



# **GEN-2016-004**

## **Impact Restudy for Generator Modification**

**March 2018**  
**Generator Interconnection**



## Revision History

Date	Author	Change Description
3/21/2018	SPP	GEN-2016-004 Impact Restudy for Generator Modification Report Issued

## Executive Summary

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The GEN-2016-004 Interconnection Customer has requested a modification to its Generator Interconnection Request to change its wind turbine generators from ninety-six (96) Suzlon S111 2.1MW (total 201.6MW) to a combination of nine (9) Vestas V110 2.0MW and fifty-one (51) Vestas V136 3.6MW (total 201.6MW). The Point of Interconnection (POI) is the Basin Electric Power Cooperative (BEPC) Leland Olds 230kV substation.

GEN-2016-004 was initially studied in the DISIS-2016-001 Group 8 impact study. The results of that study can be found on the SPP website<sup>1</sup>. GEN-2016-004 was restudied in the DISIS-2016-001-1 Group 8 impact study. The results of the restudy can also be found on the SPP website<sup>2</sup>.

With the assumptions outlined in the DISIS-2016-001-1 report and with all the required network upgrades in place, GEN-2016-004 using nine (9) Vestas V110 2.0MW and fifty-one (51) Vestas V136 3.6MW 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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<sup>1</sup> See Appendix J16: Group 16 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%202016-001%20v3\\_FINAL.pdf](http://sppoasis.spp.org/documents/swpp/transmission/studies/files/2016_Generation_Studies/DISIS%202016-001%20v3_FINAL.pdf)

<sup>2</sup> See Appendix J16: Group 16 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%202016-001-1\\_FINAL-R1.pdf](http://sppoasis.spp.org/documents/swpp/transmission/studies/files/2016_Generation_Studies/DISIS%202016-001-1_FINAL-R1.pdf)