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DEPARTMENT OF COMMERCE
Office of Consumer Services

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To: Utah Public Service Commission

From: Office of Consumer Services
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Date: October 5, 2011

Re: In the Matter of the Acknowledgement of PacifiCorp's 2011 Integrated Resource Plan; Docket No. 11-2035-01; Office Reply Comments

## I. Background

In the 2011 IRP Docket, the Commission afforded all parties an opportunity to respond to comments filed by interested parties on September 7, 2011. Accordingly, the Office submits the following responsive comments for consideration by the Commission.

## II. Responsive Comments

A. <u>General Areas of Agreement</u>

The majority of IRP parties (Office, UAE, WRA, UCE) found that PacifiCorp's 2011 IRP failed to comply with a number of important IRP Guidelines and recommended that the Commission not acknowledge the IRP as-filed. The Office recommended further analysis of all 19 core portfolios based on the Company's liberal renewable policy assumptions applied to only to "Re-optimized" Case 3 and WRA recommended correction of deficiencies in the plan.

Issues or concerns identified by parties generally converged in the following key areas:

- Analytical support and justification for the full Gateway Transmission build out;
- Analytical support and justification for the timing and location of new wind resources;
- Analytical support and justification for the significant new investment in environmental control technology related to certain units in PacifiCorp's coal fleet;
- A bias in favor of existing coal resources and against geothermal and non-Wyoming wind as viable resource options;
- Post-modeling manual adjustments involving the selection and timing of certain resources in the preferred portfolio;

- The need for the Commission to take a more active-directive role to ensure that the IRP conforms to the IRP guidelines.

B. Issues of Concern – Office Response

- *Verification of IRP Models*

  The Division and UAE raise an issue relating to the transparency and verification of the various models relied on by the Company to perform IRP analysis. In particular, UAE recommends use of more transparent and flexible models that can be accessed, understood and verified by parties.

  **Office Response** – There is possibly a significant issue as to the current ability of any IRP party to verify 1) whether the IRP models have been correctly specified and 2) the accuracy and completeness of data inputs. Unlike rate proceedings where some parties have routinely hired experts to review and verify the specifications, data inputs and assumptions for ratemaking models (GRID, COS, etc.), there has not been a similar "audit" of the IRP models. Thus, some parties may not have the same level of confidence in the IRP models that they have with the models used for ratemaking purposes.

  With this background in mind, the Office cautions the Commission and other parties not to underestimate the complexity of resource planning models. Achieving and maintaining expertise in these models would require considerable effort and could not occur on a part-time basis. Moreover, the IRP documents are replete with information, data and policy assumptions that have enabled parties in this and recent IRP dockets to perform a comprehensive review and comment on a wide range of issues. Since the Commission has not required specific actions or remedies by the Company to address IRP deficiencies (other than suggestions for future improvements), the value added by having access to and verifying the Company's IRP models needs to be given careful consideration.

- *Division's IRP Analysis*

  The Division performed a basic spreadsheet analysis to confirm the sufficiency of resources to meet loads over the next 10 years and concluded: "Therefore, without reference to natural gas prices, carbon tax amounts, System Optimizer and PaR models, the Company's scenario for resource acquisition over the next ten years appears to be reasonable." The Division also performed a trend analysis to check the reasonableness of the Company's IRP load forecasts. Lastly, the Division commented on the increase in complexity and burden of the IRP on the Division, Company and other parties and recommended a "cursory analysis" of IRP approaches used in other states.

  **Office Response** - The Office urges the Commission not to endorse the kind of over-simplified analysis put forth by the Division of the 2011 IRP. A basic spreadsheet analysis of resource selection is a monumental step backward from the complex modeling effort undertaken by the Company in response to feedback from IRP parties and regulatory agencies. The Division's analysis fails to incorporate a comparison of risk profiles, consider performance across different resource scenarios or evaluate the merits of policy assumptions that underlie the preferred portfolio selected by the Company. Similarly, the Office has serious concerns about the Division's review of the Company's forecasting process. Drawing a simple trend line from a few years' of historical data is no substitute (or even "back of the envelope" check) for a sophisticated econometric forecasting process.

The Office understands and shares to a certain degree the frustration apparent in the Division's reduced level of analysis and recommendation that alternative IRP processes be considered. The Division, Office and other parties have put significant time and effort into analyzing previous IRPs without seeing many concrete outcomes. While there may be some benefit in examining IRP processes in other states, the Office does not recommend that the Commission consider less overview of the resource planning process at this time. Utility resource plans are relied on in preparing regional studies and planning processes (e.g., WECC, NWPP, WIEB, etc.) at an increasing rate. Further, resource acquisition is at the heart of many key policy matters currently under discussion.[1] Given this environment, it is critically important that the Commission continue to require a high level of review and take a more active role in guiding the IRP process to ensure Utah regulatory and policy goals are included in the regional discussion.

