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-BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH-

In the Matter of the Application of PacifiCorp for a Certificate of Convenience and Necessity Authorizing Construction of the Currant Creek Power Project	Docket No. 03-035-29

PRE-FILED DIRECT TESTIMONY OF THEODORE T. BANASIEWICZ FOR SPRING CANYON ENERGY LLC

February 4, 2004

Spring Canyon Exhibit 2

Q. Please state your name and business address.

A. My name is Theodore T. Banasiewicz and my business address is 31585 Runaway Place, Steamboat Springs, Colorado 80477.

Q. By whom are you employed and for whom are you appearing in this proceeding?

A. I am a Principal of USA Power, LLC and I am appearing for Spring Canyon Energy, LLC (Spring Canyon). Spring Canyon is wholly owned by USA Power Partners, LLC and was formed to construct a 525 MW Combined Cycle power plant close to Mona, Utah. USA Power, LLC is one of the participants in the Spring Canyon project. Spring Canyon responded to PacifiCorp's Request for Proposals (RFP) issued June 6, 2003.

Q. What is your experience and educational background?

A. I hold a Chemical Engineering degree from Clarkson University and a Master of Business Administration from Rensselaer Polytechnic Institute. I have been involved in the power industry my entire career. My career began with power plant startup and testing experience. I moved into the area of management consulting in the utility practice of Price Waterhouse. I have worked in the power plant development business since 1989 having worked for the affiliates of two public utilities.

Q. What is the purpose of your testimony?

A. I describe several problems associated with PacifiCorp's Request For Proposals ("RFP") process and I describe several flaws in PacifiCorp's evaluation of the proposals, which when corrected change the results of the evaluation. I show that Spring Canyon's bids provide better economics than PacifiCorp's Next Best Alternative ("NBA" or "Currant Creek") proving that PacifiCorp did not select the least cost alternative.

In brief, the flaws in PacifiCorp's evaluation of Spring Canyon in comparison to the NBA follow below:

1. The NBA achieves an inappropriate PVRR value from higher escalation rates used during the last 18 years of its 38-year term versus the lower escalation rates used during the 20-year Spring Canyon evaluation;
2. The NBA achieves an inappropriate PVRR value from utilizing a dispatch methodology that is very different than the dispatch methodology used to evaluate Spring Canyon;
3. The evaluation process does not include the value associated with the transfer of the facility at the end of the term of the power contact to PacifiCorp at a value that could have been as low as $1.00;
4. In evaluating the Spring Canyon Bid No. 135, PacifiCorp uses the wrong values for the output, availability, heat rate and capacity charge and other aspects of Spring Canyon and when the correct values are used there is a significant improvement in the PVRR of Spring Canyon;
5. PacifiCorp uses an enormous amount of duct-firing[1] in the NBA model; far in excess of the limits described in the Navigant Consulting reports and PacifiCorp's Integrated Resource Plan ("IRP"), far in excess PacifiCorp's air permit application, and far in excess of industry standards, and when this excess is removed, there is a large deduction in the PVRR of the NBA; and
6. PacifiCorp has used values in the NBA model for operation and maintenance (O&M) that are too low according to General Electric (manufacturer of the NBA proposed

[1] Duct firing is supplemental firing of the gas turbine exhaust by adding more natural gas to the exhaust. This creates additional steam which further drives the steam turbines and produces additional electricity. Duct firing components are relatively inexpensive compared to other forms of generating electricity but it is much less efficient.

equipment) and when the appropriate values are included, the PVRR is significantly reduced.

As a result, the PVRR of the NBA is overstated and should have been reported as -$205.7 million on a 38-year basis (rather than -$46.2 million as PacifiCorp reported) and -$146.5 million on a 20-year basis (rather than -$33.1 million as PacifiCorp reported). The PVRR of Spring Canyon's Bid No. 135 should have been reported as -$72.7 million (rather than -$195.9 million as PacifiCorp reported) to the PSC.

In other words, Spring Canyon's Bid No. 135 has a better PVRR than the NBA and if PacifiCorp had properly evaluated Bid No. 653, it would have discovered as we have, that Bid No. 653 has an even better PVRR than our Bid No. 135.

When you stop and think about it, my adjusted valuations make sense if you remove the over-complicated analysis of the two very different models and think about the fundamentals. As Mr. Graeber's testimony shows, Spring Canyon's Bid No. 135 has a lower overall capital cost and a financing structure, which when combined requires the equivalent of a 7.07% rate of return versus the 7.50% required by PacifiCorp's financing structure. Spring Canyon is also more efficient which means it uses less fuel to produce the same amount of electricity and Spring Canyon has a lower variable operation and maintenance ("O&M") cost (i.e. $3.29/Mwh for the NBA and $3.21/Mwh for Spring Canyon Bid No. 653). Combining a higher efficiency with a lower variable cost yields a lower marginal cost for Spring Canyon. Therefore, Spring Canyon should dispatch more often and run longer than the NBA. Spring Canyon has a higher availability that is guaranteed. Fixed O&M which is comprised largely of salaries, property tax and

administrative costs should be nearly the same for Spring Canyon and the NBA; after all they are both located in Juab County immediately adjacent to Mona substation and utilize the same technical configuration. These fundamentals suggest that Spring Canyon is a cheaper source of reliable electricity than the NBA and should have a better PVRR.

I will summarize the issues regarding the process below:

1. If the power contract were awarded according to the RFP timeline, Spring Canyon had the ability to achieve commercial operation by June 2005, (422 Mw with Bid No. 135 and 527 Mw with Bid No. 653) and the process did not place a value on Spring Canyon's ability to do so;
2. When it became apparent that the delay in PacifiCorp's process would cause a delay in completion, Spring Canyon developed the ability to provide replacement power beginning in June 2005 for the period of delay caused by PacifiCorp and PacifiCorp did not include this ability in the evaluation of Spring Canyon;
3. The process eliminated Spring Canyon's most economical bid even though it was a near duplicate of the NBA in terms of design and dispatchability;
4. The process is being disregarded as PacifiCorp goes outside the RFP in an attempt to secure long-term generation resources while ignoring the most attractive results of the RFP (they say that the RFP allows them to do this, but why go to the cost, effort and timing constraints of the RFP if they do not have to respect the bids received under the RFP? If it is true that they can go outside the RFP, the RFP process is a sham and exists just to justify the NBA to the Commissioners);

5. The process ignores the value associated with a completely developed project such as Spring Canyon (that has the ability to complete construction in a timely manner since all principal construction permits have been issued) allowing virtual projects such as the NBA to be viewed with the same level of risk and credibility;
6. The process ignores the value of several aspects of Spring Canyon's bids including the value associated with guaranteed plant performance; and
7. The process allows the use of a model which: a) predicts NBA dispatch levels that are inconsistent with their own IRP, b) selects a resource that is inconsistent with the planned resource needs, and c) which provides far less dispatch for Spring Canyon even though Spring Canyon is more efficient and has lower marginal cost than the NBA.

Q. Do you believe that the model(s) that PacifiCorp used to compare the economics of the NBA against Spring Canyon were appropriate?

A. No. PacifiCorp recently completed an Integrated Resource Plan (IRP) and more recently issued a revised IRP. The revised IRP, on Page 14, reports that the 2005 resource deficiency is well over 1,000 Mw. Yet the model used to evaluate the NBA shows that the NBA provides only 251 MW for only four months (June, July, August and September) of calendar 2005 and for only 8 hours each day. In this model, the NBA does not operate again until April 2006. For the process to maintain credibility, the model which evaluates the NBA should predict the same level of dispatch as was predicted by the system-wide models used in the IRP process, which determined the generation resource needs.

Furthermore, the resources selected (i.e. Currant Creek) do not match the resource needs. The RFP requested 425 Mw of "peaking power" resources. This was divided into 200 Mw of peaker (defined as "*a resource that can be dispatched at least daily*") and 225 Mw of super peak (defined as *"a resource that can deliver during predefined hours"*). During the RFP process, PacifiCorp sent an e-mail to all of the prospective bidders stating that they would entertain offers for commitments well in excess of this amount on account of its revised load forecast for Utah, which suggested an additional need for peaking resources beyond that which had been identified in the original IRP. This is confirmed on Page 21 of the Navigant Consulting report dated November 7, 2003. The revision to the IRP increased the estimated generation need yet again. With testimony by PacifiCorp that the 2005 generation resource deficiency is over 1,000 Mw and with further testimony by PacifiCorp that black/brown outs will be likely if Currant Creek does not begin construction in January 2004, it is difficult to understand how the selection of Currant Creek facility and its 251 Mw will keep the lights on in Utah. The process lacks credibility when only 25% of the needed resources are selected and that selection is the maximum that can be provided by PacifiCorp in that timeframe. If we assume that the latest IRP is valid, then PacifiCorp must select additional resources, otherwise the RFP process cannot be considered to be valid.

While it is disconcerting that the model which PacifiCorp uses to evaluate the NBA has selected resources that do not match the need, it is also disturbing that the model dispatches the NBA in a very different way than the model used to evaluate Spring Canyon. While Mr. Olive of Quixx Corporation will explain the ramifications of this in

his testimony, an example here is appropriate. After the first few years, the NBA is dispatched, including duct-firing, almost 24 hours per day, 7 days a week. At the same time Spring Canyon's Bid No. 135 is dispatched only 16 hours per day, 7 days a week. The incremental power generated by the NBA duct burners operate at an approximate heat rate of 9,400 Btu/kwh whereas Spring Canyon Bid No. 135 has a more efficient heat rate of approximately 7,000 Btu/kwh. The NBA model loses credibility when it dispatches the significantly more inefficient NBA duct burner while at the same time does not dispatch a significantly more efficient Spring Canyon. Furthermore, in its evaluation of Bid No. 653, PacifiCorp limits duct firing to 1,500 hours per year whereas it allows the NBA duct burners to fire an average of more than 7,000 hours per year after 2009. Any model that predicts duct firing at the level and duration of the NBA is seriously flawed. Competitive market forces would provide additional combined cycle generation resources and would eliminate any possibility that inefficient duct burners would fire that often. We contacted the EPA to confirm this and discovered that the typical duct burner in the United States operates less than 15% of the time or less than 1,300 hours per year. We believe that the estimate of 1,500 hours in the Spring Canyon Bid No. 653 model is a good approximation of market needs; however, the assumption in the NBA model grossly over-estimates the PVRR of the NBA. We are astonished that Navigant Consulting did not discover this inequity during their audit especially since the PacifiCorp IRP in Chapter 5, Page 74, states "It is expected that environmental constraints may limit the capacity factor of installed duct-firing to an equivalent of 15% capacity factor."

