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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of PacifiCorp for Approval of an IRP Based Avoided Cost Methodology for QF Projects Larger than 3 Megawatts	Docket No. 03-035-14

REBUTTALL TESTIMONY OF RICH COLLINS
On Transmission Issues

Wasatch Wind hereby submits the Rebuttal Testimony of Rich Collins in this docket.

DATED this 17th day of February, 2006

Richard S. Collins

/s/_____
Richard S. Collins
Representing Wasatch Wind

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was sent by United States mail, postage prepaid, or by email this 11 day of, July 2005, to the following:

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PREFILED REBUTTAL TESTIMONY

Of

RICHARD S. COLLINS

On behalf of Wasatch Wind

In the Matter of the Application of PacifiCorp for Approval of an IRP Based Avoided Cost Methodology for QF Projects Larger than 3 Megawatts

Docket No. 03-035-14

February 17, 2006

Q. Are you the same Richard S. Collins who filed direct testimony on behalf of Wasatch Wind LLC in this transmission issue proceeding?

A. Yes I am.

SUMMARY OF TESTIMONY

Q: What is the purpose of your rebuttal testimony?

A: The purpose of my testimony is to rebut the testimony of Company witnesses Bruce Griswold and Kenneth Houston and Division witness Andrea Coon.

Q: Could you give a summary of your conclusions and recommendations?

A: Yes. In my testimony, I explain why the Company's proposal for calculating avoided capital costs associated with transmission is fundamentally flawed. It violates the ratepayer neutrality conditions of establishing avoided costs for QFs. I also explain why intermittent resources should not be excluded from receiving credit for avoiding transmission line losses. I propose a fair and simply way of determining how to compensate wind resources eligible for avoided transmission capital costs and avoided line losses. I rebut the Division's recommendation to accept the Company's position.

Rebuttal of Mr. Griswold

Q: Do you agree with Witness Griswold's contention that PURPA regulations require that line losses be considered when determining avoided costs?

A: Yes, I do. I agree with his statement that

> "the adjustment, either plus or minus, is based on the premise that line loss costs or savings result from the QF delivering power to a load area in lieu of power that PacifiCorp would have supplied to that some load area (either generated or purchased)." (Lines 13-16 Griswold Transmission Direct)

I agree with his contention that the DRR methodology using the GRID model is not the

appropriate model for calculating avoided line losses as it lacks the necessary detail and granularity.

Q: Does Mr. Griswold acknowledge line losses from generators located in remote areas such as wind facilities?

A: Yes he does. I agree with Mr. Griswold statement that a generator located in a remote area may incur greater losses when transmitted to a load area than the loss rate contained in PacifiCorp's Open Access Transmission Tariff (OATT) and a remotely located wind resource may encounter large losses. Mr. Griswold notes that the Company is obligated to purchase net power from a QF at the point of interconnection and the Company bears losses associated with delivering power to load. Therefore, Mr. Griswold reasons that any line loss credit or debit should be based on the difference between where the QF and the avoided resource are located in respect to the load center.

Q: What recommendations does Mr. Griswold make for determining whether a QF project should pay or be compensated for line losses and how does he propose calculating the value of these line losses?

A: He recommends that the

> "transmission (and distribution if applicable) losses would be applied to …….. QF projects based on the proximity of each individual QF relative to the Utah load area as compared to the proxy resource relative to the Utah load area." (Lines 56-59 Griswold Transmission Direct)

He recommends that the Company then utilize its OATT rates as compensation for the avoided line losses. This will avoid the difficulties in calculating incremental/decremental losses on a case by case basis and will serve as a reasonable

proxy that is not expected to yield materially more precise results.

Q: Do you agree with Mr. Griswold's recommendations as stated above?

A: Yes, I do. Eligibility for line losses should be determined by comparing the line losses associated with proxy resource delivering power to the Utah Load center and the line losses associated with delivering power from the QF to the Utah load center. If there are less line losses associated with the QF then they should be compensated at the OATT rate. If the QF interconnects at sub-transmission levels it should be eligible for the sub-transmission line loss rate specified in the OATT.

Q: So what parts of Mr. Griswold's recommendation don't you agree with?

A: I disagree with his recommendation to exclude intermittent resources from receiving line losses and find the Company's logic for doing so to be lacking.

Q: What is the Company's explanation for excluding intermittent and non-firm resources from receiving line loss credits?

A: Several reasons are given for excluding intermittent resources. The first is that line losses were not considered in evaluating bids for PacifiCorp's most recent renewable RFP therefore QFs should not receive losses. I find this argument weak; RFP evaluators should consider the location of the wind project in relation to the Company's load. To ignore a potential cost to ratepayers in a procurement process puts the ratepayer at risk and does not insure that the lowest cost power is obtained. Line losses should be included as an evaluation criteria in its next RFP, I provide a hypothetical example of why line losses must be included in the evaluation process in my Direct Testimony on transmission issues. (P. 8 lines 8-16) The Commission should not base a decision and set

precedence based on a faulty Company RFP process.

