Yvonne R. Hogle
Senior Counsel
One Utah Center
201 S. Main Street, Suite 2300
Salt Lake City, UT 84111
801.220.4050
801.220.3299 Fax

January 5, 2009

Ms. Julie Orchard
Secretary, Utah Public Service Commission
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City, Utah 84114

Re: Docket No. 07-035-94: In the Matter of the Application of PacifiCorp for Approval of a Solicitation Process for a Flexible Resource for 2012-2017 Time Period, and for Approval of a Significant Energy Resource Decision

Dear Julie:

The purpose of this letter is to address (i) PacifiCorp Energy's Steps 2 and 3 in its bid evaluation process for the Solicitation for a Flexible Resource for 2012-2017 time period and (ii) the Independent Evaluator's comments filed with the Public Service Commission of Utah ("Commission") on December 29, 2009. PacifiCorp Energy convened a workshop on December 11, 2008 to review and make recommendations in compliance with the Commission's Suggested Modifications and Order, dated May 23, 2008 and Rocky Mountain Power's commitment contained in its August 5, 2008 letter to the Commission regarding the following:

1. The mechanism to be used to compare alternative portfolios; and
2. The criteria to be used for selecting final short list resources from the highest performing portfolios.

The Company provided a document[1] at the workshop for discussion amongst the parties and the independent evaluators which described Steps 2 and 3 of the bid evaluation process, which would be applied after establishment of the initial shortlist of bidders (Step 1). The modeling in Steps 2 and 3 compares the alternative portfolios and the criteria for selecting the highest performing portfolios.

These modeling steps are:

Step 2 – Portfolio Development/Optimization
Step 3 – Risk Analysis
Step 3a: Stochastic Analysis

[1] Document is attached as Attachment 1

Step 3b: Deterministic Scenario Analysis.

Merrimack has indicated in its December 29, 2008 paper that "they believe that the three resources selected for the conditional shortlist in the Request for Proposals Base Load Resources (2012 RFP) were the appropriate resources" however, that "they are concerned the current approach could lead to a higher cost solution in another competitive solicitation process." They add that the methodology is very sophisticated and detailed and that it exceeds industry standards for portfolio evaluation. They also note that they have no problem with Step 2 Portfolio Development/Optimization process. It appears that their concern is largely with Step 3 of the process. Specifically, Merrimack cites the following three primary concerns, also expressed at the December 10, 2008 workshop, relating to Step 3a and Step 3b of the request for proposal modeling:

1) First should resources that perform best in a range of scenarios be selected on the frequency of occurrence of individual portfolios over multiple portfolios or limited to the selection of a single specific portfolio under a range of scenarios?

2) Second, do you establish different weights or probabilities for the portfolios?

3) What is the appropriate risk metric?

The Company will first comment on Merrimack's general comments and then address each of Primary Concerns separately.

A) Merrimack General Comments:

1) Size of Individual portfolio

One of Merrimack's original concerns was that the size of the individual portfolios differed based on the capacity and associated energy from the resources included in each portfolio. However, that PacifiCorp Energy affirmed during discussions at the December 11, 2008 workshop that all portfolios are balanced through the use of Front Office Transactions. That by PacifiCorp Energy's affirmation, they assume that PacifiCorp Energy means that any excess capacity and/or energy is sold into the market and any capacity/energy shortages are acquired from the market to balance resource requirements with load for all portfolios evaluated. Finally, Merrimack requests that PacifiCorp affirm this conclusion.

Company' response:
Yes, system energy balancing is handled in the IRP models through the sale and purchase of spot market energy at market hubs. For capacity balancing, PacifiCorp will allow the capacity expansion optimization model to select a variable megawatt amount of firm market purchases (also referred to as front office transactions in the Company's integrated resource plans) up to limits specified for each market hub. Both annual and third-quarter market product proxy resources are included in the model for this purpose. Firm market purchases selected by the

model for each carbon dioxide/market price scenario will be included, along with the selected bid resources, in the Planning and Risk stochastic production cost simulations.

2) Viable back up lists of bids

PacifiCorp should maintain a viable back-up list of bids in case bids selected for the top ranked portfolio fail or are eliminated if they do not meet conditions required for inclusion. During the short list selection stage we would recommend that PacifiCorp inform bidders on the back-up list of their status and ask the bidder if it wishes to remain on the back-up list. This approach is used by a number of utilities who do maintain a back-up list of resources to ensure the process remains a competitive process.

Company response
The Company agrees with Merrimack that it is a good idea to maintain a list of viable back up bids.

B) Primary Concerns

1) Individual portfolio vs. frequency of occurrence over multiple portfolios.

Should resources that perform best in a range of scenarios under Step 3a, the stochastic analysis, be selected based on the frequency of occurrence of individual resources within multiple portfolios or limited to the selection of a single specific portfolio under a range of scenarios?

Company response
The Company agrees with Merrimack in that the unique portfolios should be completed as a first step; however, the Company does not believe that the analysis should be restricted to only the development of a single portfolio. The Company's development of the unique portfolio is followed by a subsequent analysis to determine which resources appear consistently in the top performing portfolios which then result in the Final Shortlist.

The purpose of Step 3a is to formulate stochastic cost and risk profiles for each of the unique portfolios developed from Step 2, and then to identify the bid and benchmark resources that appear consistently in the top-performing portfolios based on both cost and risk measures. The Company is proposing that the unique portfolio should be completed consistent with Merrimack's suggestions; however, the selection of the Final Shortlist should consider both the unique portfolios and the analysis of which resources which appear consistently in the top performing portfolios.

