BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Request of Rocky Mountain Power for a Waiver of Solicitation Process and for Approval of Significant Energy Resource Decision	DOCKET NO. 08-035-35

Redacted Direct Testimony of

Wayne Oliver

Public Service Commission of Utah

June 20, 2008

I. INTRODUCTION

Q. WOULD YOU PLEASE STATE YOUR NAME, EMPLOYER, AND BUSINESS ADDRESS?

A. My name is Wayne J. Oliver. I am Principal and Founder of Merrimack Energy Group, Inc. (Merrimack Energy), 155 Borthwick Avenue, Suite 101, Portsmouth, New Hampshire, 03801.

Q. WOULD YOU PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE?

A. I have over 30 years of experience in the energy industry. During that time, I have held senior level positions as an economist and consultant with government agencies and private sector firms. I was formerly a Founder and Senior Officer of Reed Consulting Group, Inc. I also served as a Director with Navigant Consulting, Inc. after the acquisition of Reed Consulting Group by Metzler and Associates in 1997 and the subsequent formation of Navigant to integrate a number of the consulting firms acquired by Metzler and Associates. I have also been an Assistant Professor in the Economics Department at Northeastern University and an Adjunct Professor in the Finance Department at Babson College, where I taught courses in Risk Management (in the Masters of Business Administration program) and Futures and Options. I have a Masters Degree in Economics and completed all course work for a PhD in Economics. My resume is attached as Exhibit WO-1.1.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of the Utah Public Service Commission. I was retained by the Utah Public Service Commission ("Commission") to serve as Independent Evaluator in this proceeding.

Q. HAVE YOU SERVED AS INDEPENDENT EVALUATOR IN OTHER PROCUREMENT PROCESSES?

A. Yes. I have served as Independent Evaluator or Monitor in approximately twenty competitive bidding processes over the past fifteen years on behalf of Public Utility Commissions, utilities or public agencies. During that time I have reviewed and evaluated hundreds of power supply proposals for both conventional and renewable resources. In particular, Merrimack Energy has served as Independent Evaluator for PacifiCorp's 2012 Base Load Request for Proposals as well as the 2008 All Source Request for Proposals. I have also worked with power generators and utilities in submitting power supply proposals, conducting market assessments, and conducting due diligence for power project acquisitions.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

A. As Independent Evaluator, I have been asked by the Commission to review PacifiCorp's analysis supporting its proposed acquisition of the Chehalis Power Generating Plant ("Plant") and assess whether the acquisition is in the public interest. That is, does the acquisition result in the lowest reasonable cost to PacifiCorp's retail customers taking into consideration long-term and short-term impacts, risk, reliability and the financial impacts on PacifiCorp.

Q. PLEASE SUMMARIZE PACIFICORP'S REQUEST IN THIS PROCEEDING.

A. PacifiCorp, through its Rocky Mountain Power Division, has filed for two requests with the Commission: (1) a Solicitation Waiver Request under Utah Code 54-17-201(3) and 54-17-501 and (2) a request for approval of a significant energy resource decision to acquire the Project under Utah Code Ann. 54-17-302 ("Acquisition Approval Request").

III. BACKGROUND

Q. PLEASE DESCRIBE YOUR UNDERSTANDING OF THE TYPE OF ANALYSIS REQUIRED OF PACIFICORP BY STATUTE TO JUSTIFY ACQUISITION OF A SIGNIFICANT ENERGY RESOURCE SUCH AS THE CHEHALIS POWER GENERATING PLANT.

A. Rule R746-430-4 states that if the requested waiver is for a waiver of a solicitation process, the affected utility should provide the following evidence:

1. That the particular resource to be procured is consistent with the utility's current Integrated Resource Plan
2. That the particular resource to be procured is consistent with any pending solicitation processes and what affect procurement of the particular resource will have on any pending solicitation processes.

3. Evidence regarding how the particular resource to be procured compares in value to similar resources.

4. Evidence how the particular resource will be connected to and will be integrated with the utility's system.

5. Evidence of the costs which the utility anticipates it will recover from ratepayers, which shall include, but is not limited to, analysis of the affects upon the utility's power costs and revenue requirements, and

