

FCS-2010-002 Shared Facility Study For

Transmission Facilities in SUNC

(Spearville – Mullergren 230kV) (Transmission Line Rebuild)

> SPP Generation Interconnection

(#FCS-2010-002)

July 2012

Summary

Sunflower Electric Power Corporation (SUNC) performed a detailed Facility Study at the request of Southwest Power Pool (SPP) for Facility request DISIS-2010-002. The requests for interconnection were placed with SPP in accordance with SPP's Open Access Transmission Tariff, which covers new generation interconnections on SPP's transmission system. The SPP request consists of rebuilding the Spearville – Mullergren 230kV transmission line and any terminal equipment to at least 2000A. The cost for SUNC to rebuild sixty-five (65) miles of Spearville – Mullergren 230kV transmission line with 1272 kcmil ACSR "Bittern" 2 conductor bundle and any associated terminal equipment to at least 2000A by using the existing right of way has the total estimated cost of \$36,107,610.

Pursuant to the tariff, SUNC was requested to provide a Facility Study grade estimate for required network upgrades to satisfy the Facility Study Agreement executed by the requesting customers and SPP.

Generation Interconnection Customers

The generation interconnection requests covered in this document are as follows:

Project	
GEN-2010-045	
GEN-2010-053	

These interconnection customers are included in the DISIS-2010-002 Impact Study which identified the required network upgrades for each customer in order to interconnect to the transmission system.

Shared Network Upgrade Cost Allocation

The interconnection customers listed in the cost allocation below are included in the DISIS-2010-002 Impact Study which identified the required network upgrades for each customer in order to interconnect to the transmission system. The cost to rebuild approximately sixty-five (65) miles of 230kV from Spearville – Mullergren 230kV with 1272 kcmil ACSR "Bittern" 2 conductor bundle and any associated terminal equipment is \$36,107,610.

Project	Shared Upgrade Cost
GEN-2010-045	\$ 17,651,637.29
GEN-2010-053	\$ 18,455,972.71

If higher queued interconnection customers withdraw from the queue, suspend or terminate their GIA, restudies will have to be conducted to determine the Interconnection Customers' allocation of Shared Network Upgrades. All studies have been conducted on the basis of higher queued interconnection requests and the upgrades associated with those higher queued interconnection requests being placed in service.