

Mountain West Consulting, LLC
Statement of Position, Transmission Task Force
Docket No. 03-035-14
November 21, 2005

Mountain West believes it is important to move the methods of calculation of avoided transmission capacity costs and avoided line loss costs in the direction of objectivity. Unfortunately, the task force process was of very limited utility, in part because of the limited time proposed for the task by PacifiCorp and the state agencies, in part because the subject is technical in nature and complex, in part because the current analytical tools used by PacifiCorp are less than satisfactory, and in part because of a series of limitations on fully objective analysis imposed by PacifiCorp in its proposal with sparse explanations.

Under FERC regulations costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from the QF are to be taken into account in determining avoided costs.

PacifiCorp does not propose to consider avoided line losses from QF wind resources. Its claim that line losses were not considered in the renewable RFP process is astonishing, as PacifiCorp has failed to consider the differing value of power at differing locations on its system. Of course, if true this failure is not desirable to perpetuate. Regardless of PacifiCorp's asserted error, wind projects will have associated avoided line loss impacts, and there should be a consistent method of determination. Given the current state of PacifiCorp's available software, as PacifiCorp representatives have described it, it appears reasonable to use the same basic method for measurement as should be used for thermal resources, based on the comparison of the proximity of the locations of the QF resource and the proxy resource to the nearest resource center. In fact this method of measurement does not measure all avoided losses on the system and will typically understate avoided losses as it does not trace the effect of losses through the system. So it is a simplified method but is a reasonable and workable beginning point, will send an appropriate economic signal and compare the QF to the proxy, taking into consideration their respective positions on the system.

In the longer term, the methods of measurement of line losses need to be greatly improved. A recent study in California indicates that a new product may offer significant improvement in this and related areas. (The study was coordinated through, and is available through the California Energy Commission and initial study results have been circulated among task force members.) The software product has been tested on a smaller utility system at Santa Clara and is currently being tested on the Southern California Edison system. After completion of the ongoing study of the SCE system using the AEMPFAST software from Optimal Technologies and study methodology jointly developed by a team including New Power Technologies, and publication of results, it would be beneficial to review study results and consider possible steps for modifying existing analytical tools or implementing new tools to more effectively and quickly measure system line losses for the Utah system, and to consider any appropriate

measures to optimize the Utah transmission and distribution system and the method of analysis of and payment for avoided line losses for QF resources. As the system would apparently have additional benefits beyond the scope of QF line loss issues it may be best to review as part of the IRP process or in another forum.

Transmission costs associated with the deferrable IRP resource should be taken into consideration in the determination of avoided costs. If the transmission is not entirely cancelled, but delayed, that results in a cost savings. If the transmission facility can be downsized as a result of the QF, that produces cost savings. For example, smaller conductor or smaller transformers involve cost savings. The analysis may show that the facilities associated with the deferrable IRP resource should be built, but that other planned transmission resources could be delayed or downsized. If the analysis shows any delay, downsizing or cancellation of any t&d facilities as a result of the QF, the QF should get a credit for the cost savings. That may also include planned distribution facilities. Unfortunately, PacifiCorp doesn't want to look at all t&d facilities including those associated with the deferrable IRP unit; they want to exclude various parts. It is inappropriate to refuse to consider benefits if the QF interconnects above 138kV. The analysis should include resources over the IRP 10 year period.

In the case of wind, the market proxy resource may typically have included that transmission upgrades are paid for by the RFP participant, but clarification by the utility should be required, as it may be possible for the utility to agree to pay some transmission upgrade costs. For example, the self build option may be selected. Another example is if strategic regional transmission lines are planned that include a component for wind. It may be possible for such a line to be built without a specific wind project having been allocated related transmission costs. Another example may be if a transmission facility were planned before the RFP winner was selected. The utility could try to characterize it as not for the project. In these sorts of cases, a close look at whether the QF should receive credit for deferral of other transmission facilities is warranted.