

TSR LGE-2016-010

System Impact Study Report

(TSR #83516862)

PROPRIETARY

Version Number: 1.0

Report Issue Date: December 28, 2016

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1. Study Summary

TranServ has evaluated the Long-Term Firm Network Transmission Service Request (TSR) listed in Table 1-1. A System Impact Study (SIS) was performed only to determine the direct assignment facility needs and cost for this TSR.

Table 1-1 Request Details

Assign Ref	POR	POD	MW	TS Increment	TS Type	Request Type	Start Time	Stop Time	Q-Time
83516862	LGEE	LGEE	22/24	Yearly	Network	Original	2018-12-01 00:00:00 ES	2024-01-01 00:00:00 ES	2016-09-30 08:41:11 ES

This is not 24 MW of new customer load. It is the splitting of the load previously served from an existing delivery point.

For reliability purposes, a second distribution transformer will be added by the customer at the load bus. The new transformer will normally supply part of the existing substation load with the remaining continuing to be served from the existing transformer. The net change in load served from the 138 kV bus due to this request is 0 MW. Since there is no increase in the total substation load, no powerflow analysis was performed as part of the SIS by the Independent Transmission Operator (ITO). However, a study was performed by the Transmission Owner (TO) to determine the direct assignment facilities that are required for this TSR.

Since the subject request does not start within the Open Access Same-Time Information System (OASIS) Available Transfer Capability (ATC)/ Available Flowgate Capability (AFC)/ Available Share of Total Flowgate Capability (ASTFC) ATC/AFC/ASTFC posting horizon, an ATC/AFC/ASTFC check was not performed. Because neither a powerflow analysis nor an ATC/AFC/ASTFC check was required, no scope document, models or input files were developed. An Ad Hoc Study Group was formed to review the SIS Report.

The granting of this request is not contingent upon any system upgrades or advancements. There are however direct assignment facilities required. The direct assignment facilities include the following:

- The construction of a 138 KV loop feed from the existing tap point
- The construction of a 138 KV ring bus at the station

The conceptual cost estimate for the direct assignment facilities is \$3,100,000 USD. The TO has determined that these facilities will be in place prior to the TSR start date if engineering starts 10 months prior to the TSR start date.

1.1 Conclusion

Neither a powerflow analysis nor an ATC/AFC/ASTFC check was performed as part of the SIS by the ITO. However, a study was performed by the TO and direct assignment facilities were identified. The total cost estimate for direct assignment facilities is \$3,100,000 USD. This cost estimate will be further refined in the Facility Study.