6. Evidence of any affect the proposed resource will have on future resource acquisitions.

Q. WAS PACIFICORP'S FILING OF APRIL 1, 2008 CONSISTENT WITH THESE REQUIREMENTS?

A. No. PacifiCorp witness Gregory Duvall filed testimony that compared the cost of acquiring the Plant in 2008 to the cost of acquiring resources in accordance with the Company's Business plan over a 20 year period. The analysis compared the economics of the acquisition to two options; one option assumes a cost for a new gas-fired combined cycle facility at REDACTED and the second option assumes a cost of a new combined cycle facility at REDACTED. The analysis considers the impacts of the three options on system-wide fuel and O&M costs, front office transactions and long term contracts, system balancing purchases and sales, wheeling costs, and capital and fixed costs. While the capital costs used for the two options in the analysis are consistent with current market expectations with regard to the capital costs from new gas-fired combined cycle facilities relative to the acquisition of the Chehalis Plant, the acquisition is compared only to generic combined cycle projects. The analysis did not go far enough with regard to the requirements of Rule 746-430-4. In particular, the analysis is not consistent with the first three requirements listed above, with the Company only using the results of the 2012 RFP as guidance in establishing the capital cost for generic resources identified above. PacifiCorp did not provide evidence that the particular resource to be procured is consistent with any pending solicitation process and did not provide evidence how the particular resource to be procured compares in value to similar resources.

Q. PLEASE SUMMARIZE THE CONCLUSIONS OF MR. DUVALL'S TESTIMONY.

A. Mr. Duvall concludes that based on the cost of the two combined cycle options identified above, the total benefits of adding the Plant are significant on a system-wide present value revenue requirements basis. Mr. Duvall concludes that acquisition of the plant will benefit the Company and its customers and the Commission should approve the acquisition.

Q. IS MR. DUVALL'S ANALYSIS IN AND OF ITSELF SUFFICENT JUSTIFICATION TO SUPPORT APPROVAL OF THE ACQUISITION?

A. No. While Mr. Duvall's analysis is a reasonable analysis to undertake in analyzing the economic benefit of the acquisition of the plant, it is not fully consistent with the requirements of Rule 746-430-4. The analysis does not assess whether the acquisition is consistent with the Company's current Integrated Resource Plan or with pending solicitation processes.

Q. WAS THE TIMEFRAME FOR CONSIDERATION OF THE ACQUISITION OF THE PLANT CONSISTENT WITH THE 2012 BASE LOAD SOLICITATION PROCESS UNDERTAKEN BY PACIFICORP?

A. Yes. PacifiCorp, through the testimony of Stefan Bird, illustrated that discussions associated with the acquisition of the Plant were occurring at the approximately the same time as the 2012 Base Load solicitation process, which was approved by the Commission in April 2007 and is still on-going. Mr. Bird indicated that in late 2006, the Company entered into confidentiality agreements related to the Plant as well as other units. Evidence in the case illustrates that PacifiCorp had conducted an economic analysis as the basis for its offer price for the Plant in December 2007. In January 2008, it appeared that discussions regarding acquisition of the Plant were renewed and PacifiCorp submitted a non-binding proposal on February 13, 2008.

Q. WHAT WAS THE STATUS OF THE 2012 BASE LOAD RFP IN THE DECEMBER 2007 TO FEBRUARY 2008 TIMEFRAME AT A TIME WHEN PACIFICORP SUBMITTED THE BID TO ACQUIRE THE CHEHALIS PLANT?

A. PacifiCorp conducted the detailed evaluation of the bids and benchmarks submitted in response to the 2012 Base Load RFP primarily during December 2007, consistent with the Steps 2 and Step 3 evaluation process as identified in the 2012 RFP. PacifiCorp had selected the shortlist of three projects by early January 2008. Subsequent to selection of the shortlist, PacifiCorp then began the contract negotiation process with these three projects. Initial negotiations were therefore occurring during the time that PacifiCorp submitted its bid to acquire the Chehalis plant on February 13, 2008.

Q. PLEASE DESCRIBE THE EVALUATION PROCESS REQUIRED FOR THE BIDS SUBMITTED IN RESPONSE TO THE 2012 RFP.

A. As identified in the 2012 Base Load RFP document, PacifiCorp proposed to undertake a three step process to evaluate the bids submitted in response to the 2012 RFP. Step 1 of the evaluation process (i.e. Initial Short List) involves a price and non-price analysis of the eligible bids to determine an initial short list. PacifiCorp uses the Structuring and Pricing RFP Base Model to screen the proposals and to evaluate and determine the price ranking for the eligible bids received.

In Step 2, Global Energy Decision's Capacity Expansion Model (CEM) is used to develop optimized portfolios of resources under various assumptions for future emission expense levels and market prices based on the initial short list. The objective of this step is for CEM to develop a number of optimized portfolios – one for each combination of emission and wholesale market and natural gas price assumptions – based on the bids in the initial short list and the Company benchmarks. An optimal portfolio will be established for each combination of emission and wholesale market and natural gas price assumptions. Each portfolio from the CEM scenarios will be a candidate for the optimum combination of resources to be selected through the RFP process and will therefore be advanced to the stochastic/deterministic analysis step.