- *Externalities*
  Sierra Club, HEAL Utah, Utah Moms for Clean Air and Physicians for a Healthy Environment commented that the Company failed to adequately consider externality costs as required in the Commission's IRP guidelines. These parties also suggested that studies, including a co-benefits study[2] released last year in Utah, contain adequate information to put numerical values on the health costs associated with electrical generation.

  **Office Response** - The Office agrees that the IRP does not analyze externalities as thoroughly as it could. However, the Office does not agree that existing studies could be relied on to generate appropriate numerical values for externalities to be incorporated into IRP analysis. The Office was extensively involved in the co-benefits study. Despite the controversy associated with the release of the study, the Office continues to believe it contains useful information that can serve as the starting point for additional analysis. However, the results are not presented in a "cost adder" format that monetizes the health or other impacts of electrical generation. Additional work would be required to convert the results into values that could be used as inputs in resource planning models. Further, certain assumptions and cost values used to develop the results were greatly disputed at

[1] Important policy matters currently under discussion include climate change, pollution controls, conservation, renewable energy, transmission planning and investment, etc.
[2] "Co-benefits of Energy and Efficiency and Renewable Energy in Utah," published March 24, 2010.

the time the study was released. While the Office believes those issues were well enough vetted for inclusion in a single study, they were not well enough vetted for the setting of Utah policy or the selection of future generating resources.

The Company can only reasonably be expected to utilize externality values that are either well accepted or that have been determined to be appropriate by this Commission. Any existing values that the Company might use in an effort to monetize externalities would certainly be challenged by at least some of the IRP parties. Thus, the Office suggests that it would be necessary for the Commission to determine the most appropriate value or range of values to be used. A determination of externality values would require a thorough evaluation within an evidentiary proceeding allowing wide participation. Any party that desires to advance the use of externality values should request the Commission to initiate such a proceeding.

C. Support of Issues Raised by Other Parties

- *Allocation of New Transmission Investment*
  UAE raises the issue of the allocation of incremental transmission costs between wholesale and retail customers. UAE recommends resolving this matter prior to the Commission considering any new cost recovery requests from the Company related to transmission investment.

  **Office Response** – A transmission expansion scenario that includes the full Gateway build out is projected to cost about $6 billion. Both retail and wholesale customers will potentially benefit from the new transmission system. The Office supports UAE’s recommendation and proposes that the Commission establish a process to address and resolve this transmission cost allocation issue in the near future.

- *Scenario Planning*
  Both Utah Clean Energy and Interwest propose that the Company incorporate scenario planning principles into its IRP development. Current IRP modeling centers on determining the least cost, least risk resource solution for serving a future governed by a set of probable assumptions with relatively narrow ranges of uncertainty. By contrast, scenario planning attempts to find a “no regrets” resource solution that performs well over a number of vastly different futures.

  **Office Response** – The Office sees merit in further investigation of the use of scenario planning. Incorporating scenario planning principles into the IRP could aid in determining more robust resource portfolios. However, this would also require a discussion on how IRP guidelines would need to be modified to accommodate scenario planning principles.

- *Simple-Cycle Combustion Turbine (SCCT) Bias*
  Utah Clean Energy comments that Combined Cycle Combustion Turbines (CCCT) gas plants are given a 16% capital discount in the stochastic analysis. This capital discount or "credit" appears to create a bias for CCCT plants and against SCCT plants in the PaR model.

  **Office Response** -- The Office shares Utah Clean Energy's concern. In fact, the Office raised a similar issue of a bias against SCCTs in its comments on the 2006 IRP. At that time, the Office commented that SCCTs provide benefits through lower initial capital costs, flexibility to integrate renewable resources and ability to meet summer peak loads. The Office recommends that the Commission order the Company to explain the basis for the 16% credit for CCCTs so the Commission can determine the appropriateness of using the credit for planning purposes.

## III. Conclusion

The Office continues to recommend that the Commission not acknowledge the Company's 2011 IRP. The Office urges caution in imposing additional requirements in the area of IRP model access and verification without first determining the value added from a step in that direction. Similar caution should be used in requiring the use of cost adders to monetize externalities in IRP analysis. Such a requirement would need to begin with an evidentiary proceeding before the Commission to determine appropriate values for any such adders. The Office also advocates that it is not appropriate to dial back the overall level of review of IRP filings nor to reduce the level of sophistication of IRP modeling. The Office believes now is the time to intensify IRP analysis to ensure that the preferred portfolio includes a mix of low cost, low risk and reliable resources for Utah customers. Finally, the Office supports 1) a process to resolve transmission cost allocation issues, 2) incorporation of scenario planning principles into future IRP studies and 3) obtaining additional information on the 16% credit for CCCTs in the stochastic analysis.