Q. In his testimony, Mr. Graeber explained that the comparison between Currant Creek and Spring Canyon was unfair because Currant Creek has been inappropriately analyzed over 38 years while Spring Canyon has been limited by a 20-year analysis. Can you expand on Mr. Graeber's Testimony with regard to issues associated with comparability?

A. Yes. The evaluation process used by PacifiCorp inappropriately favors the NBA facility by utilizing a forward price curve for estimating future electricity prices which makes the assumption that prices remain relatively flat for the first 20 years, then escalates rapidly for the next 18 years. By evaluating Currant Creek over 38 years, PacifiCorp captures the very high assumed values for electricity in the remaining 18 years to improve the PVRR value of the NBA. PacifiCorp uses one methodology to forecast future electricity values through 2020, which results in an average yearly price escalation of 1.9%. For years beyond 2020, PacifiCorp switches to a different methodology, which uses a 3% yearly price escalator. Mr. Olive will explain this concept in his testimony utilizing several graphs he has prepared drawing information from PacifiCorp's forward price curve used in the NBA model.

Q. Are there other reasons that it is inappropriate for PacifiCorp to analyze Currant Creek over 38 years while the Spring Canyon evaluation is limited to a 20-year analysis?

A. Yes, PacifiCorp has very clearly stated in the materials from their June 20, 2003 Pre-bid Conference, Page 15 and in the RFP Page 9, Table II that the commodity being sought was a 20-year product, not a 38-year product. This is further confirmed in the Navigant

Consulting report titled "Review and Audit of PacifiCorp's Screening Review Process for RFP 2003-A" dated November 7, 2003, Page 21. PacifiCorp has obtained a distinct advantage by attempting to limit all bidders in these RFP publications, including Spring Canyon to a 20-year product. The operative wording of the RFP states: *"Peaker Term from~April 2005 (but not later than June 1, 2005) through up to 20 years."* Readers and bidders would interpret those statements as meaning that a limited term of only 20 years was available. Furthermore, Spring Canyon requested a power contract with a term longer than 20 years during in the first discussion with PacifiCorp subsequent to being short-listed. Spring Canyon was informed that 20 years was the maximum that PacifiCorp was willing to consider. The July 22, 2003 Navigant Consulting Inc. report titled "Review and Audit of PacifiCorp's Next Best Alternative," states on Page 7 that one of Navigant Consulting's roles was to *"validate that the NBA model components were consistent with what was being requested of bidders."* Yet Table C of the report, which lists all of the categories Navigant Consulting Inc. used to *"validate the consistency of the NBA and the RFP,"* does not include any mention of the term of the resource! PacifiCorp did not allow Spring Canyon to bid a product longer than twenty years which limits the PVRR of Spring Canyon, yet they include the additional value associated with the extra 18 years in the NBA model. Again, it is astonishing that Navigant Consulting remains silent with regard to this incredibly important evaluation issue.

Q. Under what circumstances would it be appropriate for the NBA to be evaluated over 38 years?

A. Given that Spring Canyon was desirous of bidding a term longer than 20 years; the only justification for a 38-year analysis of the NBA would be for PacifiCorp to have included the value associated with transferring ownership of Spring Canyon to PacifiCorp at any point up to the end of the tolling agreement. In the pre-bid conferences, PacifiCorp stated that it would *"find value"* in a bid that provided PacifiCorp with the option to purchase the bidder's facility. While the RFP requested a specific price, it also stated that "*price and non-price issues"* would be negotiated subsequent to being short listed. Also, during the Pre-Bid Conference held in Portland on June 20, 2003, PacifiCorp, in its presentation lead by Mark Tallman, identified several transaction structures (slides 15, 16, 17) including "*PPA, tolling lease, turn-key sale, equity participation, etc."* that would be negotiated. Following the parameters of the RFP, Spring Canyon did not, in its response, state a specific price because the value of the facility changes over time. However, Spring Canyon did state on Page 7 of Section 1 of the bid response a willingness to, in good faith, negotiate the sale of the facility to PacifiCorp at any time. During several discussions with PacifiCorp, Spring Canyon restated its willingness to sell the facility to PacifiCorp; however, PacifiCorp was unwilling to engage in this negotiation. With a firm and undeniable understanding of Spring Canyon's willingness to transfer the facility, PacifiCorp should have included the value that such a transfer would provide to the rate payer and, without doing so, the PVRR of Currant Creek is inappropriately enhanced while that of Spring Canyon is inappropriately degraded. Without including the transfer of Spring Canyon in the PVRR analysis, it is inappropriate for the process to allow Currant Creek to benefit from the 38-year analysis while Spring Canyon is limited to a 20-year analysis.

Q. Since you and the other owners of Spring Canyon were willing to sell the Spring Canyon project to PacifiCorp, what would have been the appropriate transfer value that PacifiCorp should have used to estimate the value to ratepayers?

A. $1.00. As Mr. Graeber testified, PacifiCorp did not negotiate in good faith. Had PacifiCorp conducted good faith negotiations as they stated in their RFP, they would have discovered that the owners of Spring Canyon were willing and are still willing to transfer the Spring Canyon facility to PacifiCorp at the end of the 20-year tolling agreement for a total purchase price of $1.00. PacifiCorp should re-calculate the PVRR of Spring Canyon with this assumption and allow everyone to understand how much PacifiCorp was willing to "leave on the table" in order to inappropriately enhance the PVRR of the NBA. While Spring Canyon is willing to essentially give the facility to PacifiCorp after twenty years, it is important to understand that Spring Canyon was willing to negotiate the sale of the facility at anytime.

In addition to being a comparability issue, the fact that PacifiCorp did not negotiate in good faith is also a process issue. The RFP stated that PacifiCorp intended to negotiate price and non-price issues with bidders subsequent to being short-listed. Believing that PacifiCorp would negotiate in good faith, Spring Canyon continued to anticipate further discussions right up until the announcement that Currant Creek had won. In the Navigant Consulting report dated November 7, 2003, Page 25 states "*Once PacifiCorp began bi-lateral negotiations with those short-listed parties, the evaluation models were updated to incorporate adjustments and clarifications bidders had the opportunity to make to their offers.*" This gives some indication of the lack of negotiations. They were

limited to PacifiCorp asking *"is this your best offer?"* The process was ineffective in that there was no motivation for PacifiCorp to negotiate since by doing so, it would reduce the likelihood of their Currant Creek project winning the bid. When Spring Canyon re-stated its desire to negotiate to transfer the facility, the response was "*duly noted,"* which was promptly ignored by PacifiCorp. An effective and appropriate process would have included the responsibility and the motivation to negotiate in good faith.

Q. Doesn't the use of the Real Levelized Revenue Requirement methodology correct for the problems associated with the whole concept of 38 years versus 20 year?

A. No, but before I get to the reason, I submit that it is inappropriate to use the Real Levelized Revenue Requirement methodology to compare Currant Creek with Spring Canyon. Referring to Appendix J of the PacifiCorp Integrated Resource Plan, the use of the Real Levelized Revenue Requirement methodology is a legitimate method to analyze different types of resource assets with different design lives (i.e. pulverized coal with a design life of 40 years versus a combustion turbine which has a design life of 25 years). However, Appendix J leads us to conclude that similar type assets with similar design lives that go into service at a similar time should not be compared utilizing the Real Levelized Revenue Requirement methodology.

To this end, Appendix J, Page 352 includes a section titled "Nominal Revenue Requirements Inadequate for Comparison." The first paragraph of this section states that *"Nominal capital revenue requirement is limited in its ability to adequately compare one type of resource asset against another."* In other words, the real levelized method must be used when the assets being compared are not the same type. The paragraph goes on to

say that *"This is particularly true when the resources being compared have lives of different lengths, or if the resources are placed in service in different years."* This seems to confirm that Currant Creek and Spring Canyon should be compared using Nominal Revenue Requirements since they are both gas-fired combustion turbine combined cycle facilities and both go into service at the same time. An argument could be made for using the Real Levelized method since PacifiCorp views Spring Canyon as a 20-year product and Currant Creek as a 38-year product, except that Appendix J declares that the design life of combustion turbines is 25 years rather than the 38 years that PacifiCorp has used in the NBA model. As mentioned earlier, Spring Canyon had requested a contract term longer than 20 years and was denied. According to PacifiCorp's IRP, the Currant Creek evaluation should be limited to 25 years (the design life of combustion turbines). Additionally, the Spring Canyon evaluation should be expanded to 25 years and as a result, the Nominal Revenue Requirements method should be used to evaluate both Currant Creek and the Spring Canyon bids.

However, if the Real Levelized Revenue Requirement methodology is used, the results are only as good as the assumptions that are used. The Real Levelized Revenue Requirement methodology does not correct for the inappropriate assumptions that Mr. Olive has described. These include the higher escalation rates for electricity prices after the Spring Canyon 20-year term has expired and the use of different dispatch and pricing methods. Also the maintenance assumptions that PacifiCorp has used in the NBA model are not valid for a 38-year period. If enough maintenance is performed, then a combustion turbine will operate for 38 years; however, PacifiCorp does not allocate

enough money to properly maintain the turbines for 38 years. These inappropriate assumptions result in higher than appropriate nominal values and these values carry over to the Real Levelized values. It is easily verified that replacing the high escalation rates in the last 18 years of the NBA evaluation with the same escalation factors from the first 20 years will reduce the PVRR of the NBA.