In Step 3 (Risk Analysis), stochastic and deterministic analyses will be performed on each optimized portfolio in order to identify the resources in the highest performing (least cost, adjusted for risk) portfolios. Step 3 includes both a Step 3(a) stochastic analysis (PaR model) and Step 3(b) deterministic scenario analysis (CEM Model). Consistent with the IRP, the Company used the Planning and Risk Model (PaR) and Capacity Expansion Model (CEM) to assess the risks of each eligible resource alternative.

Q. DID PACIFICORP UNDERTAKE THE ANALYSIS IDENTIFIED IN THE RFP DOCUMENT IN EVALUATING THE BIDS RECEIVED IN RESPONSE TO THE RFP?

A. PacifiCorp did not undertake a complete Step 1 evaluation of the bids but instead passed all eligible bids to the short list. PacifiCorp did undertake a complete Step 2 and Step 3 analysis as identified above during the December 2007 to early 2008 timeframe.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE APPROPRIATE APROACH FOR EVALUATING THE CHEHALIS PLANT GIVEN THE TIMING OF THE COMMUNICATIONS BETWEEN PACIFICORP AND THE CHEHALIS PLANT OWNERS?

A. In my view and based on the requirements of R746-430-4 and the timing of the acquisition of the plant relative to the timing of the solicitation process, the appropriate evaluation would be to undertake an assessment of the Chehalis plant along with and relative to the bids submitted in response to the 2012 RFP since this resource was effectively another option available during the same timeframe as the bid evaluation associated with the 2012 RFP process. PacifiCorp could have evaluated the Chehalis plant relative to the costs of the bids submitted in response to the 2012 RFP. Since PacifiCorp was in contract negotiations with several short listed proposals, such an assessment could have informed PacifiCorp whether it should have been more aggressive in continuing its negotiations with a bid option if the economics were more favorable than Chehalis rather than select Chehalis as a company-owned resource. This would be the most appropriate way to determine if the acquisition of the Chehalis plant is in fact in the public interest since all resource options available at the time would be consistently evaluated.

Q. HAS PACIFICORP CONDUCTED SUCH AN ANALYSIS?

A. As previously noted, PacifiCorp did not originally conduct such an analysis. I submitted two separate data requests to PacifiCorp requesting that PacifiCorp provide the detailed results of an economic analysis of the proposed plant compared to all proposals and benchmarks submitted and evaluated in response to the 2012 RFP consistent with the Step 1, Step 2 and Step 3 evaluation process under the premise that the plant should be compared on an equal basis to other similar resources. The data requests in question were IE 1.11 and IE 3.1. I also asked the Company to provide specific project cost information about the Chehalis plant and other proposals to allow for a cost analysis of each option. PacifiCorp did eventually provide their assessment of the Step 1, Step 2, and Step 3 analysis along with the assumptions, inputs, and specific cost information used in the analysis.

Q. ISN'T IT TRUE THAT THE CAPITAL COST OF THE CHEHALIS PLANT IS SIGNIFICANTLY LESS THAN THE COST OF A NEW COMBINED CYCLE UNIT?

A. Yes. Certainly the acquisition cost of the Chehalis plant is at a significant discount from the capital cost of a new combined cycle unit. However, the capital cost of a project is only one of many costs that must be considered when evaluating the economics of resource options. Other fixed and operating costs along with operational parameters of a unit such as heat rates, minimum run levels, duct-firing capability, etc. will influence the relative economics of power generation options. An appropriate analysis will therefore assess the system-wide cost impacts associated with various proposals and projects included in the utility's resource plan. In conducting such an analysis other costs, in addition to the capital or acquisition cost need to be considered as well including fuel commodity costs, fuel transportation, transmission costs associated with each option, fixed and variable O&M costs as well as plant operating constraints. For combined cycle plants, fuel costs account for more than 75% of the costs of a combined cycle option given the current gas market. As a result, the physical location of the project and access to gas supply and transportation will have a significant impact on project economics. For example, Rocky Mountain gas has been selling at a significant discount from gas sourced at Sumas in the Pacific Northwest. The current and expected cost differentials for the gas commodity and associated pipeline transportation costs should be considered. Furthermore, Washington State, where the Chehalis plant is located, includes a tax on fuel which provides a competitive disadvantage for projects located in Washington State. Finally, the estimated transmission cost impacts associated with each project can have a significant impact on the relative economic evaluation of different proposals and resource options. All such costs should be considered when evaluating resource options.

