

December 31, 2012

BY HAND DELIVERY

Julie Orchard, Secretary
Public Service Commission of Utah
400 Heber M. Wells Building
160 East 300 South
Salt Lake City, Utah 84111

Re: Docket 03-035-14

Dear Julie:

Attached please find PacifiCorp's Response to Exhibit Public Witness 1 admitted on September 27, 2005 in the above-reference proceeding. PacifiCorp will file its Response to Exhibit Public Witness 2 tomorrow, October 5, 2005.

Thank you for your consideration of the attached Response.

Very truly yours,

Jennifer H. Martin

JHM;jse

Attachment

PacifiCorp Response to Exhibit Public Witness 1

Summary

The Company has reviewed the Exhibit marked “Public Witness 1” and believes that it is seriously flawed. As described in more detail below, the Company has three primary concerns. First, Exhibit Public Witness 1 inflates Utah avoided costs for wind QFs by up to \$36 / MWh on a 20-year levelized basis by including transmission capital costs in the avoided cost calculation. Second, the proposed capacity factor adjustment rewards poor wind sites with higher avoided cost prices. Mathematically, this proposed adjustment would result in a facility with a 20 percent capacity factor receiving prices that were double those of a facility with a 40 percent capacity factor. Finally, the data used in Exhibit Public Witness 1 is poorly document and supported making it difficult to know what avoided cost prices would result if these two methodology changes were adopted. Under the method proposed in Exhibit Public Witness 1, for example, a wind project with a 28 percent capacity factor located near Evanston, Wyoming, would be paid over \$100 / MWh on a 20-year levelized basis.

Discussion

The Company’s first concern with Exhibit Public Witness 1 is the inclusion of transmission capital costs in the avoided cost calculation for wind QFs. The author of Exhibit Public Witness 1 assumes that significant transmission costs are avoidable. This was a major unresolved issue in the case and no additional evidence is presented by the Public Witness on this issue. According to Exhibit Public Witness 1, including transmission costs in the avoided cost calculation for a utility owned wind project can add between \$6 / MWh¹ to \$36 / MWh² to a Utah based wind project. The Company believes this is unreasonable, and has recommended that transmission avoided costs be determined on a case by case basis and a working group be formed that will determine the methodology for establishing the costs and savings and the timing on completion of the study, with a report to the commission within 21 days of the Order in this docket.

Second, the Company is concerned with the proposed capacity factor adjustment in the exhibit. The capacity factor adjustment method proposed in Exhibit Public Witness 1 is flawed and could result in paying more for new QF wind resource in Utah than comparable resources identified in the Integrated Resource Plan (IRP).³

There is an important distinction between a profile adjustment and a capacity factor adjustment. Profile refers to the timing or pattern of power deliveries, while capacity

¹ Calculated by removing the \$67 / kW transmission adder from the Vancycle Wind Farm example provided in Exhibit Public Witness 1 and comparing the results of this new study to those shown for the Vancycle Wind Farm example in the Exhibit.

² Calculated by removing the \$855 / kW transmission adder from the Near Evanston example provided in Exhibit Public Witness 1 and comparing the results of this new study to those shown for the Near Evanston example in the Exhibit.

³ The Utah Commission may decide to require higher prices be paid to Utah wind resources than system wind resources. Under the Revised Protocol, the cost of a New QF Contract in Utah that exceeds the cost of a Comparable Resource would be assigned situs to Utah.

factor refers to the quantity of power delivered as a percent of the installed capacity of the project. The Company supports a profile adjustment, but strongly opposes a capacity factor adjustment for the following reasons. Assume, for example, two 100 MW wind resources have identical profiles and fixed costs, but Windplant A has a 35% capacity factor and Windplant B has a 30% capacity factor. Even though Windplant A delivers more power to the Company than Windplant B, the value of the power to the Company is the same on a unit cost basis, since each project delivers power to the Company in the same pattern. Using the capacity factor adjustment proposed in Exhibit Public Witness 1, however, the avoided cost for Windplant A would be \$48.90 / kWh and the avoided cost for Windplant B would be \$57.05 / kWh.⁴ This is an inappropriate adjustment that results in Windplant B, the windplant with the lower capacity factor, receiving prices that are 114% of the prices paid to Windplant A even though the value of the power to the Company is the same from each facility on a unit cost basis.

The Company has proposed a profile adjustment in this case, which is very different than a capacity factor adjustment. In the example above, assuming Windplant A was the IRP self-build option and Windplant B was the new wind QF, no adjustment would be made to the self-build price and Windplant B would be offered \$48.90 / MWh. If the two windplants had different profiles, then the Company has recommended an adjustment be made to the avoided cost. For example, assume Windplant A and B both had 35% capacity factors, but Windplant B, the QF, produced power mainly in the summer peak hours and Windplant A, the self-build plant, delivered power evenly throughout the year. Under the Company's profile adjustment proposed in this case, the new Utah QF would be paid more than the self-build option on a unit price basis because the timing of the delivery of the power to the system from the QF provides more value to the Company than the self-build alternative. To make this adjustment, the Company would use GRID to quantify the difference in value between Windplant A and B due to their differing profiles.

The final concern the Company has with Exhibit Public Witness 1 is the underlying data is dated, unsupported or misapplied. First, some of the data used in the exhibit is from the Company's 2003 IRP and is nearly 3 years old. Second, many of the capacity factors are simply unsupported. The exhibit lists sources such as "Data from Leroy Jamalick's site", "Data from 2 sites from the Adam's Family" and "Data from Project Developer". No information is provided regarding the time period over which the data was collected, the number and height of the anemometers used for data collection, the frequency of the data and many other relevant factors needed to assess the validity of the reported capacity factors. Third, transmission adders for Idaho and parts of Utah appear to be made up, with no explanation behind the assumptions. Finally, the Wyoming transmission adder of \$855 / kW that is listed in the assumptions table is inappropriately applied to the Near Evanston example and results in the inappropriate addition of over \$36 / MWh to the Near Evanston wind project cost. Given the number of poor assumptions incorporated in Exhibit Public Witness 1, the Company would question its value to inform the Commission on setting avoided costs in Utah.

⁴ See Exhibit Public Witness 1, Spanish Fork Wind Farm example for the \$57.05 / MWh. Changing the capacity factor to 35% in this example produced the \$48.90 / MWh.