Q. Are there other ways that you believe that the Spring Canyon evaluation was inappropriate?

A. Yes, PacifiCorp has made several very significant errors in the calculation of the Spring Canyon PVRR. The errors affect each of the six components of the Spring Canyon PVRR. In order to remind everyone of the results, I have included Table 1, PVRR Comparison of Spring Canyon and Currant Creek. This table includes the six components of the Spring Canyon Bid No. 135 PVRR and the eight components of the NBA PVRR, for both the 38-year and 20-year PVRR as PacifiCorp has reported them. As PacifiCorp has calculated the PVRR, Spring Canyon loses by a lot; -$195.9 million for Spring Canyon and -$33.1 million, (-$46.2 million for the 38-year PVRR) for the NBA. But this changes dramatically as I make corrections to several errors.

First in its evaluation of Spring Canyon's Bid No. 135, PacifiCorp has used inappropriate values for output and availability. In its bid response, Spring Canyon provided the facility output corrected to various temperatures ranging from -10^{o}F to 105^{o}F. As I will discuss later, one of several reasons that Spring Canyon had selected Utility Engineering to construct the facility was that it had recently completed the construction of a nearly duplicate facility in terms of design and this facility is located at nearly the identical

elevation as Spring Canyon. As a result, Spring Canyon is certain of the accuracy of the values in Table 1 of Section 2 of its bid response. Those without this important experience will be relying on engineering models which are not as reliable as actual experience.

In order to run a monthly model as PacifiCorp does, values for average monthly facility output are required since gas turbines produce different outputs at different temperatures. PacifiCorp explained during discovery meetings that the values from Table 1 of our bid response were adjusted by interpolation for the monthly temperatures; however, upon further evaluation, it was discovered that PacifiCorp had "short-changed" Spring Canyon in the process. The attached Table 2, Corrected Spring Canyon Facility Output, shows the output that PacifiCorp has used for each month of the first year in their evaluation of Spring Canyon's Bid No 135. The next column shows the average monthly temperature that PacifiCorp used in the Currant Creek evaluation, which is duplicated from the "Currant Creek Data" section of the NBA model. The third column is the output that PacifiCorp should have used for Spring Canyon's output and has been developed by precise interpolation of Table 1 from Section 2 of the bid response. The first year of operation is used in the table because it is easy to view the effect of the PacifiCorp error since subsequent years would also require an adjustment for degradation. As can be seen from Table 2, PacifiCorp has short changed Spring Canyon in every month by no less than 14.2 Mw. While PacifiCorp does apply a degradation factor to the first year, much of this difference is not the result of degradation. It could be argued that some

degradation may be experienced by the end of the first year, however, that would only justify 3 of these 14 Mw and certainly not in the first months of the year.

Table 3, The Effect of Corrected Output on Value Received by PacifiCorp, shows the value of the electricity received by PacifiCorp that should have been used in the first year of operation. The table utilizes the exact hours of dispatch and the exact price that PacifiCorp uses in the Spring Canyon Bid No. 135 evaluation; only the facility output has been corrected. Column 1 is the PacifiCorp calculation of value received whereas Column 6 is the value received based on corrected facility output. As can be seen from the table, the value of the electricity received by PacifiCorp increases from $104 million to $108 million just in the first year alone.

With regard to availability, in its analysis of Spring Canyon's Bid No. 135, PacifiCorp has used an inappropriate availability factor. PacifiCorp has used a flat 95% availability in each month for the 20-year term. Notes taken by PacifiCorp and Navigant Consulting during short-list discussions confirm that Spring Canyon had proposed an average yearly availability of 96%. Further discussions were held regarding Spring Canyon's ability to provide 100% availability in the summer months and 97% during other months plus a maintenance outage. Using a flat number is an over simplification of the Spring Canyon proposal. The accurate availability should be 100% for June, July, August and September, 97% for all other months except April when 71% should be used. This equates to an annual availability of 96%. The April availability is calculated by combining a 3% forced outage rate with a 7 to 8 day maintenance outage. Table 4, The

Effect of Corrected Output and Corrected Availability on Value Received, shows the effect of correcting both the output and the availability factor on the first year of Spring Canyon's operation. Table 4 utilizes the corrected output from Table 3 and makes an adjustment for the hours of dispatch to convert from 95% availability to the correct values. (i.e. for June, Table 3 showed 456 hours of dispatch. This is derived by PacifiCorp taking the 30 days of the month multiplying by 16 hours per day and multiplying by 95%; if availability of 100% is used, the value increases to 480 hours). As can be seen, correcting the availability factor and the facility output increases the value of electricity produced by the Spring Canyon project from $104 million which was used by PacifiCorp in the Spring Canyon evaluation to $110 million which should have been used.

In its NBA model, PacifiCorp also uses inappropriate assumptions for availability of its Currant Creek facility. In the NBA model, PacifiCorp takes actual availability values from its Hermiston facility; however, only four years of data (1997- 2000) are used. Since major overhauls are not performed in a four-year timeframe, it is unlikely that the Hermiston values over four years are representative of that which Currant Creek would experience over 38 years. It is my view, that using a flat number such as 95% is inappropriate and that using the Hermiston values are inappropriate; however, it is most inappropriate to utilize different methodologies in evaluating Spring Canyon and Currant Creek. The two facilities propose identical technologies and it is reasonable to assume that both facilities will be operated by qualified professionals and similar availabilities will be achieved. Even though the annual average is 92.2%, it is particularly offensive

that PacifiCorp has used 100% availability (or nearly 100%) for Currant Creek in the summer months when power prices are the highest while Spring Canyon is hindered by a flat 95% availability.

As can be seen by the Tables 2, 3, and 4, PacifiCorp has used a value of $104 million for the Energy Value received from Spring Canyon when $110 million should have been used or approximately 5.5% more in the first year and every year thereafter. This results in a 5.5% increase in the present value of the Energy Value received by PacifiCorp. As seen in Table 1, PacifiCorp reported the Energy Value to be $1,085.5 million. The value should have been $1,145.2 million or approximately $60 million more. Let me be clear that this does not by itself mean that the PVRR of Spring Canyon should be better by $60 million. Higher output means that in addition to producing more electricity, more fuel must be consumed.

Q. Does that mean the fuel component must be corrected?

A. Yes, but in addition to needing to be corrected for the additional output, it is also wrong because in its evaluation of Spring Canyon's Bid No. 135, PacifiCorp has used inappropriate values for the heat rate efficiency of the facility.

In the same way that the output of the Spring Canyon facility was to be adjusted for temperature, the heat rate efficiency should be adjusted. Table 5, Corrected Spring Canyon Heat Rates, shows the monthly heat rates that PacifiCorp used for the first year of Spring Canyon's operation. Again the first year is chosen for ease of comparison since the first year does not involve degradation complications and while some of this

difference could be attributed to degradation, much of the difference can not. Also shown are the heat rates that PacifiCorp should have used based on a precise interpolation of Table 1 of Section 2 of the Spring Canyon bid response. The impact of PacifiCorp utilizing a higher than appropriate heat rate in the Spring Canyon evaluation is that the projected cost of fuel consumed is higher since it requires more fuel to produce the same amount of electricity.

Table 6, Effect of Using Correct Spring Canyon Heat Rates, shows the impact on fuel cost during the first year of operation if the corrected heat rates had been used. For purposes of comparison, Table 6 uses the exact dispatched hours, output and fuel price from PacifiCorp's Spring Canyon model, with only heat rate being corrected.

The inaccurate PacifiCorp estimates of heat rate results in $1.75 million (or 2.5%) per year more fuel cost than that which should have been included in the Spring Canyon cost. In order to calculate the accurate impact on the Spring Canyon Bid No. 135 PVRR, in addition to lowering the cost because PacifiCorp has used the wrong value for heat rate, we must also increase the total fuel cost since more fuel is used as a result of using the correct values for facility output and availability. The net impact of using the correct output, availability and heat rate on fuel cost is a 2.3% increase in each year and therefore a 2.3% increase in the present value. PacifiCorp reports a Fuel cost of $623.5 million and the correct cost is $14.4 million more or $637.8 million. Now we can see impact of the corrections for heat rate efficiency, output and availability on the Spring

Canyon Bid No. 135 PVRR. The Energy Value increases by $59.7 million while the Fuel cost increases by $14.3 million for a net PVRR improvement of over $45 million.

Q. Are there other significant mistakes in the Spring Canyon evaluation?

A. Yes. Another particularly disturbing mistake is that in its evaluation of Spring Canyon's Bid No. 135, PacifiCorp has used an inappropriately high capacity charge.

The original Spring Canyon Bid Nos. 135 and 653 included a capacity charge of $7.70/kw•m and $6.90/kw•m respectively. These capacity charges were based on a very conservative financing scenario because, without knowing the details of the ultimate tolling agreement, it would be impossible to know the exact interest rate that lenders would charge. If the contract included favorable financing terms, the interest rate would be less than if the tolling agreement included less favorable terms. The bids were based on a bond financing at a very conservation rate of 8.25%. Bid No. 135 (the more expensive bid) was short-listed whereas Bid No. 653 (the most economical bid) was not. During the initial discussions subsequent to the short-list, PacifiCorp insisted that the cost of the gas pipeline be included in the capacity charge. This caused the capacity charge for Bid No. 135 to increase from $7.70/kw•m to $7.95/kw•m. During those discussions, PacifiCorp was asked to disclose the details of the tolling agreement so that Spring Canyon could more accurately estimate the interest rate and therefore the capacity charge. PacifiCorp was unable to do so and instead, requested the mechanism by which the capacity charge would be reduced if interest rates were lower than that upon which the original bid was based. Spring Canyon informed PacifiCorp of its discussions with various lenders and based on those discussions, it was very likely that, providing the

terms of the tolling agreement were appropriate, the term interest rate would be 7.25%, not 8.25% and that the construction interest rate would be 5.5%, not 8.25%. PacifiCorp was informed that all of the benefit of the lower interest rates would be passed on in the form of a lower capacity payment. Using the mechanism that was provided to PacifiCorp, (i.e. $0.13-$0.15/kw•m per 25 basis change in interest rates) the capacity charge that should have been used to evaluate Spring Canyon's Bid No. 135 would be between $0.52 and $0.60/kw•m less than the $7.95/kw•m that PacifiCorp did use. When the construction interest savings is included, the reduction shifts to the high end of the range, which is approximately an 8% reduction in the capacity charge. PacifiCorp's Jim Schroeder acknowledges this in his notes to the meeting held in Portland on October 16, 2003 when he writes *"8% better #."* Mr. Schroeder's notes were obtained from PacifiCorp's response to Data Request 2.7. In the template used during that discussion, PacifiCorp states in Box #31 regarding the $7.95/kw•m capacity charge, that they understand that the *"current financing will lower this valuation."* The template with Mr. Schroeder's notes is attached as Exhibit G. Mr. Schroeder's notes acknowledge the 8% reduction; yet, the Spring Canyon evaluation does not. Had PacifiCorp used the appropriate capacity charge in the Spring Canyon Bid No. 135 evaluation, the present value of the capacity charge would have been 8% less than the 373.9 million PacifiCorp reports or $344.0 million. This is a $30 million improvement in the Spring Canyon Bid No. 135 PVRR in addition to the $45 million improvement that I have already discussed.

