

TSR-LGE-2016-005
TSR #82479926
System Impact Study Report
Executive Summary

PROPRIETARY

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1. Executive 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 to determine the impact of this TSR on the transmission network, to determine if any transmission constraints prohibit granting the requested service and to identify any limiting constraints. This report documents that SIS.

**Table 1-1
 Request Details**

Assign Ref	POR	POD	MW	TS Increment	TS Type	Request Type	Start Time	Stop Time	Q-Time
82479926	PJM	LGEE	3	Yearly	Network	Original	07/31/2016 23:00:00 CS	07/31/2035 23:00:00 CS	03/23/2016 14:27:43 CS

As shown in Table 1-1, TSR #82479926 (TSR LGE-2016-005) is a yearly network request for 3 MW (per Network Integration Transmission Service [NITS] application and email instructions received from the customer).

This is a fast track TSR. No Ad Hoc Study Group was formed and no flowgate analysis was performed in accordance with the LG&E and KU TSR Study Criteria document posted on the LG&E and KU Open Access Same-Time Information System (OASIS). Also no off-peak analysis was performed as part of this fast track study.

As given in the LG&E and KU TSR Study Criteria Document, posted on the LG&E and KU OASIS, TSR SISs include both near-term and out year models. Due to the nature of the NITS application, the subject TSR was evaluated using 2016 summer and winter peak, and 2026 summer and winter peak power flow models based on the LKE 2017 Base Case Study (BCS) r20160304 models (2017 BCS models).

All appropriate prior queued transactions were modeled prior to modeling of the subject request. Representation of these earlier queued requests may also have necessitated the representation of associated planned transmission improvements. Thus, it is important to note that, if the planned improvements do not come to fruition, the subject request's impact on the transmission system as identified by this study may become invalid and a revised study may become necessary before transmission service can be granted.

1.1 Summary of Power Flow Analysis Results

1.1.1. Thermal Constraints

No system intact or contingency thermal constraints, due to the subject request, were found.

1.1.2. Voltage Constraints

No system intact or contingency voltage constraints, due to the subject request, were found.

1.1.3. Flowgate Constraints

No flowgate analysis was performed since this TSR SIS was performed under the fast track TSR SIS methodology.

1.2 Summary of ATC/AFC/ASTFC Check Results

Since the subject request starts within the OASIS Available Transfer Capability (ATC)/Available Flowgate Capability (AFC)/Available Share of Total Flowgate Capability (ASTFC) posting horizon, an ATC/AFC/ASTFC check was performed. No ATC, AFC, and ASTFC constraints, due to the subject request, were found.

1.3 Conclusion

No thermal or voltage constraints have been identified for the subject TSR. Also no ATC, AFC or ASTFC constraints have been identified for the subject TSR.

LG&E and KU has determined that there will be no direct assignment facilities associated with this request. Since there are no constraints and no direct assignment facilities, there was no need for LG&E and KU to provide a non-binding planning level cost estimate and no facilities study is needed.

The full report is available on LG&E and KU Critical Energy Infrastructure Information (CEII) File Transfer Protocol (FTP) site. See study report title posting on OASIS for instructions for accessing LG&E and KU CEII FTP site. LG&E and KU secure CEII FTP site URL is: <https://eft.lge-ku.com/EFTClient/Account/Login.htm>.