Affected System Interconnection Facilities Study

ASGI-2015-004

July 2016

Generator Interconnection

SPP Southwest Power Pool

Revision History

Date	Author	Change Description
7/14/2016	SPP	Final Affected System Interconnection Facilities Study Report Revision 0 Issued

Table of Contents

Affected System Interconnection Facilities Study Summary

Affected System Interconnection Facilities Study Introduction

This Affected System Interconnection Facilities Study (ASIFS) for ASGI-2015-004 (Affected System Interconnection Request) is for a 56.4 MW combustion engine generation facility located in Montgomery County, Kansas. The Affected System Interconnection Request was studied in the DISIS-2015-001 Impact Study and DISIS-2015-001-1 Impact Restudy as an Energy Resource Interconnection Service (ERIS) request. The Affected System Interconnection Request was provided updated Cost Allocation in DISIS-2015-001-2 Impact Restudy. Since the posting of the DISIS-2015-001 Impact Study the Interconnection Customer has executed the Affected System Interconnection Facilities Study Agreement and provided deposit securities as required to proceed to the Affected System Interconnection Facilities Study.

Grand River Dam Authority (GRDA) and American Electric Power - West (AEPW) performed a detailed Affected System Interconnection Facilities Study at the request of SPP for the Affected System Interconnection Request. Interconnection Customer's original in service date for the Interconnection Request is November 28, 2016.

The primary objective of the Affected System Interconnection Facilities Study (ASIFS) is to identify necessary Affected System Transmission Owner Interconnection Facilities, network upgrade(s), other direct assigned upgrade(s), and associated upgrade lead times needed for the additional of the requested Interconnection Service potentially affecting the SPP Transmission System at the specific Point of Interconnection (POI).

Interconnection Customer Affected System Interconnection Facilities

The Affected System Interconnection Request's Generation Facility is currently proposed to consist of three (3) 18.8 MW Wartsila Reciprocating Internal Combustion Engines for a total generating nameplate of 56.4 MW. This generation facility is planned to be connect to one (1) 69/13.8kV Interconnection Customer owned and maintained transformer at the Interconnection Customer owned substation. An existing generator lead 69kV transmission circuit will connect the Generating Facility from the Interconnection Customer owned substation to the Point of Interconnection (POI) at the existing Coffeyville Municipal Light & Power owned and maintained 69kV bus at the Northern Industrial Park Substation.

Affected System Transmission Owner Interconnection Facilities and Non-Shared Network Upgrade(s)

To facilitate interconnection, the Affected System Transmission Owner(s), GRDA and AEPW, currently did not identify any additional upgrades for the acceptance of the Interconnection Customer's Interconnection Facilities.

At this time, Interconnection Customer is responsible for $0 of GRDA and AEPW Affected System Transmission Owner Interconnection Facilities (ASTOIF) and Affected System Non-Shared Network Upgrade(s). **Table 1** displays the estimated costs for ASTOIF and Non-Shared Network Upgrade(s).

Table 1: Interconnection Customer ASTOIF and Non-Shared Network Upgrade(s)

ASTOIF and Non-Shared Network Upgrades Description	Allocated Cost ($)	Allocated Percent (%)	Total Cost ($)
Currently not allocated Interconnection or Non-Shared Network Upgrades	$0	n/a	$0
Total	$0	n/a	$0

Shared Network Upgrade(s)

The Affected System Interconnection Request was studied in the DISIS-2015-001 Impact Study and DISIS-2015-001-1 Impact Restudy as an Energy Resource Interconnection Service (ERIS) request. The Affected System Interconnection Request was provided updated cost allocation in DISIS-2015-001-2 Impact Restudy. At this time, the Interconnection Customer is allocated $0 for Shared Network Upgrades. If higher queued Interconnection Request(s) 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 Request(s) and the Network Upgrade(s) associated with those higher queued Interconnection Requests being placed in service. At this time, the Interconnection Customer is allocated the following cost listed in **Table 2** for Shared Network Upgrade.

Table 2: Interconnection Customer Shared Network Upgrades

Shared Network Upgrades Description	Allocated Cost ($)	Allocated Percent (%)	Total Cost ($)
Currently not allocated Shared Network Upgrades	$0	n/a	$0
Total	$0	n/a	$0

Other Network Upgrade(s)

Certain Other Network Upgrades are currently not the cost responsibility of the Interconnection Customer but will be required for full Interconnection Service. At this time, No Other Network Upgrade(s) are assigned to this Affected System Interconnection Request.

Depending upon the status of higher or equally queued customers, the Interconnection Request's in-service date is at risk of being delayed or their Interconnection Service is at risk of being reduced until the in-service date of these Other Network Upgrades.

Conclusion

The Interconnection Customer is responsible for $0 of Affected System Transmission Owner Interconnection Facilities and Non-Shared Network Upgrades. At this time, the Interconnection Customer is allocated $0 for Affected System Shared Network Upgrades. After all Affected System Interconnection Facilities and Non-Shared Network Upgrades have been placed into service, Interconnection Service for 56.4 MW, as requested by the Interconnection Customer can be allowed.

At this time the total allocation of costs assigned to Interconnection Customer for interconnection Service are estimated at $0.