GEN-2016-043 Impact Restudy for Generator Modification

March 2018 Generator Interconnection



Revision History

Date	Author	Change Description
3/21/2018	SPP	GEN-2016-043 Impact Restudy for Generator Modification Report Issued



Executive Summary

The GEN-2016-043 Interconnection Customer has requested a modification to its Generator Interconnection Request to change its wind turbine generators from one-hundred (100) GE 2.3MW (total 230.0MW) to a combination of sixty-one (61) Vestas V136 3.6MW and three (3) Vestas V136 3.45MW (total 229.95MW). The Point of Interconnection (POI) is the Nebraska Public Power District (NPPD) Hoskins 345kV substation.

GEN-2016-043 was initially studied in the DISIS-2016-001 Group 9 impact study. The results of that study can be found on the SPP website¹. GEN-2016-043 was restudied in the DISIS-2016-001-1 Group 9 impact study. The results of the restudy can be found on the SPP website².

With the assumptions outlined in the DISIS-2016-001-1 report and with all the required network upgrades in place, GEN-2016-043 using sixty-one (61) Vestas V136 3.6MW and three (3) Vestas V136 3.45MW wind turbine generators should be able to interconnect reliably to the SPP transmission grid. The proposed changes do not constitute a Material Modification.

The restudy analyzed many of the most probable contingencies, but it is not an all-inclusive list and cannot account for every operational situation. It is likely that the customer may be required to reduce its generation output to 0 MW, also known as curtailment, under certain system conditions to allow system operators to maintain the reliability of the transmission network.

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

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¹ See Appendix J9: Group 9 Dynamic Stability Analysis Report in DISIS-2016-001 Definitive Interconnection System Impact Study Report, posted 2/28/2017

http://sppoasis.spp.org/documents/swpp/transmission/studies/files/2016 Generation Studies/DISIS%20201 6-001%20v3 FINAL.pdf

² See Appendix J9: Group 9 Dynamic Stability Analysis Report in DISIS-2016-001-1 Definitive Interconnection System Impact Study Report, posted 12/22/2017

http://sppoasis.spp.org/documents/swpp/transmission/studies/files/2016 Generation Studies/DISIS%20201 6-001-1 FINAL-R1.pdf