



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

November 30, 2015
(Updated December 4, 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 acclamation 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

Facilitator: Scott Baker

Secretary: Brinda Malladi

PJM Subject Matter Expert: Aaron Berner

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 counter flow of confirmed service for generation deliverability and common mode outage testing. This utilization percentage shall be updated annually 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% line rating will be used across all transmission voltages for internal PJM facilities when studying a transmission service import as well as being used for external facilities when reviewing transmission service exports or imports. 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 when reviewing impacts to internal facilities.

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

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

[Manual 14A revisions](#)

[Manual 14B revisions](#)

[Final Solutions Matrix](#)



Appendix III: Stakeholder Participation

Last Name	First Name	Company
Adams	Chris	East Kentucky Power Cooperative, Inc.
Ali	Shadab	PPL Electric Utilities
Allen	William	Commonwealth Edison Company
Barker	Jason	Exelon Business Services Company, LLC
Brodbeck	John	EDP Renewables North America, LLC
Danis	Deral	Clean Line Energy Partners
Davis	Connie	City of Cleveland, DPU, Div of Cleveland Public Pwr
Dean	Kevin	McNees Wallace & Nurick LLC
De Geeter	Ralph	Maryland Pulic Service Commission
DeLosa	Joseph	DE Public Service Commission
Dugan	Chuck	East Kentucky Power Cooperative, Inc.
Engalla	Carla	Smart Wires
Erbrick	Michael	DhastCo, LLC
Filomena	Guy	Customized Energy Solutions, Ltd.
Fitch	Neal	NRG Power Marketing, LLC
Foladare	Kenneth	IMG Midstream LLC
Folmar	Vicki	Monitoring Analytics, LLC
Fuerst	Gary	American Transmission Systems, Inc.
Gass	Scott	PowerGem
Greening	Michele	Talen Energy Marketing, LLC
Hagaman	Derek	GT Power Group
Hoatson	Tom	West Deptford Energy, LLC
Hoatson	Tom	Riverside Generating, LLC
Idzior	Donald	Consumers Energy Company
Jablonski	James	Borough of Seaside Heights, New Jersey
Johnson	Carl	Customized Energy Solutions, Ltd.
Koehler	Nicolas	AEP Indiana-Michigan Transmission Company, Inc.
Kogut	George	New York Power Authority
Kopinski	John	ITC Mid-Atlantic Development LLC
Laios	Takis	Appalachian Power Company (AEP Generation)
Lemire	John	North Carolina Electric Membership Corporation



Mabry	David	McNees Wallace & Nurick LLC
Manning	James	North Carolina Electric Membership Corporation
Marton	David	FirstEnergy Solutions Corp.
Mason	Ray	ReliabilityFirst Corporation
McAlister	Lisa	American Municipal Power, Inc.
Mok	Alan	Duke Energy Kentucky, Inc.
Ning	Jiaxin	Virginia Electric & Power Company
Norton	Chris	American Municipal Power, Inc.
Patten	Kevin	Appalachian Power Company
Piasek	Thomas	IMG Midstream LLC
Pratzon	Dave	GT Power Group
Riedl	Brett	Exelon Generation Co., LLC
Sasser	Jonathan	Customized Energy Solutions, Ltd.
Scarpignato	David	Calpine Energy Services, L.P.
Seide	Richard	Apex Clean Energy
Stuchell	Jeff	FirstEnergy Solutions Corp.
Wang	Tingting	Appalachian Power Company
Whitehead	Jeffrey	Direct Energy Business Marketing, LLC
Wisersky	Megan	Madison Gas & Electric Company
Yeh	Eric	Baltimore Gas and Electric Company
York	Katherine	Tennessee Valley Authority
Yu	Joel	Rockland Electric Company
Zhao	Rongda	Dominion Virginia Power LLC