

FCS-2011-002 Shared Facility Study For Transmission Facilities in OKGE

(Cimarron – Draper 345kV)

SPP Generation Interconnection

(#FCS-2011-002)

July 2012

Summary

OG&E Electric Services (OKGE) performed a detailed Facility Study at the request of Southwest Power Pool (SPP) for Facility request DISIS-2011-002.. 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 replacing a 1200A wave trap at Cimarron substation, in Canadian County Oklahoma, with a 2000A trap. SPP requested at least a 1600A Trap. At 345kV 1600A Traps are not available so a 2000A trap will be utilized. To get the Cimarron – Draper 345kV circuit operating at 1600A, the 1200A current transformer at Draper substation, in Cleveland County Oklahoma, will need to be replaced with at least a 1600A current transformer. The cost for OKGE to replace a 1200A wave trap at Cimarron substation with a 2000A trap is estimated at being \$50,000 and replacing a 1200A current transformer at Draper substation with at least a 1600A current transformer is estimated to being \$30,000, with the total cost for upgrades being estimated at \$80,000.

The proposed time line for construction would be approximately forty-two months after an NTC is received by OG&E to allow for right of way procurement, engineering, construction and completion

Pursuant to the tariff, OKGE 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.

Network Upgrade	Cost
Draper Substation – Replace 345k, 1200A current	\$30,000
transformer with minimum of 345kV, 1600A	
current transformer	
Cimarron Substation – Replace 345kV, 1200 A	\$50,000
Line Trap with new 345kV, 2000 A Line Trap	
Total	\$80,000

Network Upgrade Detail

Shared Network Upgrade Cost Allocation

The interconnection customers listed in the cost allocation below are included in the DISIS-2011-002 Impact Study which identified the required network upgrades for each customer in order to interconnect to the transmission system.

Project	Shared Upgrade Cost
GEN-2011-050	\$ 3,244.19
GEN-2011-051	\$12,419.09
GEN 2011-054	\$64,336.71

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.