Q. What is your next issue which requires a correction?

A. Both Variable O&M and Fixed O&M need to be corrected. The correction is related so I have to discuss them together. The original Spring Canyon Bid No. 135 provided a

variable O&M charge ("VOMC") of $3.44/Mwh. As stated in our bid response variable O&M is intended to pay for variable operation and maintenance expenses including fuel used during startups, lube oils, filters, water treatment chemicals, other consumable items and a reasonable reserve for the expected cost of gas turbine and steam turbine overhauls and for replacement of SCR catalyst. Our charge of $3.44/Mwh is based on the scheduled maintenance required when a facility is operated on a 5 x 16 basis (i.e. five starts per week, 16 hours per day) which is 260 starts per year and 4160 hours per year. The same assumption was used to develop the VOMC for our Bid No. 653 which included duct-firing capability and that VOMC was $3.21/Mwh. This compares to the VOMC of the NBA of $3.29/Mwh (which is the sum of $3.19/Mwh for the combined cycle capacity plus $0.10/Mwh for the duct burner capacity). It is not surprising that these numbers are so close because as our basis for the original VOMC was 260 starts and 4,680 hours, the VOMC of the peaking NBA is based on 300 starts and 5,518 hours per year.

During the first discussion with PacifiCorp subsequent to Bid No. 135 being short-listed, which included Rand Thurgood and Ian Andrews of PacifiCorp's generation group, it was explained to Spring Canyon by Mr. Andrews that one start per day may not offer enough flexibility and that "intra-day" starting flexibility may be necessary. As a result, Spring Canyon revised its bid to include a pricing structure that provided the flexibility of unlimited starts. In its revision to Bid No. 135, Spring Canyon lowered its VOMC from $3.44.Mwh to $2.58/Mwh and included a startup charge of $8,700 per turbine including fuel. We also included the concept of a $10,000 bonus depending on whether

the start was achieved on time. Another way to describe this concept would be an $18,700 start charge with a $10,000 penalty. This bonus/penalty concept has been used by the utility and independent power industry to provide motivation for the facility owner/operator to have the plant running when the utility desires. During discussions with PacifiCorp regarding this concept, we explained that this was a starting point for our negotiations since any bonus/penalty should be related to the timeframe of the start up period (i.e. the longer the time to accomplish the start, the lower the bonus). We pointed out that the concept could be dropped if it was not of value to PacifiCorp. If the concept was dropped, the startup charge would be $8,700 per start per turbine including fuel. Further discussion did not occur and PacifiCorp has included the full cost into the Spring Canyon evaluation without discussing the timeframe in which they would require the start to be accomplished. Without that discussion, the appropriate startup charge that should have been used is $8,700 per start per turbine including fuel.

When PacifiCorp asked for unlimited flexibility, we had to assume a maximum number of starts which we chose to be 520 because we could not imagine market conditions which dictate a dispatch scenario of more than 520 starts per year. We also had to assume the other end of the operating spectrum as being possible. PacifiCorp could operate the facility as a baseload facility which meant it might start once and operate all year. As a result, a combination of a VOMC equal to that of our baseload Bid No. 620 which was $2.58 plus a start charge seemed reasonable since the lowered VOMC would cover our maintenance cost if there was a low number of starts. Using GE Documentation, we determined that if PacifiCorp started the facility 520 times per year,

we would need $8,754 per start (both turbines) to perform the required maintenance in addition to the $2.58/Mwh VOMC. We then added the fuel required to the start the turbines using $5.50 per MMBtu as the assumed fuel cost and 750 MMBtu for each turbine for each start which yields $8,250 for fuel for each start (both turbines) for a total of $17,004 or $8,502 per turbine. Since, to our knowledge, no one is operating GE 7FA turbines to this level, we used engineering judgment to increase this number to $8,700 per turbine including starting fuel. If the facility is started 520 times per year, it will cost approximately $3.5 million more to maintain the turbines each year then if the turbines were started 260 times.

In its evaluation of Spring Canyon's Bid No. 135, PacifiCorp has used this more expensive operation scenario even though the original Spring Canyon Bid No. 135 gave PacifiCorp all the flexibility that they have modeled into the NBA. Since PacifiCorp did not need the additional flexibility, they should have modeled the pricing scenario in the original bid response

In the Spring Canyon Bid No. 135 model, PacifiCorp lowers the VOMC from $3.44/Mwh to $2.58/Mwh and includes $18,700 per start into the fixed operation and maintenance cost. Even though PacifiCorp should not have used this, if they do use it, it should be used correctly. The revised bid was $8,700 per turbine per start including fuel. In the model, PacifiCorp has used $18,700 per start not including fuel. Table 7, Effect of Corrected Spring Canyon Variable O&M Rates, shows the effect of using the correct VOMC on the first year of Spring Canyon's operation. Using the correct value increases

the Variable O&M cost from $5,962,822 to $8,343,654 an increase of 39.9%. While the correct values increase our Variable O&M cost, they also reduce our Fixed O&M cost. Table 8, Effect of Correct Spring Canyon Fixed O&M Rate, shows the effect of using the correct FOMC in the first year of Spring Canyon's operation. Using the correct value decreases the Fixed O&M cost from $13,342,235 to $6,813,864, a reduction of 48.9%. As a result of using the correct values, the net present value of the Variable O&M component shifts from $67.5 million to $94.4 million while the net present value of the Fixed O&M component shifts from $153.0 million 78.2 million. The net impact on the Spring Canyon Bid No. 135 PVRR is a beneficial $47.9 million.

Q. The only component of Spring Canyon's PVRR that you haven't corrected is Carbon Tax. Do you want to correct this?

A. Yes, but the impact is very small and not really worth the amount of discussion required. The carbon tax is a fictitious tax anyway.

Q. So what are your conclusions regarding the Spring Canyon Bid No. 135 PVRR?

A. I have summarized the results of my analysis in Table 9, Adjusted Spring Canyon PVRR. The table shows the adjustments to each component and the new total PVRR. PacifiCorp reported the Spring Canyon Bid No. 135 PVRR to be -$195.9 million and our analysis shows that it should be -$72.7 million.

Q. What is your next issue regarding the way Spring Canyon was evaluated and the way the NBA was evaluated?

A. I have pointed out several significant corrections which significantly affect the outcome of the Spring Canyon Bid No. 135 evaluation. While there are several corrections that

should be made to the NBA model, I would like to point out two that significantly affect the outcome.

First, the NBA model operates the duct burners almost continuously after the first few years. In every year after 2009, the Currant Creek duct burners are operated more than an average of 7,000 hours per year. Attached, as Exhibit E, is a chart which shows the hours of duct-firing each year. In 2015 they are operated more than 7,800 hours per year. The Navigant Consulting report titled Review and Audit of PacifiCorp's Screening Review Process for RFP 2003-A, dated November 7, 2003, states on Page 26 that with regard to changes to the evaluation model methodologies between the first and second stages, one of those changes was *"added limitations as to the number of duct-fired operating hours. This change pertains only to peaking build proposals and the peaking NBA. Since the annual number of duct-fired hours is expected to have some limitations, a cap of 3,500 hours per year was added to the NBA models."* It is also appropriate to note that PacifiCorp, in its original air permit application and in its subsequent modification to the air permit application, requested no more than 3,500 hours per year of duct-firing. Despite the statement in the Navigant Report and the limit in the air permit application, the NBA model contains a level of duct-firing that far exceeds the 3,500 per year limitation even though as I discussed earlier, the national average according to the EPA is less than 1,300 hours as PacifiCorp recognizes in its IRP, Page 74. The PVRR of the NBA enjoys enormous benefit as a result of this violation. If we limit duct-firing to 3,500 hours, the nominal market value of the electricity produced in 2015 would decrease by $22.2 million or 13%. This effect is approximately the same in each year

after 2010. The impact on the present value of the Energy produced by the NBA would also be approximately 13% less. The stated present value is $1,538.2 million and 13% of that is $200 million. The adjusted Energy Value would be $1,338.2 million. Correspondingly, we must reduce the Fuel cost by the amount that the duct burners would have used had they been able to operate all those hours. For every $1.00 that the Energy Value goes down because less electricity was produced, fuel cost goes down by $0.63 since less fuel is burned. The stated value of Fuel cost of $958.7 million would decrease to $832.7 million. By limiting the duct-firing capability of the NBA to 3,500 hours per year, the net impact on the PVRR of the NBA is -$74 million.

While 3,500 hours per year may ultimately be permissible under the Currant Creek air permit when it is issued, it is still an unreasonably high market assumption and limiting the duct-firing assumption to 1,500 hours, as PacifiCorp has done in the Spring Canyon Bid No. 653 model, would be a better approximation of the market and consistent with the IRP. If we do this, the net impact on the present value of the Energy received is reduced by 17% (not 13%) and the present value of the Energy is $1,276.7 million. The Fuel cost would further decrease to a present value of $793.9 million. The impact on the PVRR of the NBA is -$97 million (not -$74 million).

