



***Facility Study
For
Generation Interconnection
Request
GEN-2009-030***

SPP Tariff Studies

(#GEN-2009-030)

February 2011

Summary

Western Farmers Electric Cooperative (WFEC) performed a detailed Facility Study at the request of Southwest Power Pool (SPP) for Generation Interconnection request GEN-2009-030. The request for interconnection was placed with SPP in accordance with SPP's Open Access Transmission Tariff, which covers new generation interconnections on SPP's transmission system.

Interconnection Customer Interconnection Facilities

The Interconnection Customer will be responsible for the 138 kV transmission line from the Generation Facility to the Point of Interconnection (POI), a new 138 kV substation to be constructed by WFEC in Weatherford, OK. Additionally, the customer will be responsible for reactive power compensation equipment to maintain 95% lagging (providing vars) and 95% leading (absorbing vars) power factor at the point of interconnection.

Transmission Owner Interconnection Facilities and Non-Shared Network Upgrades

Per the following Facility Study, the Interconnection Customer is responsible for **\$2,000,000** of Transmission Owner Interconnection Facilities and non-shared network upgrades.

Shared Network Upgrades

The interconnection customer was studied within the DISIS-2010-001 Impact Study. At this time, the Interconnection Customer is allocated the following costs for shared network upgrades:

1. Washita - Weatherford 138kV CKT 1. Build approximately 50 miles of 138kV.	\$22,435,002
2. Washita - Gracemont CKT 2. Build approximately 11 miles of 138kV.	\$2,007,857
Shared Network Upgrade Costs - TOTAL	\$24,442,859

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.

WESTERN FARMERS ELECTRIC COOPERATIVE

FACILITY STUDY

For

Generation Interconnection Request 2009-030

100.8 MW Wind Generation Facility
In Custer County
Near
Weatherford, OK

January 26, 2011

SUMMARY

Pursuant to the tariff and at the request of the Southwest Power Pool (SPP), Western Farmers Electric Cooperative (WFEC) performed the following facility Study to satisfy the Facility Study agreement executed by the requesting customer for SPP Generation Interconnection request Gen-2009-030. The request for interconnection was placed with SPP in accordance with SPP's Open Access Transmission Tariff, which covers new generation interconnections on SPP's transmission system. The requirements for interconnection consist of building a new 138 kV Switch Station at Weatherford.

INTRODUCTION

The Southwest Power Pool has requested a facility Study for the purpose of interconnecting approximately 100.8 MW of wind generation within the service territory of WFEC in Washita County, Oklahoma. The interconnect station will be owned by WFEC. There was no proposed in-service date in the documents WFEC received. Power Flow analysis has indicated that for the power flow case studied, it is possible to interconnect the 100.8 MW of generation with transmission reinforcements within the local transmission system. Given the point of interconnection there are additional requirements for interconnection including bus, breakers, switches, relaying, metering, etc.

See table one for estimated costs for construction.

INTERCONNECTION & TRANSMISSION FACILITIES

The requirements for interconnection consist of building a new 138 kV Switching Station near WFEC’s Weatherford Substation. It is assumed that the customer has acquired the necessary right-of-way for the interconnect transmission line.

The total cost for WFEC to build the interconnect station at Weatherford is estimated at \$2,000,000. This does not include building the line from the collector substation to the interconnect station. In addition, the customer is required to maintain +/- 0.95% power factor at the point of interconnection to WFEC’s facilities. For other costs see table one.

This facility study does not guarantee the availability of transmission service necessary to deliver additional generation to any specific point inside or outside of the SPP transmission system. The transmission network may not be adequate to deliver any additional generation output to the system. If the customer requests firm transmission service under the SPP open access transmission tariff at a future date, network upgrades or other new construction may be required to provide the service.

The costs of interconnecting to WFEC’s facilities are listed in Table one below.

Facility	Estimated Cost (2011 Dollars)
WFEC-Interconnection facility-build a new three breaker ring bus near the existing Weatherford Substation to accommodate the wind farm interconnect. Work will include breakers, dead-end structures, line switches,relaying equipment,revenue metering equipment, etc.	\$2,000,000
Total	\$2,000,000

Table 1