ReedSmith

Wind Generators Deemed Transmission Owners and Operators for NERC's Reliability Standards

Author: Douglas W. Everette, Counsel, Washington, D.C.
Author: Amy S. Koch, Partner, Washington, D.C.

Publication Date: June 23, 2011

On June 16, 2011, the Federal Energy Regulatory Commission (FERC) upheld two North American Electric Reliability Corporation (NERC) determinations that the owners of generator tie-line interconnection facilities could be required to register as a transmission owner and a transmission operators (TO/TOP).[1]

In an order, FERC denied the appeals of Cedar Creek Wind Energy, LLC (Cedar Creek) and Milford Wind Corridor Phase I, LLC (Milford), which had argued that the NERC and the Western Electricity Coordination Council (WECC) misapplied NERC's registration criteria to their interconnection facilities. In affirming the NERC registrations, FERC found that, based on the specific facts, each of the Cedar Creek and Milford interconnection facilities had a material impact on the Bulk-Power System (BPS) because reliability of the BPS depended on the reliable operation and maintenance of their respective interconnection facilities. Consequently, FERC required the wind generators to register with NERC as a TO/TOP and identified a set of reliability standards that each must comply with to "prevent a reliability gap." FERC also ordered the wind generators and NERC to negotiate and submit for review any other reliability standards necessary for the reliability of the BPS.

Background

Cedar Creek owns and operates a 300 MW wind generation facility located in Colorado that is connected to a switching station through its 72-mile, 230 kV radial generation interconnection tie line and associated equipment connected to the BPS. Milford owns and operates a 203.5 MW wind generation project located in Utah, which, through several 34.5 kV collection lines, is connected to its 88-mile, 345 kV radial generation interconnection tie line, two 362 kV/34.5 kV transformers, circuit breakers, and related equipment connected to the BPS.

In each case, FERC determined that the wind generators had operational control over certain facilities at one end of their respective tie-lines, and that proper protection coordination and operation of those facilities and the tie-line was required for the reliability of the BPS:

- Cedar Creek's 230 kV circuit breakers and associated tie-line protective relays
- Milford's 345 kV circuit breakers, 345 kV transmission line equipment and protective relays[2]

In essence, FERC found that the wind generators' facilities are material to the BPS and that without registration of the owner and operator of these facilities, there would be reliability gaps in (i) coordination of protection systems, (ii) operations and operating credentials, and (iii) restoration and development and communications of system operating limits.

As a result, Cedar Creek and Milford are required to register as a TO/TOP and to comply with, at a minimum, 16 specific requirements of the following reliability standards:

- PRC-001-1 (communication and coordination regarding relay/equipment failures)[3]
- PRC-004-1 (develop a Corrective Action Plan to avoid misoperations)
- TOP-004-2 (coordinate switching in/out of service with the interconnected utility)
- PER-003-1 (utilize NERC-certified operators responsible for transmission line breakers)
- FAC-003-1 (prepare and implement a vegetation management program)
- TOP-001-1 (prioritize decision-making authority to alleviate operating emergencies)
- FAC-014-2 (establish system operating limits for the tie-line)

FERC also ordered NERC and/or the WECC to negotiate with the wind generators as to which additional TO/TOP requirements may be necessary for BPS system reliability. NERC is also required to submit a compliance filing by September 14, 2011, identifying those additional requirements.

Observations

FERC's decision leaves several unanswered questions:

- It does not resolve the interpretation of section III(d)(1) of NERC's Registry Criteria or the definition of an "integrated transmission element."[4]
- FERC's instructions to NERC and/or WECC to negotiate with the wind generators as to which additional TO/TOP requirements may be necessary for BPS system reliability may not lead to a resolution without further FERC intervention.

- The registrations seem to be contrary to the recommendations of a 2009 report that recommended that NERC refrain from registering generator owners and operators as a TO/TOP generically by virtue of their generator interconnection facility.[5] While FERC stated that the application of NERC's reliability standards to generator tie-lines is an ongoing concern, it only urged NERC to develop an approach that would satisfy NERC's BPS reliability concerns and would provide useful notice for entities trying to understand the scope of their NERC compliance obligations.

What is certain is that generators are on notice that their operation and maintenance of tie-line interconnection facilities may result in such facilities being deemed material to the BPS, requiring them to register as a TO/TOP, and to comply with the "applicable" NERC reliability standards.