Second, the NBA model uses an inappropriately low value for variable O&M. The operational assumptions for the NBA are that it will start 300 times each year and operate an average of 84% or 7,367 hours per year. The first difficulty I have is that the Spring Canyon bids included the cost of startup fuel in the variable operation and maintenance

charge (VOMC) and the NBA does not. When we revised our bid to provide unlimited starting flexibility (within manufacturer guidelines) we combined the concept of a VOMC with a startup charge, all as I discussed earlier. The point I am making here is that even our revised bid included the fuel used to start the gas turbines. We are unable to find the cost associated with startup fuel anywhere in the NBA model. The manufacturer recommends an estimate of 750 MMBtu per turbine per warm start. The NBA is assumed to start 300 times per year. With an estimate of $5.50/MMBtu for fuel, this would be $1,856,000 per year (300 starts x 2 turbines x 750 MMBtu x $5.50). This cost is included in the PVRR of Spring Canyon's Bid No. 135, yet it is not included in the PVRR of the NBA.

In addition to the startup fuel inaccuracy, the PacifiCorp estimates for variable operation and maintenance are understated. According to GE published documentation, which is attached as Exhibit F, the schedule and cost associated with gas turbine and steam turbine inspections and overhauls will require a total of $70.1 million over a nine year period if the NBA is operated with 300 starts and 7,367 hours per year. In addition, $167.00 per fired hour must be accrued for SCR replacement. This is an additional $1.23 million per year ($167/hr x 7,367 hrs) or an additional $11.0 million over a nine year period for a total outage allotment of $81.1 million. In order to have this amount available, PacifiCorp must accrue just over $9 million each year; however, the NBA model assumes that only $7 million is accrued each year, an understatement of $2.0 million per year. For example, in Fiscal 2007, the NBA accrues $6.882 million. An additional problem with PacifiCorp's estimate of variable operation and maintenance cost is the

estimated incremental cost associated with duct-firing. The NBA model assumes that a VOMC of $3.19/Mwh when the facility is operating in combine cycle and an additional $0.10/Mwh when the duct burners are fired. The additional $0.10/Mwh will not even cover the additional cost of ammonia used by the SCR let alone additional maintenance on plant components especially the SCR. As a result, the NBA model underestimates the present value of the Currant Creek Variable O&M cost in several ways. The present value of the Variable O&M cost in the NBA model is $112 million, but should be increased to $144 million.

Table 10, Adjusted Currant Creek PVRR shows how the total PVRR for the NBA is adjusted for both the 38-year PVRR and the 20-year PVRR. On either basis (38 or 20 years) the adjusted PVRR of Spring Canyon's Bid No. 135 is better than that of the NBA. This is seen by comparing Table 9 with Table 10.

Q. You have discussed two errors in the NBA model that alter the results dramatically. Are there other areas that should be address?

A. Yes, several but some do not have significant impacts on the result. Those I mention, more to point out the inconsistencies in evaluation rather than the overall impact on the results. First, the NBA model uses a mega-watt output that is not achievable with the Currant Creek plant configuration.

PacifiCorp has stated that the configuration of the Currant Creek facility will employ the use of evaporative cooling versus the Spring Canyon configuration, which employs inlet chillers. This is one of the very few differences between Currant Creek and Spring Canyon. Spring Canyon has asked engineers at Utility Engineering to review the output

that PacifiCorp has used in the calculation of the Currant Creek PVRR. A higher than expected output results in an inappropriately high amount of generation and therefore an inappropriately high PVRR. PacifiCorp uses an output of 420 Mw at 60^{o}F; when 417 Mw should have been used.

Second, PacifiCorp does not consider Carbon Tax in a consistent manner when evaluating Spring Canyon and the NBA. In the Spring Canyon model, PacifiCorp calculates Carbon Tax based on a charge of $0.47/MMBtu, whereas in the NBA model Carbon Tax is calculated based on a charge of $3.56/Mwh. In the Spring Canyon model, July 2008 is the first month that Carbon Tax is imposed and the calculation is simply $0.47/MMBtu X 1,361,755 MMBtu, which equal $640,025. For the same month, the NBA model uses $3.56/Mwh X 239,042Mwh to yield a Carbon Tax of $850,662. However, had PacifiCorp calculated Carbon Tax in the NBA model in the same way as it did in the Spring Canyon model; the Carbon Tax would be higher. In July 2008, the NBA used 1,382,769 MMBtu for the gas turbines and 470,460 MMBtu for the duct burners. Summing these two values and multiplying by $0.47/Mwh yields a Carbon Tax of $871,017 not $850,662. As a result, the Carbon Tax in the NBA model is understated by approximately 2.4%. Had PacifiCorp used the same method that they used to evaluate Spring Canyon, the Currant Creek PVRR would be $3 million less. Since, in our evaluation of the NBA we have limited duct-firing to 1,500 hours per year, this will reduce the Carbon Tax associated with the NBA by approximately 14% for a net impact of 11.6% less. As a result the Carbon Tax of the NBA should have been reported as $110.2 million rather than $127.8 million.

Third, PacifiCorp calculates Fixed O&M and property tax in the NBA model in an inappropriate manner and in a manner inconsistent with that of the Spring Canyon model. Fixed O&M is called "Fixed" because it is a cost that is independent from the amount of Mwh produced from generation. It includes such costs as salaries of personnel, whom are paid even if the plant is not dispatched or generating power. However, in the NBA model, PacifiCorp treats Fixed O&M as though it were a variable cost. In the first year of operation (fiscal year 2006), Currant Creek is dispatched for five months (June, July, August and September of 2005 and March of 2006). The NBA model shows a fixed cost charge in each of the five months but shows no charge in the other months when the facility is not operating. The Spring Canyon model correctly charges the Fixed O&M amount each month; thus the NBA maybe understating Fixed O&M. PacifiCorp used the same inappropriate logic for its calculation of property tax. The NBA model only charged a property tax in the months when the facility is generating electricity. The error is compounded because the property tax is dependent on the amount of power generated. The Spring Canyon model appears to correctly account for property tax since it is included in the Fixed O&M calculation. While the impact of these mistakes does not appear to be great, these inconsistencies in the model formulation structure cannot be ignored and must be corrected for the comparability evaluation to have integrity.

Fourth, the NBA model uses an inappropriately low estimate of the cost to interconnect the Currant Creek project to the transmission network. During its review of the NBA

viability, Navigant Consulting discovered that PacifiCorp Transmission (the division of PacifiCorp which determines the cost to interconnect facilities with the transmission network) was busy with other interconnection requests and was unable to provide system impact and interconnection study results to the PacifiCorp Resource Development. This is because PacifiCorp Transmission must perform interconnect studies and facilities work on a first come, first serve basis. As a result, PacifiCorp Resource Development utilized an old, inaccurate estimate, which was completed for Panda Energy in 2001 before PacifiCorp purchased Panda's worksite. The old estimate is no longer considered valid by PacifiCorp Transmission because Panda did not complete the interconnection process and as a result other projects, namely Spring Canyon, have completed current studies and have a higher interconnection priority than Currant Creek. The Currant Creek interconnection cost must include the assumption that the higher priority projects (first in the queue) are completed which means the estimated cost to interconnect Currant Creek will be higher. Without a completed study from PacifiCorp Transmission, there is no way to know how much higher except that it will be higher than PacifiCorp has estimated. This will have a significantly higher impact on the overall facility cost. Since Spring Canyon has completed its studies, the cost to interconnect is known with a high degree of certainty.

Fifth, the NBA includes an inappropriate low cost of equipment. Stone and Webster provided an estimate of equipment cost to PacifiCorp is its June 9, 2003 report titled "Cost Estimate for Currant Creek Power Project, Volume 1." The Navigant Consulting Report dated July 22, 2003 titled "Review and Audit of PacifiCorp's Next Best

Alternative" states on Page 14 that "*the prices quoted in the Stone and Webster report were based on original equipment manufacturers (OEM) prices for new equipment. For the NBA, PacifiCorp adjusted CT (combustion turbine) costs to reflect prices in the secondary market."* This reduction is included in the NBA model yet PacifiCorp has not purchased CT(s) from the secondary market but has contracted with the OEM. While we have requested information from PacifiCorp to confirm the exact amount of this error, PacifiCorp has not yet provided the requested information.

Q. Mr. Graeber testified that the PacifiCorp RFP was unfair with regard to both process and comparability. Can you tell us more about the problems associated with the process?

A. Yes. First the RFP process did not effectively evaluate Spring Canyon's ability to successfully complete the proposed project.

USA Power LLC, the majority beneficiary and managing partner of Spring Canyon had been developing the Spring Canyon project for over two years prior to PacifiCorp concluding that they needed to issue the RFP. As a result, PacifiCorp could therefore no longer conduct direct negotiations regarding the purchase of electricity from the Spring Canyon project or the purchase of the project itself. During the timeframe that the RFP was being prepared, Spring Canyon was totally convinced that its proposal would present the least risk from a construction perspective since so much development work had been completed (i.e. rezoning, air permit, water permits, electrical interconnect, etc.). With the development of the project nearing completion, Spring Canyon assembled a very strong team that would make obvious to PacifiCorp that not only did Spring Canyon

have the best and most economical project but also had the best construction, operating and financial team to get it done on time and within budget. The team had to include the following:

- Creditworthy sources of equity,
- Excellent facility operator,
- Experienced and creditworthy facility constructor, and
- Creditworthy sources of debt.

With regard to equity, Spring Canyon entered into agreements with two entities; the EIF Group (Energy Investors Funds), which since its inception in 1987 has invested over $1 billion of equity into energy projects, and the Quixx Corporation (Quixx) which also invests equity into energy projects. In addition, Quixx provides contact operation and maintenance services (O&M) to energy projects and has an excellent reputation in the industry doing so. While the equity participation agreements were the result of direct negotiations based on time tested relationships between Spring Canyon, EIF and Quixx, the agreement awarding operation and maintenance services to Quixx was the result of a competitive bid process.

