



# Manual 2: Transmission Service Request

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- Periodic review
- Administrative changes
  - New PJM manual template applied
- Align Long Term Firm (LTF) process language with proposed Tariff changes
  - Initial Study replaced by Firm Transmission Feasibility Study

- Fixed hyperlinks throughout document
- Contact information updated
- Several outdated / unnecessary reference documents removed
- Minor wording changes for clarity
- Exhibit 2: Purchasing Transmission Service Using OASIS
  - updated for accuracy and readability

- Proposed Tariff changes:
  - **No changes to the study process**
  - replace Initial Study with Firm Transmission Feasibility Study (FTFS)
  - FTFS report will include reinforcement plan and cost estimates
- Timeline for Tariff changes:
  - Endorsed by the Markets & Reliability Committee in December
  - Effective April 1, 2018

- Replaced Initial Study with FTFS throughout document
- Added clarity to Section 1.3.2 and Exhibit 4 under Section 3
  - LTF request within 18-month horizon evaluated based on ATC
  - Deleted sentence within Section 3.1 to align with this concept
  - **Consistent with current process**

- MIC
  - Informational 01/10/18
  
- PC
  - First Read 01/11/18
  - Endorsement 02/08/18
  
- MRC
  - First Read 01/25/18
  - Endorsement 02/22/18

Effective Date – April 1, 2018

# Appendix – Manual Redlines

## References

The references to other documents that provide background or additional detail directly related to The **PJM Manual for Transmission Service Request** are:

- Open Access Transmission Tariff (OATT) <http://www.pjm.com/directory/merged-tariffs/oatt.pdf>
- Open Access Transmission Tariff Accounting – Manual 27 <http://www.pjm.com/~media/documents/manuals/m27.ashx>
- PJM OASIS User Guide <http://www.pjm.com/markets-and-operations/etools/oasis/oasis-user-guide.aspx>
- PJM OASIS <http://oasis.pjm.com>
- PJM Regional Practices <http://oasis.pjm.com> <http://www.pjm.com/~media/etools/oasis/regional-practices-clean-pdf.ashx>
- NERC Available Transfer Capability Definitions and Determination — A framework for determining available transfer capability of the interconnected transmission network for a commercially viable electricity market, North American Electric Reliability Council – June, 1996.
- NERC Transmission Transfer Capability — A Reference Document for Calculating and Reporting the Electric Power Transfer Capability of Interconnected Electric Systems, North American Electric Reliability Council, May 1995.
- Standards and Communication Protocols for Open Access Same-Time Information System, September 10, 1996, (appended to Order No. 889, Final Rule, FERC, April 24, 1996).
- PJM Import Capability Study Procedure Manual, September 1, 1996
- GETO Procedures and Methods, May 1996
- PJM Sub-Area Capacity Emergency Transfer Limit (CETL) Methodology, January 24, 1997



## 1.3 Point-to-Point Transmission Service Requests

All Point-to-Point Transmission Service requests must be made on the PJM OASIS. Information including path-name, Point of Delivery, Point of Receipt, source, sink, time ~~block~~interval, capacity, capacity type, ~~begin~~start date/time and ~~end~~stop date/time must be identified with each request. More details on procedures for making a transmission service request via the PJM OASIS are contained in the PJM OASIS Users Guide at (<http://www.pjm.com/markets-and-operations/etools/oasis/oasis-user-guide.aspx>). In addition, a written application must be submitted to PJM for long-term firm requests.

### 1.3.1 OASIS Requests for Transmission Service

Eligible transmission customers use the PJM OASIS to request transmission service. Eligible customers must complete the appropriate Transmission Service Agreement (see “Applying for Authorization”) before transmission service requests can be made. The transmission customer must also register on OASIS in order to make requests for transmission service. The OASIS registration process and user instructions for the OASIS are included on the PJM OASIS Internet web page (<http://oasis.pjm.com>). The ~~steps~~process flow for the OASIS transmission service request ~~are~~is depicted on Exhibit 2. This is a simplified process flow which does not include all possible request statuses. Based on analysis, PJM may counter offer an amount less than the requested transmission service pursuant to Section 19.7 of the OATT.

### 1.3.2 Requests for Long-Term Firm Service

In addition to the online OASIS requests submission, requests for service 1 year or longer must contain a written application. As per the PJM OATT, requests can be made so long as the Eligible Customer has met the applicable requirements by the commencement of service. Below are the steps to obtain long-term firm transmission service:

- Step One - Customer makes request on OASIS.
- Step Two\* - PJM sends out an Initial Firm Transmission Feasibility Study Agreement (ISAF TFSA) and works with the customer to tender a Completed Application.
- Step Three - Upon execution of the ISAF TFSA and return of Application, PJM performs Initial the Firm Transmission Feasibility Study.
- Step Four - Based on the results of the Initial Firm Transmission Feasibility Study, PJM will either draft either a Transmission Service Agreement (TSA) or a Network Integration Transmission Service Agreement (NITSA) for the customer to execute, or tender a System Impact Study Agreement.

\* If the start and stop date of the request are contained entirely within the ATC horizon, the request is evaluated based on ATC.

## 1.5 Evaluation of Transmission Service Requests

Once a Transmission Service Request is received (“~~study~~ status = STUDY on OASIS”) the evaluation process begins. Each request for transmission service is evaluated by PJM to determine if there is sufficient capability to accept the request and ensure reliable service to all transmission customers.

