

2013 Bakken Area Long Range Transmission Study

Executive Summary

The purpose of this study was to determine if the new 2013 load forecast in the Bakken changes the recommendations of the 2012 Bakken Long Range Transmission Study.

The 2012 Bakken Long Range Transmission Study was performed under the Integrated System transmission planning stakeholder process as part of the FERC 890 requirement. In April of 2013 Basin Electric updated their Bakken Area load forecast. This forecast has significantly higher load growth than forecasted in the 2012 study. Based upon the results of this study the current plan for system improvements in the Bakken include the following in order to accommodate the April 2013 load forecast:

2014:

- Logan 115 kV Capacitor 2x15 MVar

2015:

- Reconductor the Logan-SW Minot 115 kV line to increase rating to 180 MVA or greater

2016:

- Judson 345/230 kV substation
- Antelope Valley-Charlie Creek 345 kV
- Charlie Creek-Indian Hills-Judson 345 kV
- Judson-Williston 230 kV

2017:

- Tande 345/230 kV transformer
- Tande 345/230 kV substation
- Judson-Tande 345 kV
- Tande-Neset 345 kV
- *Proposed: Gumbo Creek Substation 345/115 kV*
- *Proposed: Blue Butte Substation 345/115 kV*
- *Proposed: Indian Hills Substation 345/115 kV*
- *Proposed: Gumbo Creek-Blue Butte-Indian Hills 345 kV*

CRITICAL ENERGY INFRASTRUCTURE INFORMATION NOTICE

Materials contained in the complete study document include Critical Energy Infrastructure Information (CEII). All materials designated as CEII must be handled and protected in accordance with the CEII Policy of Western Area Power Administration (WAPA) and the CEII Policy of any affected Transmission Owner (TO) identified in this document or attached materials.

In order to receive a complete study report, the requesting party will need to follow Western's Critical Energy Infrastructure Information (CEII) Policy. This CEII Policy is included with all Western Area Power Administration Effective Business Practices posted at:

<http://www.oatioasis.com/WAPA/WAPAdocs/Western-Common-Business-Practices.html>

The direct link to the CEII Policy file is:

<http://www.oasis.oati.com/woa/docs/WAPA/WAPAdocs/Western-OATT-BP-CEII-Policy-Version-2010-0812.pdf>

If the request for CEII can be granted, a Non-Disclosure and Confidentiality Agreement (NDA) will be offered to the requestor. A template of the NDA is also posted in Western's Effective Business Practices Folder. The direct link to the pdf file is:

<http://www.oasis.oati.com/woa/docs/WAPA/WAPAdocs/Western-OATT-Confidentiality-NDA-Agreement-Form-Version-2010-0812.pdf>