Having secured its sources of equity and its operator, Spring Canyon then turned its attention to securing an engineering, procurement and construction (EPC) contractor possessing sufficient experience and the financial capability to guarantee facility completion by a specific date. Utility Engineering (UE), a subsidiary of Xcel Energy, and Siemens Westinghouse Power Corporation (Siemens) were the finalists in Spring Canyon's selection process. UE was selected for several reasons. First, UE is the owner

of Quixx and through this affiliation, it would be a significant long-term equity investor in Spring Canyon with all the necessary incentives to perform in accordance with its construction obligations, much the same way that, for example, someone like Calpine would be motivated to ensure its construction division performed properly. Second, the quality of the UE balance sheet combined with that of its joint venture partner, TIC, gave Spring Canyon the comfort that the UE/TIC team was credit worthy and had passed the scrutiny of lender review.

Third and most important, the UE/TIC team had recently completed the design, construction and performance testing of a facility in Colorado Springs, CO, the Front Range Energy Project, which has the same design configuration as that proposed by Spring Canyon. The Colorado Springs site is located at an elevation similar to that of Spring Canyon. As a result, UE/TIC had the most recent industry knowledge of construction cost, equipment and labor availability, construction schedule and performance parameters associated with the facility including output, efficiency and emissions. Because of its experience, UE/TIC was very confident of the plant performance parameters which allowed Spring Canyon to remove much of the uncertainty regarding output and heat-rate normally associated with engineering models. In addition, UE/TIC's construction schedule of 22 months was significant due to their ability to leverage their design experience from the Colorado Springs project thereby reducing the engineering timeframe. In order to meet the PacifiCorp timeframe of June 2005, UE/TIC was willing to begin engineering work prior to October 1, 2003, which was the date, published in the RFP, that PacifiCorp would execute power contracts.

UE/TIC and Spring Canyon were willing to take the risk associated with up-front engineering but would not purchase equipment or begin major construction activities without the fully executed power agreement. By performing the up-front engineering work, the UE/TIC construction team could guarantee completion of the plant within 20months from the execution of the tolling agreement. Twenty months from October 1, 2003 is June 1, 2005. Had PacifiCorp not delayed the process and executed the tolling agreement on October 1, 2003, the Spring Canyon team was fully prepared to achieve commercial operation by June 1, 2005.This obligation would have been guaranteed with market based liquidated damages, including provisions for replacement power if the plant were not on line when the company desired it.

In order to secure debt financing on a fast track basis, the Spring Canyon team had preliminary discussions with several lender groups. While several groups with solid power financing credentials indicated an intense desire to provide debt, none were willing to make a firm commitment until they had the opportunity to review the terms and conditions of the tolling agreement. Two banks did express serious intent to lead the debt syndication for the total debt requirement. At that time, the interest rate would be negotiated and fixed and the project would be fully funded.

The Spring Canyon team is a very strong and financially viable team. It does not appear that PacifiCorp gave more than a cursory review of the team's qualifications. While detailed financial and experience qualifications were provided in the bid response, PacifiCorp, during shortlist discussions continued to ask questions such as "*who's*

Quixx?" and *"what are the legal names of your partners?"* To ensure that PacifiCorp had a thorough understanding of the team, representatives of each team member company attended a meeting with PacifiCorp in Portland, OR, on October 16, 2003. During this meeting, again, PacifiCorp asked only cursory questions of the team members. Not having conducted a thorough evaluation of the Spring Canyon team and its ability, it would be impossible for PacifiCorp to come to any reasoned conclusion regarding Spring Canyon's ability to perform.

By mid September 2003, it was apparent to Spring Canyon that PacifiCorp was not going to achieve the schedule that had been published in pre-bid conference materials and in the RFP. In telephone discussions with PacifiCorp, Spring Canyon identified that any delay in PacifiCorp's schedule would cause a delay in Spring Canyon's completion schedule. Spring Canyon discussed this concern with both Siemens and UE. Siemens submitted a revised proposal guaranteeing commercial operation by August 2005; two months beyond PacifiCorp's desired start date. UE continued to support a commercial operation date of twenty months from the execution of the power contract. This was discussed during the meeting in Portland on October 16, 2003. PacifiCorp's Jim Schroeder identified this as a significant issue for PacifiCorp and further informed Spring Canyon that PacifiCorp would not be able to execute a tolling agreement until January 2004. During the week following this meeting, Spring Canyon conducted an evaluation of the power markets to determine if there were viable methods of bridging the period between June 2005 and the date that Spring Canyon would be able to deliver based on the new schedule of executing the power contract in January 2004. We concluded that

there were viable methods and on October 28, 2003, I informed Jim Schroeder that Spring Canyon wanted to schedule a meeting to present these ideas to PacifiCorp. Jim told me to call him on October 29th to schedule the meeting. I left messages on October 29th and on October 30th. Jim Schroeder did not return my calls. On the October 31st, I talked to Howard Friedman of Navigant Consulting regarding the meeting. He informed me that he was unaware of any such meeting or Spring Canyon's desire to discuss replacement power issues. That was on a Friday, and on the following Monday, Jim Schroeder and Stacy Kusters called to inform us that Spring Canyon had been deemed to be uneconomical.

The conclusion to this evaluation and my testimony is as follows. Spring Canyon could have been operational by June 1, 2005, had PacifiCorp not delayed the process. Furthermore, Spring Canyon could have bridged the gap caused by the delay. PacifiCorp is now asking serious due diligence questions regarding Spring Canyon's abilities to build Bid No. 135 during this discovery process; however, they should have asked these questions during the short list evaluation process. For some reason, these items are important now but they were not important during the short list evaluation process.

Four letters are attached to my testimony as Exhibits A, B, C and D, which support Spring Canyon Energy's capability to have contracted, financed and completed the construction of the facility by June 1, 2005. First is a letter from Dan Henke, Vice President of Utility Engineering. The second is from Sonja Sevcik, Vice President of Union Bank of California. The third is from Guy Piazza, Managing Director of CIT.

The fourth is from Jim Heller, Vice President of Siemens Westinghouse Power Corporation.

Q. In Mr. Graeber's Testimony, PacifiCorp's RFP process did not evaluate Spring Canyon's most economical bid. Is this correct?

A. That's correct. The process inappropriately eliminated Spring Canyon's most economical bid, yet short-listed one of Spring Canyon's higher priced bids.

Spring Canyon Energy submitted two bids in response to PacifiCorp's peaking requirements; Bid No. 135 which was titled "400+ Mw Daily Dispatch Call Option" and Bid No. 653 titled "400 + Mw Daily Dispatch Call Option and 100+ Mw Peaking Call Option." Bid No 135 (found in Section 5-B of the Spring Canyon RFP response) stated the "*configuration is designed to provide more than 400 Mw of Daily Dispatch Power at 105^{o}F with the operational flexibility of starting the facility once per day and operating any number of hours per day."* The response went on to say *"PacifiCorp may have the option to dispatch the facility the day prior to delivery and adjust the resource output through out the delivery day and within the delivery hour."* Bid No. 653 (found in Section 5-D of the Spring Canyon Energy RFP response) stated the "*configuration is designed to provide more than 400 Mw of Daily Dispatch Capacity at 105^{o}F and more than 100 Mw of Peaking Capacity at 105^{o}F. PacifiCorp may require the facility to start once per day and operate any number of hours it desires. PacifiCorp may have the option to dispatch the facility the day prior to delivery and adjust the resource output throughout the delivery day and within the delivery hour."* Bid No. 135, which was priced at $7.70/kw•m, was short-listed whereas Bid No. 653, priced at $6.90/kw•m, was

not short-listed. Navigant Consulting stated in a discovery meeting that it did not consider Bid No 653 to be a peaker (even though the NBA is the same configuration as Bid No. 653) yet Bid No. 135 was considered to be a peaker. Howard Friedman of Navigant Consulting has pointed out that in Section 2 of the Spring Canyon RFP response, Spring Canyon states *"Bidder's offering includes a maximum of 260 individual combustion turbine starts per year"* and that this is the reason Bid No. 653 was eliminated. While 260 starts were used for purposes of determining Variable Operation and Maintenance costs, just as PacifiCorp used 300 starts to determine theirs, it was never intended to limit PacifiCorp's ability to operate the facility as evidenced by the above quoted statements from Sections 5-B and 5-D. Even if it was, Section 2 applies to both Bid Nos. 135 and 653 as the Spring Canyon RFP response clearly stated that *"all of the response sections remain the same for each bid with the exception of Section 5."* It is inappropriate to ignore the detail provided in Section 5-D and eliminate Bid No. 653 simply because one believes that a generic reference to a limit of 260 starts per year, disqualifies the bid as having been non-responsive to the RFP requirement for dispatchability. In fact PacifiCorp, in their June 20, 2003 Pre-Bid Conference presentation, Page 14, identified their list of acceptable products to include 5 x 16 operations which equates to 260 starts per year. Also, I would like to reference Page 13 of the RFP, Table 6, which indicates the Operational Non-Price Factor Weightings. Maximum points would be given for *"PacifiCorp having the option to dispatch the resource the day prior to delivery (i.e. day-ahead) and PacifiCorp having the option to adjust the resource output through out the delivery day and within the delivery hour."* Both Bid Nos. 135 and 653 provide the exact level dispatch flexibility that PacifiCorp

was seeking, yet the most economical bid was eliminated as being non-responsive. It is obvious that the screening process was defective and that Bid No. 653 should have been properly evaluated against the NBA.

Q. Do you believe that PacifiCorp is disregarding the RFP process by pursuing opportunities outside the RFP process?

A. Yes, even though in the RFP, PacifiCorp reserved the right to essentially do anything it wanted in spite of the RFP stipulation from the Commission. During the PacifiCorp RFP process, bidders were told that their bids would not be considered if they were not submitted by July 22, 2003. However, PacifiCorp is giving consideration to three potential providers of long-term resources that did not participate in the RFP process, as stated in PacifiCorp's response to CCS Data Request 5.10. If PacifiCorp is allowed to flagrantly disregard the RFP process, it will discourage bidder participation in future RFPs. If PacifiCorp were genuinely interested in securing the most economical long-term resources, even if it meant disregarding its RFP process, it would re-open discussions with Spring Canyon (and others) and conduct the negotiations as had been stated in the RFP. With regard to Spring Canyon's Bid No. 653, even if PacifiCorp and Navigant Consulting were sincerely confused that Bid No. 653 was not a peaker and as a result did not give Bid No. 653 any consideration during the RFP process, PacifiCorp is now very much aware that Bid No. 653 is a peaker and that Spring Canyon is willing to negotiate a long-term tolling agreement, including transfer of the facility at anytime, as stated in Section 1 of our bid response. Having determined that it is willing to go outside the RFP process, PacifiCorp should be willing to re-open discussions with Spring

Canyon based on now understanding that Bid No. 653 is in fact a peaker with all the flexibility of the NBA.