Available Transfer Capability (ATC) is the capability remaining in the network above that which is already committed. The ATC process is administered by the Transmission Service Department. The ATC calculations are described in Section 2 of this manual.

All Transmission Service Requests are evaluated by PJM based on posted ATC and other reliability analysis. If there is available transmission capability and there are no known reliability problems, the transmission service request is ~~approved~~ accepted. Once PJM has accepted the request, the ATC posting is adjusted to reflect the new transmission service reservation. All requests for Long-Term Network or Point to Point Transmission Service are subject to the ~~Initial~~ Firm Transmission Feasibility Study process detailed in Section 3 of this manual.

## 1.5.1 PJM Methodology Contact and ATC Complaint Forum

PJM transmission customers, providers, and those wishing to offer comments, submit questions or complaints regarding the methodology or resulting ATC values posted, can do so by calling, or e-mailing ~~the PJM Member Relations Department~~. ~~The PJM Member Relations Department~~ can be reached at (610-666-8980) or <https://www.pjm.com/about-pjm/who-we-are/contact-us.aspx> ~~http://www.pjm.com/about-pjm/member-services.aspx~~. ~~select CONTACT INFORMATION and Member Services on the bottom right of the display~~. A PJM representative will respond to phone contacts within one business day and web submittals within one week. Responses will be made by letter, phone, or email. All communications received will be addressed and a formal response sent. If the response is deemed unsatisfactory, commenters can use the Dispute Resolution Process in Schedule 5 of the PJM Operating Agreement.

There is also a PJM ATC Methodology Contact document at: <ftp://ftp.pjm.com/oasis/ATC-Methodology-Contact.pdf>

## Section 3: ~~Initial~~ Firm Transmission Feasibility Study For Long Term Firm Transmission Service Request Evaluation Process

The PJM ~~Long Term Firm Initial~~ Firm Transmission Feasibility Study process is composed of four major parts:

- ATC Screening
- ~~ASTFC~~ Available Share of Total Flowgate Capability Screening
- Load Deliverability
- Generator Deliverability

These parts determine a centralized calculation for the entire PJM footprint. These studies encompass the multitude of assumptions and projections of expected internal and external conditions, such as system topology, generation dispatch, projected customer demands, as well as existing and future transactions. Transfer capability can vary significantly with changing system conditions. Modeled conditions are much more susceptible to change as the operating and planning horizons increase. For this reason, and to guard against unreliable system operations resulting from over-allocating the transmission system, additional studies are identified and performed pursuant to Part VI of the OATT. Failure of any portion of the process results in either a ~~rejection~~ denial of the request, or the need for further analysis. The process progresses according to an increasing level of both granularity and the breadth of system conditions in order to model future capability issues using both a deterministic and probabilistic approach.

## 3.1 ATC Screening

Once a long term transmission request has been made and the Initial Study Agreement (ISA) has been executed, evaluation of that request begins with an ATC screening. The ATC screening (if within ATC calculation horizon) indicates if sufficient transmission capability exists for the requested service. The following are used in the ATC screening: Power flow models

- Power flow models
- A fixed set of flowgates
- Existing reservations and previous queues under STUDY status
- NERC SDX data
- CBM and TRM on a flowgate basis

## 3.2 Available Share of Total Flowgate Capability (ASTFC) Screening

The ASTFC screening, if within the calculation horizon, will identify potential flowgate allocation violations to comply with the Congestion Management Process (ATTACHMENT 2) of the MISO/PJM Joint Operating Agreement and the Joint Reliability Coordination Agreement between PJM-Tennessee Valley Authority. ~~These agreements can be found at [http://www.pjm.com/library/governing\\_documents.aspx](http://www.pjm.com/library/governing_documents.aspx).~~

## 3.3 Load Deliverability

Long-Term Firm Point-to-Point Transmission Service must be deliverable to serve load in all sub-regions of PJM ~~during any system conditions~~, including during system emergencies and capacity deficiencies as if it were a generator within the PJM system.

## 3.5 ~~Initial Firm~~ Transmission Feasibility Study Screening Summary

Analysis indicating that service cannot be granted associated with any of the ~~Initial Firm~~ Transmission Feasibility Study (FTFS) screenings, will result in a need to complete a System Impact Study (SIS) before service can be accommodated. Due to the proximity to real-time, posted monthly firm ATC values at the time of the ~~Initial Study~~ FTFS will dictate the ability to accommodate transmission service for the next 18 months. Deliverability studies under the System Impact Study will be used to determine the ability to accommodate service beyond the ATC screening associated with the ~~Initial Study~~ FTFS.

The PJM SIS process can be found at: <http://www.pjm.com/~media/documents/manuals/m14a.ashx>

<http://www.pjm.com/~media/documents/manuals/m14b.ashx>

## 3.6 Next Steps

As noted in section 1.3.2, based on the results of the ~~Initial~~ Firm Transmission Feasibility Study, PJM will either draft ~~either~~ a Transmission Service Agreement (TSA) or a Network Integration Transmission Service Agreement (NITSA) for the customer to execute, or, if service cannot be granted, tender a System Impact Study Agreement. System Impact Studies and Facility Studies are described in the PJM Tariff, Section VI.