

Regional Transmission and Energy Scheduling Practices

Revision ~~12~~13

Effective Date: ~~July-January 26~~22, 20232026

Prepared by:

Transmission Service Department

PJM Interconnection, LLC



This page is intentionally left blank.

Table of Contents

Approval	1
Current Revision	2
Definitions	3
Section 1: Transmission Service Across the PJM Border	9
1.1 Requesting Transmission Service on the PJM OASIS.....	9
1.1.1 PJM Contact Information.....	9
1.1.2 Transmission Service Request Paths	10
1.1.3 Transmission Service Products	11
1.1.4 PORs and PODs	11
1.1.5 Requested and Min Accepted Capacity	12
1.2 Long-Term Firm Point-to-Point Transmission Service Requests	13
1.2.1 Rollover Rights.....	14
1.2.2 Right of First Refusal.....	14
1.2.3 Clarification of Transmission Service Queue for ATC	14
1.2.4 Deferring the Start of Service	15
1.2.5 Modifications to Receipt and Delivery Points for Long-term Firm Service - Redirects	15
1.2.5.1 Non-Firm Redirect	15
1.2.5.2 Firm Redirect	16
1.3 Short-Term Firm Point-to-Point Transmission Service Requests.....	16
1.3.1 Granting Partial Service for Short-term Firm Transmission Service Requests - Counteroffers.....	17
1.3.2 Modifications to Receipt and Delivery Points for Short-term Firm Service - Redirects.....	17
1.3.2.1 Non-Firm Redirect	18
1.3.2.2 Firm Redirect	18
1.3.2.3 RESERVED	18
1.3.2.4 RESERVED	18
1.4 Short-Term Non-Firm Point-to-Point Transmission Service Requests	18
1.4.1 Preemption and Right of First Refusal	19
1.4.1.1 Defender is a Transmission Service Request in ACCEPTED Status	20
1.5 Network Transmission Service Requests	20

1.5.1	Network External Designated	20
1.5.2	Network External Non-Designated	21
1.5.3	Spot Market Energy Imports (SPOT IN)	21
1.5.3.1	Retracting Unused Portion of SPOT IN Reservations	22
1.5.3.2	Background on Spot Market Energy Imports	22
1.5.4	Network Resources	23
1.5.5	Network External Load	23
1.5.6	Network Stipulated	23
1.5.7	Network Market Integration	23
1.6	Transmission Service Timings	24
1.7	Reservation Priorities for Granting Transmission Service	27
1.8	Time Block Conventions for Requests	27
1.9	On-Peak and Off-Peak Transmission Service Requests	27
1.10	Reserving but not Utilizing Transmission Service	28
1.10.1	Manual Release of SPOT IN Reservations	28
1.10.2	Automatic Release of SPOT IN Reservations	28
1.11	Allocation Process for Earliest Request Time	28
1.12	Posting Transactions for Resale	29
1.12.1	OASIS Postings	29
1.12.2	OFF-OASIS Resale	30
1.12.3	ON-OASIS Resale	30
1.12.4	Negotiating ON-OASIS Resales	31
1.12.5	Billing and Settlements	31
1.12.6	Special Considerations	32
1.12.7	Transfers	33
1.13	Submitting Request for Renewal	34
1.14	PJM Non-Firm Pricing and Discounting Policy	34
1.15	PJM Long-term/Short-term Firm Pricing Policy	34
1.16	Transmission Service Reservation Bidding and Displacement Process	35
1.17	Financial Transmission Rights (FTR)/Auction Revenue Rights (ARR)	35

1.18	Reserved.....	35
1.19	Policy for Rebating Transmission Service and Forgiveness of Congestion Charges.....	35
1.20	Early Termination or Annulment of Service.....	36
1.21	Interface Pricing.....	36
1.21.1	Mapping of Balancing Authorities to Interface Pricing Points.....	37
1.21.2	Standard Interface Pricing Point Determination.....	37
1.21.3	Non-Standard Interface Determination.....	37
1.22	Service Across Multiple Transmission Systems (SAMTS).....	37
1.22.1	SAMTS Request Process.....	38
1.22.2	Attestation and Reduction.....	38
Section 2: Interchange Scheduling.....		39
2.1	Overview of Interchange Scheduling.....	39
2.2	Interchange Scheduling Business Rules.....	39
2.2.1	PJM Contact Information.....	39
2.2.2	Interchange Schedule Timing Requirements.....	40
2.2.3	General Information.....	41
2.2.4	Ramp Limits.....	42
2.2.5	Ramp Limit Violations.....	43
2.2.6	Interchange Cap.....	44
2.2.7	OASIS Business Rules.....	44
2.2.8	Transmission Service Sliding.....	45
2.2.9	Financially Responsible Party (FRP) Approvals.....	48
2.2.10	Ramp Reservations.....	48
2.2.11	Dispatchable Interchange Schedules.....	49
2.2.12	Dynamic Transfers.....	49
2.2.13	Day-ahead Bids.....	51
2.2.14	PJM-MISO Coordinated Transaction Scheduling.....	51
2.2.15	Interface Limits.....	52
2.3	Interchange Approval Protocols.....	52
2.3.1	Data Requirements.....	52