Furthermore, two of the three opportunities being considered by PacifiCorp are located in the Nevada Power control area. These efforts will fail to produce the necessary resources. In its November 7, 2003 report titled Review and Audit of PacifiCorp's Screening Review Process for RFP 2003-A, Page 20, Navigant Consulting states that the *"most likely alternative was the construction of [Peaking] resources by the Company. This is because transmission limitations in and out of PacifiCorp's East system limits market purchases of power."* Navigant concludes that, because of transmission constraints, the construction of a facility is necessary in order to satisfy this type of long-term requirement. This is consistent with a study performed by Navigant Consulting on behalf of Spring Canyon. In its report titled "Market Assessment for USA Power's Spring Canyon Energy Project" dated June 2002, Navigant concludes the following with regard to Northern Nevada: *The Sierra Pacific market area is deficient with regard to in-area generation and is highly dependent on transmission imports to meet load requirements. The reliance on imports will continue for at least ten years. The interconnection with Utah is constrained. Sierra Pacific plans to build a 345 kV transmission line between its Falcon and Gonder substation and if built will increase the transfer capability between Utah and Nevada from 245 Mw to 400 Mw.* However, according to PacifiCorp's OASIS, the current available transfer capability on this transmission line is zero. Regarding the Southern Nevada market area, Navigant Consulting concluded: *that an interconnection with Nevada Power through Red Butte is*

sized for 300 Mw. However, PacifiCorp's OASIS shows the current available transfer capability to be only 5 Mw.

It seems highly appropriate for PacifiCorp to re-open its consideration of the Spring Canyon bids since as Navigant concludes resources must be built in Utah to solve the peaking resource needs and since Spring Canyon has received its air and water permits, it is the only resource that can supply power in an amount and in a timeframe consistent with the resource needs. This would also provide some credibility to the RFP process and give a reason for potential bidders to participate in future RFPs.

Q. Did PacifiCorp evaluate the risk associated with obtaining permits in their evaluation?

A. No. The evaluation process completely ignores the risk associated with obtaining permits. In a November 5, 2003 press release, PacifiCorp's CEO Judi Johansen stated that its Currant Creek project was selected because it was *"determined to have the best cost/risk balance."* We have already shown that Currant Creek did not have the best economics and it does not present the lowest risk. Of the ten short-listed projects, five did not even have a site under control and nine did not have air or water permits. Spring Canyon was, and still is, the only short-listed bidder (including the NBA), which has fully issued air and water permits. The Navigant Consulting Inc.'s "Review and Audit of PacifiCorp's Next Best Alternative" dated July 22, 2003, stated on Page 9, with regard to the viability of the NBA that PacifiCorp *"still needs to obtain a number of permits, which does pose some additional risk."* The Navigant report goes on to say that *"an important point to note related to this project's viability assessment is that [Navigant's]*

focus was not on providing a third party engineering review" but rather to ensure the NBA options "*appeared achievable."* PacifiCorp is now realizing how risky and potentially unachievable it can be to obtain such permits. For instance, PacifiCorp recently was forced to reduce the size of its air permit application before the Utah DAQ from 1000 Mw to 500 Mw. Its water permit application has also come under sizable and fierce opposition as evidenced by the article in the Deseret News dated 12/30/2003 titled "Mona Power Plant Proposal Assailed." The City of Mona, irrigation companies and other groups are objecting to PacifiCorp's water application. Rand Thurgood, Managing Director of Resource Development for PacifiCorp, is quoted in the article as saying "We are willing to take the risk on this application simply because we have no other choice. We can't meet the schedule otherwise." One choice would have been for PacifiCorp to select the Spring Canyon facility (located only 0.75 miles from the site which PacifiCorp has selected), which has its fully issued water permits. Additionally, PacifiCorp's revised air permit application is seeking the approval to emit almost 5 times the pollution that Spring Canyon is allowed in its permit (on a per MW basis). While PacifiCorp may ultimately be successful in obtaining such a permit, it is difficult to envision such a permit being issued without significant, well-organized opposition, which, at a minimum, will delay the issuance of the permit beyond PacifiCorp's projection. The RFP evaluation process lacks credibility for having assigned no value to projects which have final permits versus virtual projects such as the NBA, which could be delayed or cancelled for any number of reasons.

Q. Are there other aspects of the Spring Canyon bid that provide value to the ratepayer that are not evaluated by the PacifiCorp RFP process?

A. Yes. The draft tolling agreement included in Section 9 of the Spring Canyon bid response included the concept of a bonus and penalty if the facility availability was above or below a specific negotiated level. During our discussions with PacifiCorp, the specific availability factors were requested from Spring Canyon. During these discussions, PacifiCorp's personnel insisted that summertime availability must be 100%. Our final bid discussions were not concluded but did offer summertime availability of 100% and yearly availability of 96%. A bonus and penalty concept provided for the capacity charge to be adjusted downward if Spring Canyon did not achieve the guaranteed availability. The concept also provided for Spring Canyon to receive a bonus if the availability was above the guaranteed levels, however, these values were never discussed. The value of a guaranteed availability should have been included in the evaluation process. PacifiCorp does not guarantee availability of its NBA and as such, if PacifiCorp does not achieve the levels that Spring Canyon had guaranteed, the ratepayer would pay that additional cost whereas Spring Canyon would pay that additional cost if it does not achieve the guaranteed levels of availability. In other words, Spring Canyon has to perform to very higher level of availability to obtain its full capacity charge; higher levels than PacifiCorp has to achieve in order to make their full rate of return. Also, if Spring Canyon was not required to provide such levels of availability, it would be willing to lower its capacity charge commensurately. The process should have given credit for the additional value which Spring Canyon provides which the NBA does not.

Q. Mr. Banasiewicz, how do you think the Public Service Commission should react regarding PacifiCorp's errors with evaluating Spring Canyon?

A. First, I want the Commissioners to understand that my evaluation of the NBA and the process is systematic, logical and accurate in its conclusions that Spring Canyon's Bid No. 135 and Bid No. 653 beat the PVRR of the NBA. I have presented a detailed analysis of Bid No. 135 compared to the NBA because Bid No. 135 is our higher price bid and it wins against the economics of the NBA. Bid No. 653 also wins in a comparison of the NBA. Based on my analysis, PacifiCorp's Currant Creek NBA is not the least-cost alternative and, therefore, the Commission should not grant PacifiCorp a certificate of public convenience and necessity. However if the Commissioners believe PacifiCorp's revised IRP is well founded, then a resource deficit of over 1,000 Mw exists in the summer of 2005 in Utah and new generation needs to be constructed to serve the power demands. The Commissioners must act on that need and come to the conclusion that both the NBA and Spring Canyon must be utilized to furnish that power since neither facility can provide the required resources by itself. In spite of PacifiCorp's flawed evaluation process, Spring Canyon really is the only facility among all the short-listed bidders that provided certainty of delivery within the necessary timeframe. If the Commission concludes that the IRP is not valid and that there are short-term solutions which, avoid the blackouts that PacifiCorp has been alluding to its emergency declarations, then the Commissioners should assemble a detailed, accurate and independent review of all the bids that PacifiCorp received and compare them with the NBA in a seamless transparent process designed by a truly independent auditor. The results of the audit should speak for themselves and we would abide by that process.

Q. Does this conclude your direct testimony?

A. Yes.

TABLE 1

PVRR COMPARISON OF SPRING CANYON AND CURRANT CREEK

(AS REPORTED BY PACIFICORP IN $1,000)

Spring Canyon PVRR Bid No. 135	**As Modeled By PacifiCorp**
Energy Value	$ 1,085.5
Fuel	$ (623.5)
Variable	$ (67.5)
Operation & Maintenance	
Fixed	$ (153.0)
Operation & Maintenance	
Carbon Tax	$ (63.5)
Capital Charge	$ (373.9)
PVRR	$ (195.9)

Currant Creek PVRR	**As Modeled By PacifiCorp 38-years**	**As Modeled By PacifiCorp 20-years**
Energy Value	$ 2,136.4	$ 1,538.3
Fuel	$ (1,331.5)	$ (958.7)
Variable	$ (156.6)	$ (112.7)
Operation & Maintenance		
Fixed	$ (83.5)	$ (60.1)
Operation & Maintenance		
Property Tax	$ (45.1)	$ (32.4)
Carbon Tax	$ (173.3)	$ (124.7)
Depreciation	$ (110.7)	$ (79.7)
Pre-Tax Return	$ (281.9)	$ (203.0)
PVRR	$ (46.2)	$ (33.0)

TABLE 2

CORRECTED FACILITY OUTPUT

SPRING CANYON BID NO. 135

Date	Output that PacifiCorp Used Mw	Temperature	Output that PacifiCorp Should Have Utilized (Mw)	Difference
	Column 1	Column 2	Column 3	Column 4
Jun-05	404	66.7	419.6	-15.6
Jul-05	402	75.3	416.9	-14.9
Aug-05	402	73.6	417.5	-15.5
Sep-05	405	64.5	420.3	-15.3
Oct-05	411	52.6	425.3	-14.3
Nov-05	417	39.5	431.7	-14.7
Dec-05	422	30.3	437.1	-15.1
Jan-06	422	28.8	438.0	-16.0
Feb-06	420	33.3	435.3	-15.3
Mar-06	416	40.5	431.1	-15.1
Apr-06	413	48.6	427.2	-14.2
May-06	408	57.6	422.8	-14.8