Q. ARE THERE ANY ADVANTAGES ASSOCIATED WITH THE CHEHALIS PROJECT RELATIVE TO THE COMPETITIVE OPTIONS FROM THE RFP?

A. Yes. The Chehalis plant is an existing facility. Therefore, development risk has been eliminated, since the plant has secured its permits and has been operational for several years. In addition, the acquisition cost of the plant is known. Therefore, the plant cost is not subject to cost uncertainty and market volatility associated with the recent run-up in capital costs due to increases in steel prices, copper prices, cement, interest rates and labor costs. As a result, the cost risk and uncertainty associated with new projects is eliminated. In addition, the risk associated with access to capital for project financing is also eliminated since the project has already been financed. Thus, much of the cost and development uncertainty and risk has been eliminated, which provides a real benefit in terms of minimizing risk and ensuring reliability in today's power market.

Q. IS IT COMMON PRACTICE IN THE POWER INDUSTRY FOR UTILITIES TO ACQUIRE EXISTING POWER GENERATION RESOURCES OUTSIDE OF A COMPETITIVE BIDDING PROCESS EVEN IF COMPETITIVE BIDDING IS THE REQUIRED MECHANISM TO PROCURE NEW LONG-TERM RESOURCES.

A. I am aware of several cases where utilities have acquired existing assets outside of a competitive bidding process, although I have not researched whether the utility had to obtain an exemption or waiver to acquire such an asset. However, it is my understanding that utilities in Oklahoma, Louisiana, and Indiana have recently acquired or proposed to acquire existing generation assets outside of the competitive bidding process.

Q. DO YOU BELIEVE THAT THE OWNERS OF THE CHEHALIS PLANT SHOULD BE REQUIRED TO COMPETE TO SELL THEIR UNIT THROUGH THE 2008 ALL SOURCE COMPETITIVE BIDDING PROCESS?

A. No. Existing power generation projects would generally prefer to negotiate a sale of an existing plant outside of the competitive procurement process because of the information requirements associated with the procurement process and the time required to complete the process. Furthermore, one of the primary tasks associated with acquisition of an existing plant is for the buyer to conduct detailed due diligence. This process is somewhat inconsistent with a competitive bidding process. For example, in a competitive bidding process, it may take some time before it is determined whether or not a bid is selected for the shortlist. The time for bid preparation and bid evaluation is effectively “down time” for the owner of an existing asset who may be interested in selling its project as quickly as possible. It is generally more efficient and timely to conduct due diligence and contract negotiations during this time rather than spend time and money to meet the RFP requirements. The RFP process is more effective in assessing power purchase agreement options from existing assets or particularly new resources that will be built to meet the requirements of the RFP. Since the 2008 All Source RFP has yet to be issued, it is not reasonable to require the Chehalis plant to bid into the RFP at this time.

IV. ECONOMIC EVALUATION OF CHEHALIS

Q. YOU PREVIOUSLY INDICATED THAT IN RESPONSE TO DATA REQUESTS PACIFICORP DID PROVIDE STEP 1, STEP 2 AND STEP 3 ASSESSMENTS. PLEASE SUMMARIZE THE RESULTS OF THE STEP 1 ANALYSIS CONDUCTED BY PACIFICORP.

A. PacifiCorp submitted the results of the Step 1 analysis in response to IE data request IE 4.1 (Confidential). The Step 1 analysis, using the RFP Base Model, was completed for the Chehalis plant as well as three other combined cycle units bid into the 2012 RFP. The analysis illustrates that the Chehalis plant has a slightly lower value (higher cost), based on Break-even Less Delivered Cost ($/MWh) compared to the lowest cost resource, a gas-fired combined cycle project selected for the short list. The Chehalis plant is significantly more economic (i.e. lower break-even less delivered cost differential) than the other two combined cycle projects, one of which was on the short list for the 2012 RFP.

Q. DID PACIFICORP COMPLETE THE STEP 2 CEM ANALYSIS AS REQUESTED?

A. In response to IE data request IE 1.13, PacifiCorp did run a Step 2 evaluation which did include the Chehalis plant as an option in 2008 that could be selected in Step 2 for Cases 1 to 9 under a 12% planning reserve margin. These studies did not include the benchmark and coal bids from the RFP as options. The study also removed the West CCCT from the 2007 IRP in 2011 that was included in the original 2012 RFP analysis for west option to be considered. The results showed that the Capacity Expansion Model selected the Chehalis project in all cases. However, the model also selected three other combined cycle options bid into the 2012 RFP, including one option that was not selected for the short list in the 2012 RFP.

