $100/ton in the currently proposed carbon tax cases).
   - As noted by Utah Commission Staff at the meeting, the Utah Commission's last IRP Order required the Company to model cases with no CO2 adder. Modeling one case, as discussed during the public input meeting, does not seem sufficient. At a minimum, three "no CO2 adder" cases should be considered that include varying natural gas price and load growth assumptions.

3. Renewable Portfolio Standard Treatment
Most of the cases included at this point assume a base level of renewable resources. We recommend the Company begin with unconstrained analysis of renewables and force renewable additions only if the resulting economics do not support the level of renewables necessary to meet current legal requirements. This would provide enough analysis for a more thorough evaluation of the cost difference between a base case and full compliance with RPS policies, as well as a more careful analysis of specific policies that could provide the most cost-effective methods for achieving desired outcomes.

4. Planning Reserve Margin (PRM) Cases
The four PRM cases proposed by the Company are unlikely to reveal a cost-risk policy tradeoff. Alternatively, we propose evaluating different planning reserve margins under enough scenarios to properly evaluate cost-risk tradeoffs.

5. Total Number of Scenarios
It is difficult to comprehend that a Company as large as Pacificorp, with many complex resource planning challenges, could find forty-two scenarios adequate for planning purposes. The Committee agrees with the Division's comments dated June 6, 2008 that forty-two scenarios is far insufficient, although we would not go so far as to recommend several hundred times that number. Assigning more staff to IRP, as the Division suggests, could be one solution. In the short term, the Company should consider dropping some of the scenarios currently comprised of unlikely input combinations, such as a high CO2 adder with low natural gas prices.

**FOLLOW-UP**
If the Company has any questions regarding the Committee's comments, please contact Dan Gimble at (801) 530-6798 or dgimble@utah.gov.