TABLE 3

EFFECT OF CORRECTED OUTPUT ON VALUE RECEIVED

SPRING CANYON BID NO. 135

Date	Value Received As Calculated By PacifiCorp	Corrected MW Output	Dispatched Hours	Total Mwh	Effective Price ($/Mwh)	Corrected Value Received
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Jun-05	$ 9,271,244	419.6	456	191338	$ 50.28	$ 9,620,455
Jul-05	$ 10,813,285	416.9	471	196360	$ 57.07	$ 11,206,259
Aug-05	$ 11,883,285	417.5	471	196643	$ 62.66	$ 12,321,619
Sep-05	$ 9,332,664	420.3	456	191657	$ 50.51	$ 9,680,585
Oct-05	$ 8,043,537	425.3	472	200742	$ 41.49	$ 8,328,769
Nov-05	$ 7,561,393	431.7	456	196855	$ 39.81	$ 7,836,806
Dec-05	$ 8,434,821	437.1	471	205874	$ 42.47	$ 8,743,473
Jan-06	$ 8,851,973	438	471	206298	$ 44.48	$ 9,176,135
Feb-06	$ 7,565,210	435.3	426	185438	$ 42.35	$ 7,853,291
Mar-06	$ 7,942,888	431.1	471	203048	$ 40.51	$ 8,225,479
Apr-06	$ 7,188,547	427.2	455	194376	$ 38.29	$ 7,442,657
May-06	$ 7,778,547	422.8	471	199139	$ 40.42	$ 8,049,190
Total	$ 104,667,394					$ 108,484,717

TABLE 4

EFFECT OF CORRECTED OUTPUT AND CORRECTED AVAILABILITY

ON VALUE RECEIVED

SPRING CANYON BID NO. 135

Date	Value Received As Calculated By PacifiCorp	Corrected MW Output	Corrected Dispatched Hours	Total Mwh	Effective Price ($/Mwh)	Corrected Value Received
	Column 1	Column 2	Column 3	Column4	Column 5	Column 6
Jun-05	$ 9,271,244	419.6	480	201408	$ 50.28	$ 10,126,794
Jul-05	$ 10,813,285	416.9	495.8	206699	$ 57.07	$ 11,796,313
Aug-05	$ 11,883,285	417.5	495.8	206997	$ 62.66	$ 12,970,401
Sep-05	$ 9,332,664	420.3	480	201744	$ 50.51	$ 10,190,089
Oct-05	$ 8,043,537	425.3	481.9	204952	$ 41.49	$ 8,503,461
Nov-05	$ 7,561,393	431.7	465.6	201000	$ 39.81	$ 8,001,791
Dec-05	$ 8,434,821	437.1	480.9	210201	$ 42.47	$ 8,927,253
Jan-06	$ 8,851,973	438	480.9	210634	$ 44.48	$ 9,369,009
Feb-06	$ 7,565,210	435.3	435	189356	$ 42.35	$ 8,019,205
Mar-06	$ 7,942,888	431.1	480.9	207316	$ 40.51	$ 8,398,371
Apr-06	$ 7,188,547	427.2	359.2	153450	$ 38.29	$ 5,875,610
May-06	$ 7,778,547	422.8	480.9	203325	$ 40.42	$ 8,218,377
	$ 104,667,394					$ 110,396,675

TABLE 5

CORRECTED HEAT RATES

SPRING CANYON BID NO. 135

Date	Heat Rate Used By PacifiCorp (Btu/kwh)	Corrected Heat Rates (Btu/kwh)
	Column 1	Column2
Jun-05	7239	7050
Jul-05	7297	7095
Aug-05	7286	7086
Sep-05	7223	7038
Oct-05	7141	6994
Nov-05	7114	6960
Dec-05	7123	6970
Jan-06	7125	6971
Feb-06	7119	6956
Mar-06	7114	6960
Apr-06	7124	6983
May-06	7168	7008

TABLE 6

EFFECT OF USING CORRECT HEAT RATES

SPRING CANYON BID NO. 135

Date	Fuel Cost As Calculated By PacifiCorp	Corrected Heat Rate (Btu/kwh)	Dispatched Hours	Output MW	Fuel Cost (Price/MMBtu)	Corrected Fuel Cost that PacifiCorp Should Have Utilized
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Jun-05	$ 5,378,200	7050	456	404	$ 4.03	$ 5,234,080
Jul-05	$ 5,605,296	7095	471	402	$ 4.05	$ 5,440,695
Aug-05	$ 5,601,680	7086	471	402	$ 4.05	$ 5,433,794
Sep-05	$ 5,403,521	7038	456	405	$ 4.05	$ 5,264,100
Oct-05	$ 5,681,511	6994	472	411	$ 4.10	$ 5,562,798
Nov-05	$ 5,942,466	6960	456	417	$ 4.39	$ 5,809,980
Dec-05	$ 6,490,993	6970	471	422	$ 4.58	$ 6,345,000
Jan-06	$ 6,787,960	6971	471	422	$ 4.78	$ 6,623,024
Feb-06	$ 6,056,155	6956	426	420	$ 4.76	$ 5,924,141
Mar-06	$ 6,370,570	6960	471	416	$ 4.56	$ 6,218,538
Apr-06	$ 5,567,936	6983	455	413	$ 4.16	$ 5,458,795
May-06	$ 5,626,190	7008	471	408	$ 4.07	$ 5,481,123
	$ 70,512,478					$ 68,796,070

TABLE 7

EFFECT OF CORRECTED VARIABLE O&M RATE

SPRING CANYON BID NO. 135

Date	Variable O&M as Calculated By PacifiCorp	Corrected MW Output	Corrected Dispatched Hours	Corrected Variable O&M $/Mhw	Corrected Value Received
	Column 1	Column2	Column 3	Column 4	Column 6
Jun-05	$ 475,696	419.6	480	$ 3.44	$ 692,844
Jul-05	$ 488,825	416.9	495.8	$ 3.44	$ 711,045
Aug-05	$ 489,272	417.5	495.8	$ 3.44	$ 712,068
Sep-05	$ 476,669	420.3	480	$ 3.44	$ 693,999
Oct-05	$ 500,087	425.3	481.9	$ 3.44	$ 705,035
Nov-05	$ 490,091	431.7	412.8	$ 3.44	$ 613,028
Dec-05	$ 512,435	437.1	480.9	$ 3.44	$ 723,093
Jan-06	$ 527,780	438	480.9	$ 3.54	$ 745,645
Feb-06	$ 473,746	435.3	435	$ 3.54	$ 670,318
Mar-06	$ 519,981	431.1	480.9	$ 3.54	$ 733,899
Apr-06	$ 497,845	427.2	411.9	$ 3.54	$ 622,911
May-06	$ 510,395	422.8	480.9	$ 3.54	$ 719,769
Totals	$ 5,962,822				$ 8,343,654

TABLE 8

EFFECT OF CORRECTED FIXED O&M RATE

SPRING CANYON BID NO. 135

Date	Fixed O&M as Calculated By PacifiCorp	Corrected Fixed O&M Rate $/kw•m	Facility Capacity (kw)	Corrected Value Received
	Column 1	Column2	Column 3	Column 6
Jun-05	$ 1,102,230	$ 1.33	421,650	$ 560,795
Jul-05	$ 1,102,230	$ 1.33	421,650	$ 560,795
Aug-05	$ 1,102,230	$ 1.33	421,650	$ 560,795
Sep-05	$ 1,102,230	$ 1.33	421,650	$ 560,795
Oct-05	$ 1,102,230	$ 1.33	421,650	$ 560,795
Nov-05	$ 1,102,230	$ 1.33	421,650	$ 560,795
Dec-05	$ 1,102,230	$ 1.33	421,650	$ 560,795
Jan-06	$ 1,133,014	$ 1.37	421,650	$ 577,661
Feb-06	$ 1,094,569	$ 1.37	421,650	$ 577,661
Mar-06	$ 1,133,014	$ 1.37	421,650	$ 577,661
Apr-06	$ 1,133,014	$ 1.37	421,650	$ 577,661
May-06	$ 1,133,014	$ 1.37	421,650	$ 577,661
	$ 13,342,235			$ 6,813,864

TABLE 9

ADJUSTED PVRR

SPRING CANYON BID NO. 135

Spring Canyon PVRR	As Modeled By PacifiCorp	Corrected	Percentage of Variance
	Column 1	Column 2	Column 3
Energy Value	$ 1,085.5	$ 1,145.2	5.5%
Fuel	$ (623.5)	$ (637.8)	2.3%
Variable			
Operation & Maintenance	$ (67.5)	$ (94.4)	33.3%
Fixed	$ (153.0)	$ (78.2)	-48.9%
Operation & Maintenance			
Carbon Tax	$ (63.5)	$ (63.5)	0.0%
Capital Charge	$ (373.9)	$ (344.0)	-8.0%
PVRR	$ (195.9)	$ (72.7)	

TABLE 10

ADJUSTED CURRANT CREEK PVRR

Currant Creek PVRR	As Modeled by PacifiCorp 38-Years	Adjusted	Percentage of Variance	As Modeled By PacifiCorp 20-Years	Adjusted	Percentage of Variance
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Energy Value	$ 2,136.4	$ 1,773.2	-17.0%	$ 1,538.3	$ 1,276.7	-17.0%
Fuel	$ (1,331.5)	$ (1,105.1)	-17.0%	$ (958.7)	$ (793.9)	-17.0%
Variable						
Operation & Maintenance	$ (156.6)	$ (199.4)	27.8%	$ (112.7)	$ (144.0)	27.8%
Fixed	$ (83.5)	$ (83.5)		$ (60.1)	$ (60.1)	
Operation & Maintenance						
Property Tax	$ (45.1)	$ (45.1)		$ (32.4)	$ (32.4)	
Carbon Tax	$ (173.3)	$ (153.3)	-11.6%	$ (124.7)	$ (110.2)	-11.6%
Depreciation	$ (110.7)	$ (110.7)		$ (79.7)	$ (79.7)	
Pre-Tax Return	$ (281.9)	$ (281.9)		$ (203.0)	$ (202.9)	
PVRR	$ (46.2)	$ (205.7)		$ (33.0)	$ (146.5)	