In response to other data requests from interveners, PacifiCorp prepared another Capacity Expansion Model run in response to DPU 6.2.1. In this case, the model was allowed to select from among the Chehalis plant, three combined cycle bids submitted in response to the 2012 RFP and Front Office Transactions. Coal bids and benchmarks were not included. Also, the West Side CCCT in 2011 was removed. The model selected Chehalis in 2008 along with two of the three combined cycles in 2012, with the remaining requirements met via Front Office Transactions. The other two combined cycles selected were the combined cycle bids selected for the short list in the 2012 RFP process.

Q. DID PACIFICORP CONDUCT THE STEP 3 STOCHASTIC ASSESSMENT?

A. PacifiCorp conducted two stochastic assessments similar to the Step 3 assessment conducted for the IRP and 2012 RFP. The first assessment, presented in response to DPU data request 6.2 (1^{st} Supplemental) compared the 2008 Business Plan options presented by Mr. Duvall in his Confidential Testimony which included the Chehalis plant along with two generic combined cycle units at capital cost levels of REDACTED and REDACTED respectively. The stochastic analysis presented the Present Value Revenue Requirements (PVRR) for the mean, 95^{th} percentile PVRR, 95^{th} percentile expected value based on a 5% probability and the Risk Adjusted PVRR (calculated as the mean PVRR plus the 95th percentile PVRR multiplied by .05 (probability of the PVRR (95%) being realized based on the Monte Carlo sampling).

The second stochastic study requested by the IE and submitted in response to DPU data request 6.2 (1st supplemental), presents the results of the stochastic analysis based on the 2012 Base Load RFP bids and portfolios under a medium CO2 tax strategy. The Company evaluated the eleven RFP portfolios that were evaluated in the Step 3 analysis for the 2012 RFP. The Company also included an additional portfolio that included Chehalis and the two short listed combined cycle projects from the 2012 RFP selected in the Step 2 CEM evaluation described above.

Q. PLEASE DESCRIBE THE RESULTS OF THESE TWO ASSESSMENTS BASED ON THE STOCHASTIC ANALYSIS.

A. The 2008 Business Plan assessment illustrates that the Business Plan with the Chehalis plant enjoys a cost benefit (i.e. lower cost) relative to the Business Plan with either of the two Combined Cycle options for both the Mean PVRR and the Risk Adjusted PVRR cases.

The stochastic analysis results for the eleven RFP portfolios along with a portfolio including Chehalis illustrates that after a correction for an error in calculating the pipeline demand charges for combined cycle options submitted in the RFP, the portfolio with the Chehalis plant and the two short listed combined cycles had the lowest average cost or mean PVRR of all the portfolios evaluated as well as the lowest cost on a Risk Adjusted PVRR basis.

Q. BASED ON THE RESULTS OF THE ANALYSIS PRESENTED BY PACIFICORP, WHAT IS YOUR CONCLUSION REGARDING THE RESULTS OF THE ANALYSIS CONDUCTED BY PACIFICORP TO SUPPORT THE ACQUISITION OF THE CHEHALIS PLANT?

A. The results of the analysis conducted by PacifiCorp appear to indicate that the acquisition of the Chehalis plant is a reasonable resource choice, would have been a short listed resource had it bid into the 2012 RFP and the acquisition should be in the public interest. However, I have not had the opportunity to verify the accuracy of the revisions to the pipeline demand charges included in the final evaluation. PacifiCorp indicated shortly before the date for filing of testimony that an error was discovered in the modeling of gas pipeline demand charges. That error has apparently been corrected. However, the revisions and results of the analysis still need verification before a final decision can be rendered.

V. SUMMARY OF CONCLUSIONS

Q. PLEASE SUMMARIZE THE MAJOR CONCLUSIONS OF YOUR TESTIMONY.

A. The following are the major conclusions of my testimony:

1. The Chehalis plant acquisition should be evaluated relative to the bids submitted in response to the 2012 Base Load RFP since resources submitted in response to

the RFP were legitimate options for consideration to meet Company resource requirements.

2. In order for the acquisition of Chehalis to be in the public interest, PacifiCorp should clearly demonstrate that the project would have been selected as a preferred resource had it competed in the 2012 RFP process, based on the analysis undertaken by PacifiCorp for assessing RFP bids.
3. PacifiCorp’s original analysis in support of the acquisition of Chehalis was a reasonable analysis but was not consistent with the analysis required by Rule 746-430-4 based on the pending 2012 RFP process.
4. While the results of the analysis conducted by PacifiCorp in response to follow-up data requests appears to indicate that the acquisition of the Chehalis plant is a reasonable choice and in the public interest, the adjustments to the analysis and results still need verification before a final decision can be rendered.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.