



**Facility Study  
For  
Generator Interconnection  
Request  
GEN-2013-011**

***SPP Generator  
Interconnection Studies***

***(#GEN-2013-011)***

**July 2014**

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## Revision History

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| Date      | Author | Change Description           |
|-----------|--------|------------------------------|
| 7/22/2014 | SPP    | Facility Study Report Issued |

## Summary

American Electric Power Western (AEPW) was requested to perform a detailed Facility Study at the request of Southwest Power Pool (SPP) for Generation Interconnection request GEN-2013-011. GEN-2013-011, a 30 MW uprate of existing coal fired generation (GEN-2006-010) is located in Hempstead County, Arkansas. 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. AEPW has indicated that no additional Transmission Owner Interconnection Facilities and Network Upgrades are required beyond those facilities identified in the DISIS-2013-001 Impact Study performed by SPP.

## Phases of Interconnection Service

It is not expected that interconnection service will require phases however, interconnection service will not be available until all interconnection facilities and network upgrades can be placed in service.

## Interconnection Customer Interconnection Facilities

The Interconnection Customer will be responsible for all of the transmission facilities connecting the customer owned substation to the Point of Interconnection (POI), at the existing AEPW owned 138 kV Turk substation. The Interconnection Customer will also be responsible for any equipment located at the Customer substation necessary to maintain a power factor of 0.95 lagging to 0.95 leading at the POI.

## Transmission Owner Interconnection Facilities and Non-Shared Network Upgrades

SPP identified no additional Transmission Owner Interconnection Facilities or Network Upgrades in the DISIS-2013-001 Impact Study necessary to provide Interconnection Service for the GEN-2013-011 Interconnection Request. The Transmission Owner has verified the existing terminal and relay equipment is acceptable for the interconnection of the additional generation. GEN-2013-011 is responsible for approximately \$0 of Interconnection Facilities and Non-Shared Network Upgrades.

## Shared Network Upgrades

The Interconnection Customer was studied within the DISIS-2013-001 Impact Study. At this time, the Interconnection Customer is allocated \$0 for Shared Network Upgrades. 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. At this time, the Interconnection Customer is allocated the following cost for Shared Network Upgrade:

| Share Network Upgrade Description | Allocated Cost | Total Cost |
|-----------------------------------|----------------|------------|
| None                              | \$0.00         | \$0.00     |
| Total                             | \$0.00         |            |

**Other Network Upgrades**

At this time there are no Other Network Upgrades that are currently the cost responsibility of the Interconnection Customer.

**Conclusion**

The Interconnection Customer is responsible for \$0 of Transmission Owner Interconnection Facilities and Non-Shared Network Upgrades. At this time, the Interconnection Customer is allocated \$0 for Shared Network Upgrades. After a full execution of a Generation Interconnection Agreement (GIA) along with completion of milestones set in the GIA, Interconnection Service for 30 MW, as requested by GEN-2013-011, can be allowed. At this time the total allocation of costs assigned to GEN-2013-011 for Interconnection Service are estimated at \$0.

## AEPW GEN-2013-011 Interconnection Facility Study

The Transmission Owner Interconnection Facilities (TOIFs) required to interconnect the generator to AEPW's Turk 138 kV is:

1. None -\$0

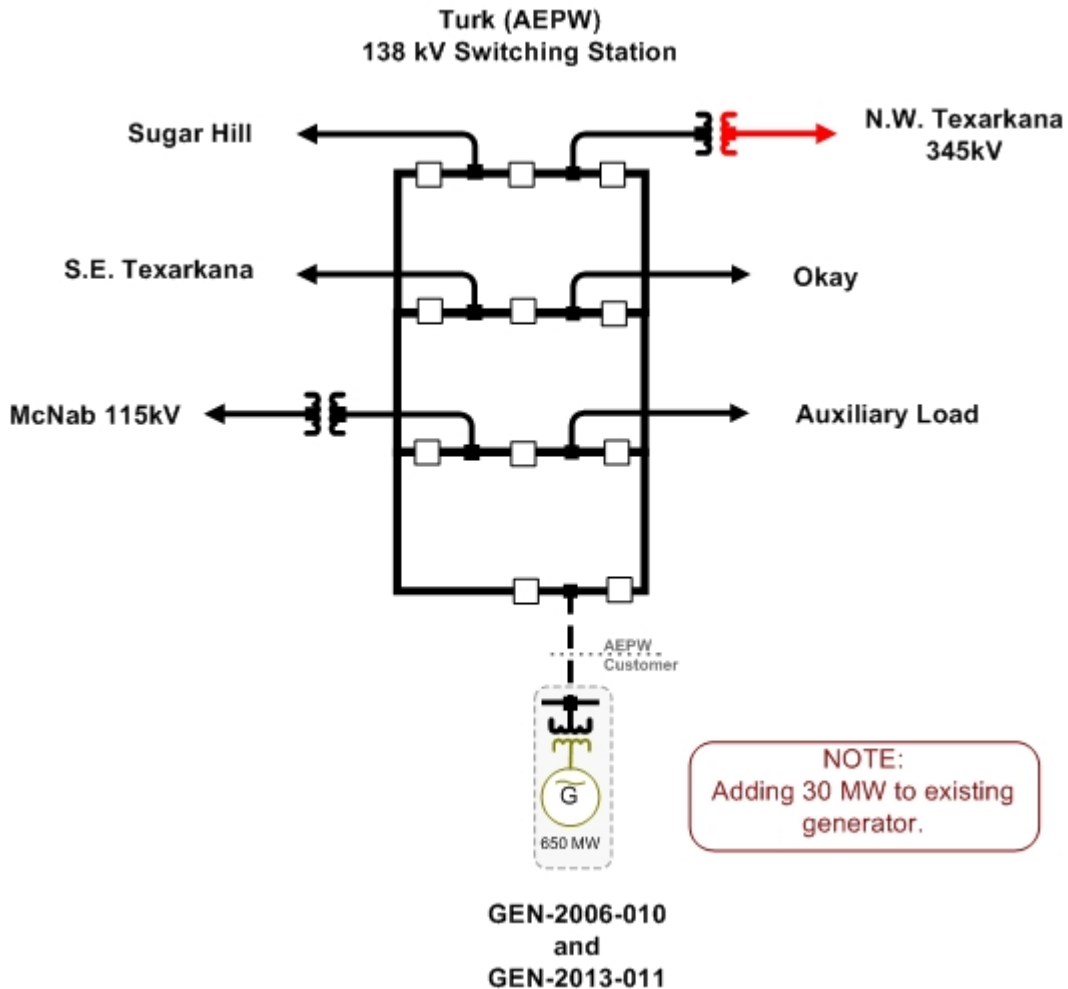
TOIF Subtotal - \$0

Non-Shared Network Upgrades (NU) required to mitigate the injection constraints for Energy Resource Interconnection Service is:

1. None -\$0

Non-Shared NU subtotal - \$0

**Total - \$0**



*Figure 1 – One-line of POI*