# Long-term Firm Transmission Service Task Force (LFTSTF)
# Final Proposal Report

November 30, 2015

## Issue Summary

The study and assignment of reinforcement costs for projects in the New Services Queue are coordinated together regardless of the type of project. This requires that the analytical methods, dispatch, and thresholds for participation in the designation of transmission reinforcement requirements be coordinated so as to provide a means to allocate costs for the final upgrades. Due to the current methodology by which the impacts of different projects are calculated, there is an opportunity for certain types of projects, specifically Long Term Firm Transmission Service, to avoid participation in the calculations which establish the need for reinforcements. The aggregation of the impacts from multiple Long Term Transmission Service Requests would require reinforcement where the individual projects are not assigned the need. This would result in base line studies identifying the need for transmission reinforcements which are caused by the aggregation of the Long Term Transmission Service Request impacts to the system, thereby requiring load customers and Transmission Owners to fund future upgrades as a result. The goal of this Task Force was to investigate whether or not PJM manual changes were needed to properly address transmission system impacts identified in the RTEP process that are caused by Long-term Firm Transmission Service requests.

This stakeholder group met six (6) times from June to November 2015 and developed a single proposal to be considered for adoption by the Planning Committee. The proposal was approved by acclimation with zero objections or abstentions.

Problem Statement and Issue Charge
Problem Statement brought forward by PJM Staff
Problem Statement/Issue Charge approved at the Planning Committee on June 11, 2015

## 1. Recommended Proposal

The recommended proposal addresses issues pertaining to the study of Long-term Firm Transmission Service requests in the RTEP process and the ability for constraints caused by these service requests on PJM internal facilities to be borne by the Transmission Owner and load customer, rather than by the queue request customer. The proposal makes modifications to four main areas – the Base Case and Queue study modeling parameters, the distribution factor and line rating thresholds used to determine the need for facility upgrades, Base Case and Queue study methodologies, and the incorporation of the Capacity Import Limit study constraints in the Long-term Firm Transmission Service studies.

Related to Base Case and Queue Study modeling parameters, the following changes will be incorporated:

Base Case Studies

a. Model reservations explicitly (individual generator(s) as applicable)
b. Model imports and exports at 100%

c. Reduce imports and exports that back off overloads to a percentage based on historical utilization (currently ~65%) to reduce the counterflow of confirmed service for generation deliverability and common mode outage testing. This utilization percentage shall be updated periodically by PJM to be implemented in the Base Case studies for any study year.
d. Model the Capacity Benefit Margin at each seam based on percentages determined during initial Base Case development

Queue Studies
a. Model all existing service as above (service which had been modeled for the base case development & studies)
b. Model all queue requests at 100% (import and export) to determine individual impacts
c. Model the Capacity Benefit Margin

Related to the thresholds used to identify constraints, a 3% distribution factor or a 3% rating will be used across all transmission voltages for external facilities. This is a change from the previous use of a 5% distribution factor and 5% line rating used on voltages less than 500 kV, and the use of a 10% distribution factor and a 5% line rating on voltages greater than 500 kV.

The study methodology used to evaluate Long-term Firm Transmission Service requests is largely unchanged; however, the modeling assumptions used in those study will have changed as a result of the input changes described above.

Previously, the Capacity Import Limit study results were not incorporated into the Long-term Firm Transmission Service queue request studies. This proposal will change that by incorporating provisions to test and upgrade Capacity Import Limit (CIL) impacted facilities during the queue studies. To do this, the most recent CIL study constraints will be used as a reference. If the proposed long-term firm service has greater than or equal to a 3% distribution factor impact on any of those facilities that were identified in the CIL study, the full impact of the transmission service on that facility using the distribution factor and MW quantity of the transmission service will be used to determine the final loading of that facility. All valid constraints identified at that point will require mitigation by the queue customer.

## Appendix II: Supplemental Documents

[Replace with a bulleted list of hyperlinks to key stakeholder process documents posted on the PJM website. Ex.: Options and Solutions Matrix, Governing Document Revisions (OA, Tariff, RAA draft language), etc.]

## Appendix III: Stakeholder Participation

[Provide a list of participants here including name, company, and sector.]

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