Treatment of Curtailed Hours in Wind Capacity Credit Calculation

August 14, 2013
IRTF
Current Procedure

• If a wind generator is fully or partially curtailed by PJM Operations for any portion of a peak summer hour, that hour is excluded from the capacity credit calculation for that generator.

• In some cases, removing the curtailed hours has had the effect of reducing a wind generator’s capacity credit.

• Should the procedure be modified to estimate what the wind unit’s output would have been absent the curtailment and those curtailed hours added back into the calculation?
• Alternative 1: Metered data used for all non-curtailed hours. State estimator data used for all hours with any curtailment. 5 minute periods with curtailment are removed.

• Alternative 2: Metered data used for all non-curtailed hours. State estimator data used for all hours with any curtailment. Interpolated data used for any 5 minute period with a curtailment.

• Alternative 3: Metered data used for all non-curtailed hours. Forecast data used for hours with any curtailment. Forecast data is from PJM Ops and is currently used for lost opportunity cost calculation.
• The posted spreadsheet shows the impact of applying these alternative procedures to the wind units in 2012.
• No change would be made to any wind unit with no curtailments over peak summer hours.
Does the PC endorse implementation of:

• Alternative 1
• Alternative 2
• Alternative 3

PJM will draft Manual language to implement the endorsed changes for review at the Sept. PC meeting.

PJM will report back to the MRC on the PC action and seek MRC endorsement in the fall.

Any new procedure is expected to be applied to summer 2013. (Wind capacity credit calculations are finalized in December 2013 to become effective June 1, 2014.)