UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Section 141.300
FERC Form No. 715
Annual Transmission Planning and Evaluation Report

Omaha Public Power District
April 1, 2016

Part 4: Transmission Planning Reliability Criteria
CEII

Overview

The Omaha Public Power District (OPPD) follows the North American Electric Reliability Corporation (NERC) *Reliability Standards*, the Southwest Power Pool (SPP) *Criteria, Open Access Transmission Tariff (OATT), and OATT Business Practices* and the Midwest Reliability Organization (MRO) *Standards*. Additionally, OPPD has established its own set of local area planning criteria.

- *NERC Reliability Standards* are available at the NERC website: http://www.nerc.com.

- *Southwest Power Pool Criteria, OATT, and OATT Business Practices* are available at the SPP website: http://www.spp.org.

- *Midwest Reliability Organization Standards* are available at the MRO website: http://www.midwestreliability.org.

Criteria

The following planning criteria apply to OPPD's transmission system facilities 69kV and above:

- Pre-contingency voltage is to be within 0.95 per unit (p.u.) to 1.05 p.u. of the nominal voltage rating. This criterion shall be met after all system adjustments have been made.
- For OPPD transmission facilities at nominal voltages of 161kV and above, post-contingency voltage is to be within normal voltage limits of 0.95 p.u. to 1.05 p.u. of the nominal voltage rating. These transmission system facilities may be allowed to be operated within emergency voltage limits of 0.90 p.u. to 1.10 p.u. for an amount of time designated by OPPD if it can be demonstrated that corrective system adjustments can be made within the designated amount of time to return voltage to within normal voltage limits.
- For OPPD transmission facilities at a nominal voltage of 69kV, post-contingency voltage is to be within normal voltage limits of 0.90 p.u. to 1.05 p.u. of the nominal voltage rating. These transmission system facilities may be allowed to be operated up to a high emergency voltage limit of 1.10 p.u. for an amount of time designated by OPPD if it can be demonstrated that corrective system adjustments can be made within the designated amount of time to return voltage to within normal voltage limits.
- Facility thermal loading, for pre or post-contingent conditions, shall not exceed 100 percent of the determined facility rating. OPPD transmission facility ratings are determined using its current methodology for developing facility ratings as required by NERC Reliability Standard FAC-008.
- OPPD Ft. Calhoun Nuclear Station has offsite power 161 kV requirements that are more stringent than the planning criteria defined by OPPD's Planning Coordinator and Transmission Planner. During normal operations, the transmission voltage supplied to the Ft. Calhoun House Service Transformers served from 161 kV transmission Circuit 1587 out of Substation 1251 shall not exceed 168.6 kV. During a contingency involving a Ft. Calhoun unit trip, the transmission voltage supplied to the Ft. Calhoun House Service Transformers shall exceed 161.3 kV. These voltage limits shall not be changed without the express written consent of the Fort Calhoun Nuclear Station.