The second reason for denying line losses centers on the unpredictable nature of the output from intermittent resources. This the Company argues requires quick adjustment from other resources thus it is not possible to determine whether losses are higher or lower than the proxy resource. This argument is a red herring, it is not on point. What the witness is referring to is integration costs and those costs have already been considered in the IRP process and were weighed appropriately in the Company's decision to acquire wind resources. This is not a reason to justify denial of a real avoidable cost. Mr. Griswold goes on to argue that it is not possible to accurately predict when other system resources will or will not be needed and therefore line losses would be difficult to measure. The Company has already admitted that it is far too difficult to measure line losses on a case by case bases in its discussion of line losses for firm resources. It recommends that its OATT be used as adequate compensation. Its claim that the inherent difficulty of measuring exact losses for an intermittent resource is a valid reason for denying payment contradicts its treatment afford thermal resources. It does not appear to be logical. What logically follows the Company's argument is that payment for line losses for intermittent resources should be based on OATT rates just like thermal resources.

Q: What is your opinion about the problems associated with intermittent resources and the need to call on other resources?

A: This is an integration issue is inherent in all intermittent resources. Predictability for an intermittent resource is important and makes it more valuable. For Wasatch Wind, our

resource is very predictable; it runs on a highly regular diurnal pattern. In addition, our project is very small and the fluctuations associated with our resource are no different than the hour to hour load fluctuations associated with a large industrial customer. Integration costs have already been accounted for in the IRP process.

Q: Can you summarize your criticism of the Company arguments against crediting intermittent QF for line losses.

A: The Company's rationale for denying line losses to renewable resources appears to be arbitrary. There is no rational justification. Just because the Company was negligent in its RFP process and failed to include this variable in its selection criteria, it should not be used as a reason to deny line losses when they occur. Secondly, the Company admits that line losses are associated with intermittent resources (See Houston Rebuttal line 171 – 175 and Griswold Rebuttal line 21-26), but inappropriately argues that because of integration costs intermittent resources should be deemed ineligible. The Company's final argument that it is difficult to make the comparison between the QF and the Proxy resources on an hour by hour basis contradicts its recommendation for thermal resources that encounter the same problem.

Rebuttal of Kenneth Houston

Q: Can you summarize Mr. Houston's testimony about avoided transmission capital costs and avoided line losses?

A: Yes, I will try. Mr. Houston is the Director of Transmission Development for PacifiCorp; he appears to be well versed in transmission planning issues. He does an

excellent job of explaining how the transmission department analyzes the impact of a potential generator on the existing transmission system and what costs or benefits that might accrue with the interconnection. He makes an eloquent case for the need to know precisely how the interconnection will affect the existing transmission system and how an interconnection affects reliability. The Transmission System Impact Study (SIS) "analyzes the proposed interconnection request's impact on the transmission system with the configuration and conditions existing at the time of the interconnection request application." (Houston, Direct, line 27-29) The Company includes planned system modifications to the transmission system with in-service dates prior to the proposed interconnection date. They use a five year planning horizon to insure that they know exactly what facilities will be affected.

Q: What is your problem with this procedure for estimating avoided transmission costs associated with a QF?

A: The procedure, while certainly adequate for determining investment decisions and calculating the impact on reliability of an interconnection, fails to measure the avoided costs of transmission. The method is fundamentally flawed because the model does not include the IRP resources that the QF will avoid. Without a longer run time and the inclusion of IRP resources the model can not possibly measure avoided cost of the proxy resource. Recall that capacity costs are determined by a IRP proxy resource, if that IRP resource is not in the transmission model, the model will not be capable of evaluating the impact of avoiding that resource. It is equivalent to running the GRID model without IRP resources to estimate avoided energy costs. Mr. Houston makes a good argument of

why a five year horizon with known resources are appropriate for planning investments, but this model is being used to evaluate a payment to a QF not to plan resources. Mr. Houston appears to be confused about the purpose of the study. The Company is proposing to use its SIS model to determine avoided transmission capital costs. Thus, the purpose of using the SIS is to evaluate the potential that a QF might avoid transmission capital costs. The output of the model will help determine the price paid to QFs, the purpose is not to determine the impacts on reliability. The issue of reliability is separate from the payment issue and deserves its own model run according to Mr. Houston's recommendations. Thus two separate SIS runs should be made, the first to determine investment and reliability issues, the second to determine avoided costs. The assumptions and inputs used should suit the purposes of each run.

