

**AFFECTED SYSTEM  
INTERCONNECTION  
FACILITIES STUDY  
REPORT**

East River Electric Power  
Cooperative  
Shared Network Upgrade(s)

Big Stone – F.L. Blair 230kV Circuit  
#1

Published September 2017

By SPP Generator Interconnections Dept.

## REVISION HISTORY

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DATE OR VERSION NUMBER	AUTHOR	CHANGE DESCRIPTION	COMMENTS
9/5/2017	SPP	Initial draft report issued.	

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## SUMMARY

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### *INTRODUCTION*

The Affected System Transmission Owner, East River Electric Power Cooperative, Inc. (East River), performed a detailed Affected System Interconnection Facilities Study (ASIFS) at the request of SPP for Shared Network Upgrade(s) assigned in the Midcontinent Independent System Operator's (MISO) Generator Interconnection System Impact Study for DPP-2015-AUG-West cluster. The scope of the IFS is defined in the Generator Interconnection Procedures (GIP) under Attachment V of the Southwest Power Pool (SPP) Open Access Transmission Tariff (OATT). Affected System Generator Interconnection Request(s) that have cost allocation responsibilities for assigned Network Upgrade(s) will require the assigned Network Upgrade(s) to be in-service for full Interconnection Service. The request for interconnection was placed with SPP in accordance with SPP's OATT, which covers new generator interconnections on SPP's transmission system. Based on SPP Affected System for MISO DPP-2015-AUG-West results, the following Shared Network Upgrade(s) are needed:

- Big Stone – F.L. Blair 230kV Circuit #1

The primary objective of the IFS is to identify necessary Transmission Owner Interconnection Facilities, Network Upgrade(s), other direct assigned upgrade(s), and associated upgrade lead times needed to grant the requested Interconnection Service at the specified Point of Interconnection (POI).

### ***AFFECTED SYSTEM GENERATOR INTERCONNECTION REQUEST(S)***

The ASGI(s) assigned the Shared Network Upgrade(s) are listed in the corresponding **Tables 1**.

*Table 1: Affected System Generator Interconnection Requests for Network Upgrade(s)*

<b>ASGI Request Number</b>	<b>Point of Interconnection (POI)</b>	<b>Capacity (MW)</b>
J436	Big Stone South - Ellendale 345 kV	150.00
J437	Big Stone South - Ellendale 345 kV	150.00
J442	Big Stone 230 kV	200.00

### ***CREDITS/COMPENSATION FOR AMOUNTS ADVANCED FOR NETWORK UPGRADE(S)***

Interconnection Customer shall be entitled to compensation in accordance with Attachment Z2 of the SPP OATT for the cost of SPP Network Upgrades, including any tax gross-up or any other tax-related payments associated with the Network Upgrades, that are not otherwise refunded to the Interconnection Customer. Compensation shall be in the form of either revenue credits or incremental Long Term Congestion Rights (iLTCR).

### ***SHARED-NETWORK UPGRADE(S) FACILITIES DESCRIPTIONS AND COSTS***

**Table 2** lists Shared-Network Upgrade(s) description, costs, and provides an estimated lead time for completion of construction. The estimated lead time begins when the Construction Agreement (CA) has been fully executed.

Additional schedule coordination during the CA negotiation will be required due to previous approved plans for F.L. Blair Substation work over the next two years. East River has design and installation equipment upgrades for F.L. Blair Substation which are currently scheduled to be completed by 9/2019.

Shared-Network Upgrade(s) Cost Allocation by each MISO Generator Interconnection Request's responsibility shall be provided by MISO.

*Table 2: Shared-Network Upgrade(s)*

<b>Shared Network Upgrades Description</b>	<b>Allocated Cost Estimate (\$)</b>	<b>Estimated Lead Time</b>
<b>Big Stone – F.L. Blair 230kV Circuit #1:</b> Replace existing free standing metering Current Transformers (CTs) with new 1600 continuous ampacity rating to achieve at least 601.8MVA as requested in the MISO DPP-2015-AUG-West study.	\$127,000	22 Months
<b>Total</b>	<b>\$127,000</b>	

All studies have been conducted assuming that higher-queued Interconnection Request(s) and the associated Network Upgrade(s) will be placed into service. If higher-queued Interconnection Request(s) withdraw from the queue, suspend or terminate service, the Affected System Interconnection Customer’s share of costs may be revised. Restudies, conducted at the customer’s expense, will determine the Affected System Interconnection Customer’s revised allocation of Network Upgrades.

**CONCLUSION**

The Network Upgrade(s) listed in this Interconnection Facilities Study are required for full Interconnection Service for the MISO Generator Interconnection Request(s) listed in **Table 1**. Interconnection Service will be delayed until the Shared-Network Upgrade(s) listed in **Table 2** are constructed. The Shared-Network Upgrades is summarized in the table below.

Description	Allocated Cost Estimate (\$)
<b>Big Stone - F.L. Blair 230kV Circuit #1</b>	\$127,000
<b>Total</b>	<b>\$127,000</b>

A draft CA will be provided to the Interconnection Customer consistent with the final results of this ASIFS report. The Affected System Transmission Owner and Interconnection Customer will have 60 days to negotiate the terms of the CA consistent with the SPP OATT.

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