



GEN-2009-016

***Generator Modification Evaluation
(Turbine Change)***

***SPP Generator
Interconnection Studies***

***GEN-2009-016
April 2013***

Executive Summary

The GEN-2009-016 interconnection request was first studied as part of the DISIS-2009-001 Definitive Impact Study, Cluster Group 7, which was originally posted in January 2010. The Interconnection Customer then requested a change in wind generator technology to a G.E. 1.6MW wind turbine, which was posted in May 2011. The Customer signed a Generator Interconnection Agreement (GIA) with SPP with an effective date of June 6, 2011.

The GIA calls for the Customer to install sixty-three (63) General Electric 1.6MW wind turbines for a total of 100.8MW nameplate capacity. The Customer is also required to maintain a 95% lagging (supplying reactive power) and a 95% leading (absorbing reactive power) at the point of interconnection. The point of interconnection is the Public Service Company of Oklahoma (AEPW) Falcon Road 138kV substation.

In March 2013, the Customer requested to change its generator configuration again to General Electric 1.7MW wind turbines while not exceeding the original GIA nameplate capacity. The Customer has supplied all generator, turbine layout, cabling impedences, and transformer impedences. SPP has determined that the Customer may install fifty-nine (59) General Electric 1.7MW wind turbines for a total of 100.3MW of nameplate capacity. The requested change is not considered a Material Modification and no study is required due to the identical electrical characteristics between the previous wind generator and the new wind generator. The Customer is still required to maintain a 95% lagging (supplying reactive power) and a 95% leading (absorbing reactive power) at the point of interconnection. The point of interconnection is the Public Service Company of Oklahoma (AEPW) Falcon Road 138kV substation.

Nothing in this study should be construed as a guarantee of transmission service. If the customer wishes to sell power from the facility, a separate request for transmission service shall be requested on Southwest Power Pool's OASIS by the Customer.