2) Same weight or probability for each scenario?

Merrimack has suggested that the Company address the weighting issue for each portfolio, even if the decision is to maintain equal weights or probability of occurrence for each Case/Scenario.

Company response

The Company believes that probability-weighting of scenarios is a complex and subjective undertaking given the consideration of joint probabilities for the scenario variables and the process needed to elicit the weights (including presumed public review and comment on the weights). The Company has no basis to conclude that one scenario is more or less probable than another and introducing anything other than equal weightings could lead to gaming and undermine the ability to identify robust resources and portfolios. More importantly, it is not clear how such weights would improve the bid and benchmark ranking process given resources that are cost-effective for one weighted-scenario portfolio versus another. For example, given a simplified world with three scenarios, probability weights with a reasonable degree of confidence, and just three resources, one outcome for capacity expansion modeling would be the following:

- Scenario 1 portfolio includes resources A and B (probability = 20%)
- Scenario 2 portfolio includes resources A and C (probability = 60%)
- Scenario 3 portfolio includes resources A and B (probability = 20%)

In this case, resource A appears in all the portfolios and is thus considered robust and ranked first; the probability weights are not relevant for ranking purposes. Resource B appears in two of the portfolios, while resource C appears in just one portfolio. Given PacifiCorp's current methodology, resource B would be ranked second and resource C third. However, applying weights would give resource C the edge because it appears in scenario-generated portfolios with a combined 60% probability of occurring versus only 40% for resource B. The resource ranking becomes more difficult given the following scenario probabilities:

- Scenario 1 portfolio includes resources A and B (probability = 20%)
- Scenario 2 portfolio includes resources A and C (probability = 50%)
- Scenario 3 portfolio includes resources A and B (probability = 30%)

In this case, the probabilities are not relevant since resources B and C have the same probabilities of appearing in a portfolio (50%). PacifiCorp would then need to go back to the robustness criterion. The ranking outcome then becomes A, B, followed by C. Similar issues would be expected when applying probability weights to the stochastic cost measures for Steps 3a.

These simplified examples illustrate the added complexity introduced by applying subjective probability weights. Given the number of bids and application of 12 probability weights for the 12 scenarios, PacifiCorp would expect a much more convoluted bid evaluation process. In addition, if the 12 scenarios resulted in less than 12 unique portfolios, then the weighting scheme becomes more complex and prone to mistakes. The Company recommends equal weightings are reasonable absent a demonstration that a scheme of unequal weights will improve the bid and benchmark ranking process.

Merrimack Energy does believe that PacifiCorp should develop criteria for selecting the preferred portfolios based on a range of cases/scenarios.[2] One option would be to sum the

[2] We have defined a case/scenario to be the three or four CO_2 cases used by PacifiCorp in the Step 3a process.

ranking of all the portfolios for all cases and select the portfolio that has the lowest sum. For example, a portfolio that ranks 2nd in all four scenarios or cases would have a score of 8. If another portfolio ranks 1st, 3rd, 4th, and 5th, it would have a score of 13. All portfolios evaluated could be ranked accordingly.

An option we would prefer is to select only those portfolios that are in the top quartile in all cases/scenarios. Each portfolio that meets this criterion will be an eligible portfolio for selection. If multiple portfolios are included in the top quartile, the eligible portfolios would be rated based on their rankings in all cases/scenarios, as described above. If no portfolio is in the top quartile, then the next selection criteria would be the top one-third of the portfolios. Only those portfolios that are consistent performers among the top ranked portfolios would be eligible for consideration. This mechanism could be applied to both Step 3a and 3b. We would recommend selecting individual, robust resources only if there are no consistently performing portfolios (i.e. the best ranked portfolios are not in the top quartile or top one-third of the portfolios under all cases/scenarios).

An issue with the recommended approach is that portfolio selection will be biased toward those developed with the low-cost input assumptions (market prices and CO2 tax). Resources that are cost-effective under the high-cost scenarios can potentially be overlooked unless the robustness criterion for individual resources is applied. One other observation with the recommended approach is that there will be exactly 12 portfolios developed from the 12 input scenarios, so there will always be portfolios in the top quartile.

3) What is the appropriate risk metric?

Merrimack's issue with the use of the risk metric was that the risk metric selected by PacifiCorp (i.e. Risk Adjusted PVRR) was changed from the time of issuance of the RFP to the evaluation of bids. Merrimack recommends that the risk metric be established and maintained throughout the evaluation process, unless interested parties and bidders are notified of such a change. With regard to the use of risk-adjusted PVRR, we feel this is a reasonable risk metric. We are not aware of any industry standard metrics used by other utilities for planning purposes. However, we would recommend that PacifiCorp develop a brief white paper providing a list of risk metric options considered and outline the basis for selecting risk adjusted PVRR and rejecting others. In other words, PacifiCorp should clearly define why it believes the Risk Adjusted PVRR is the preferred risk measure for this evaluation.

Company response

Consistent with Merrimack's recommendation, PacifiCorp agrees that using a risk-adjusted PVRR is reasonable. PacifiCorp will develop and file with the Commission a brief white paper providing a list of risk metric options and the basis for selecting risk adjusted PVRR prior to the commencement of Step 3.

Informal inquiries regarding the foregoing may be addressed to Stacey Kusters at (503) 813-5351.

Sincerely,

Yvonne R. Hogle