Q: Could you explain how the Company's proposed method violates the ratepayer indifference standard?

A: If the method to calculate avoided costs does not even allow a possibility for the planned IRP resource to be avoided then it will surely underestimate avoided costs and thereby violate the standard.

Q: If a method underestimates avoided costs aren't ratepayers more protected than a method that might over estimate avoided costs. Shouldn't regulators err on the side of caution?

A: I agree that regulators tend to err on the side of caution and use the rationale that they are protecting ratepayer's interest, but I disagree with their approach. If avoided costs are set

too high it discourages the purchase of QF development that can lead to lower rates in the long run. I remember a QF project of some 150 MWs that accepted a rate in the high $20 range, for a variety of reasons, some mostly contractual, the contract was never executed. Looking back on the deal it was a bargain for ratepayers and ratepayers are definitely worse off.

Q: Do your agree with Mr. Houston's analysis of avoided line losses associated with an intermittent resource?

A: As with Mr. Griswold, I agree with certain parts of his analysis but not others, I strongly disagree with his conclusions.

Q: On what issues do you agree?

A: In his testimony, lines 171 – 175, he seems to indicate that line losses are associated with all different types of generators: non-firm, wind proxy contract customer, must-run resources, fully dispatchable power and firm power and that all losses are charged to Transmission Customers at the rate set forth in Schedule 9 of the Company's OATT based on load. Thus Transmission Customers not generation resources are responsible for paying for losses if the generator is a Network Resource regardless of whether it was a QF or not.

Q: What do you conclude from his analysis?

A: If a QF that is located closer to load than the avoided resource, it will help the Transmission Customer avoided charges for such line losses and therefore should be compensated for avoiding such losses.

Rebuttal of Andrea Coon

Q: Do you agree with Ms. Coon's recommendations regarding methods for calculating avoided transmission capacity costs?

A: Yes, I agree that wind and thermal should be treated the same.

Q: Do you agree with Ms. Coon's analysis for a preferred method for calculating line losses?

A: Ms. Coon provides a hypothetical example that compares a proxy generator that interconnects at Mona to a QF that interconnects at Camp Williams. Under her assumptions, the generator at Mona incurs a 5% line loss while the QF at Camp Williams incurs 0%. She then recommends that the QF receive a credit for avoided line losses, but only if the power was dispatched by PacifiCorp. Undispatched power would receive no credit.

Q: What justification does the Division give for such a discriminatory recommendation?

A: Violation of ratepayer neutrality is cited, but unfortunately it is not supported. Ms. Coon makes the argument that:

> "..in the case of non-dispatch hours or a non-firm resource, you cannot directly tie line losses to a particular plant, it is very difficult to ensure ratepayer neutrality. For example, take the same QF, tied into the same Terminal Substation (this according to Ms. Coon would be Camp Williams with no line losses). It is no longer reasonable to assume that the energy that this QF is providing would directly replace energy from the avoidable resource. It could be replacing energy on *any part of the system* including energy that could be delivered into the same substation, in which case, calculating losses is complicated and continually changing. (Coon Transmission Direct lines 90-99).

Ms. Coon goes on to request suggestions on how losses could be calculated for this resource without violation of ratepayer neutrality.

Q: Is there a flaw in logic in the Division's analysis?

A: If the Division does not recommend some line losses for a QF connected at Camp Williams, it would do so knowing that it is violating ratepayer neutrality. Using the hypothetical supplied by the Division, the QF has no line losses associated with its output, yet the energy that it is replacing could come from any part of the system. Indeed, the Division argued in past proceedings in this docket that avoided energy attributable to QFs was coming from low cost coal plants that are subjected to substantial line losses. Thus by definition, if some avoided energy comes from coal that have lines associated with it, then energy from the QF which has no line losses MUST be avoiding line losses to some extent. To argue that it can not be measured accurately does not overcome the fact that denying avoided costs line losses would knowingly violate ratepayer neutrality. If accurate measurement is the issue, I suggest the compromise proposed by the Company, use of the OATT rates.

Q: Does the Division recommend line losses for wind resources?

A: No, it does not. It states that it is unclear that the proxy contract price includes any line loss value; therefore line losses for a QF are not warranted. This logic is similar to the Company's and should be ignored.

SUMMARY

Q: Could you give a brief summary of your recommendations?

A: Avoided capital costs associated with transmission can be measured with the Company's SIS model only if the analysis is extended to 10years and it explicitly includes planned IRP resources. Wind resources should be eligible for both avoided transmission capital costs and line losses. If the QF resources is closer to a constrained load center than the proxy resource, it should receive compensation as outlined in the Company's OATT.

Q: Does that complete your testimony?

A: Yes.