2.3.2	Data Validations	53
2.3.3	Interchange Schedule Evaluation and Checkout.....	55
2.3.4	Dispatchable Interchange Schedule Evaluation and Checkout.....	55
2.3.5	Day-ahead Bid Evaluation and Checkout.....	56
2.3.6	PJM-MISO Coordinated Transaction Scheduling Evaluation and Checkout	56
2.4	Distribution of Interchange Information	56
2.5	Implementation of Interchange Information.....	56
2.6	Curtailment of Transmission or Recall of Energy	57
2.6.1	RESERVED	58
	RESERVED	59
2.6.2		59
2.6.3	RESERVED	59
2.6.4	RESERVED	59
2.6.5	RESERVED	59
2.6.6	RESERVED	60
2.6.7	RESERVED	60
2.6.8	RESERVED	60
2.6.9	Energy Recalls	60
2.6.10	Firm Pro-Rata Curtailment Methodology.....	61
2.6.11	Capacity-Backed Transactions	61
2.7	Tagging Priority Codes	61
Section 3: Ancillary Services		63
Section 4: RTOR Elimination		64
4.1	Service Not Charged.....	64
4.2	Service Charged	64
4.3	Firm Service.....	64
4.4	Redirects.....	64
4.4.1	Redirect on Non-Firm Basis (Non-Firm Secondary).....	64
4.4.2	Redirect on Firm Basis	65
4.4.3	Temporary Redirects on a Firm Basis	65

Revision History	66
Approval	1
Current Revision	2
Definitions	3
Section 1: Transmission Service Across the PJM Border	9
1.1 — Requesting Transmission Service on the PJM OASIS	9
1.1.1 — PJM Contact Information	9
1.1.2 — Transmission Service Request Paths	9
1.1.3 — Transmission Service Products	10
1.1.4 — PORs and PODs	10
1.1.5 — Requested and Min Accepted Capacity	11
1.2 — Long-Term Firm Point-to-Point Transmission Service Requests	12
1.2.1 — Rollover Rights	13
1.2.2 — Right of First Refusal	13
1.2.3 — Clarification of Transmission Service Queue for ATC	13
1.2.4 — Deferring the Start of Service	14
1.2.5 — Modifications to Receipt and Delivery Points for Long-term Firm Service – Redirects	14
1.2.5.1 — Non-Firm Redirect	14
1.2.5.2 — Firm Redirect	15
1.3 — Short-Term Firm Point-to-Point Transmission Service Requests	15
1.3.1 — Granting Partial Service for Short-term Firm Transmission Service Requests – Counteroffers	16
1.3.2 — Modifications to Receipt and Delivery Points for Short-term Firm Service – Redirects	16
1.3.2.1 — Non-Firm Redirect	17
1.3.2.2 — Firm Redirect	17
1.3.2.3 — RESERVED	17
1.3.2.4 — RESERVED	17
1.4 — Short-Term Non-Firm Point-to-Point Transmission Service Requests	17
1.4.1 — Preemption and Right of First Refusal	18
1.4.1.1 — Defender is a Transmission Service Request in ACCEPTED Status	19
1.5 — Network Transmission Service Requests	19

1.5.1	Network External Designated.....	19
1.5.2	Network External Non-Designated.....	20
1.5.3	Spot Market Energy Imports (SPOT_IN).....	20
1.5.3.1	Retracting Unused Portion of SPOT_IN Reservations.....	21
1.5.3.2	Background on Spot Market Energy Imports.....	21
1.5.4	Network Resources.....	22
1.5.5	Network External Load.....	22
1.5.6	Network Stipulated.....	22
1.5.7	Network Market Integration.....	22
1.6	Transmission Service Timings.....	23
1.7	Reservation Priorities for Granting Transmission Service.....	26
1.8	Time Block Conventions for Requests.....	26
1.9	On Peak and Off Peak Transmission Service Requests.....	26
1.10	Reserving but not Utilizing Transmission Service.....	27
1.10.1	Manual Release of SPOT_IN Reservations.....	27
1.10.2	Automatic Release of SPOT_IN Reservations.....	27
1.11	Allocation Process for Earliest Request Time.....	27
1.12	Posting Transactions for Resale.....	28
1.12.1	OASIS Postings.....	28
1.12.2	OFF OASIS Resale.....	29
1.12.3	ON OASIS Resale.....	29
1.12.4	Negotiating ON OASIS Resales.....	30
1.12.5	Billing and Settlements.....	30
1.12.6	Special Considerations.....	31
1.12.7	Transfers.....	32
1.13	Submitting Request for Renewal.....	33
1.14	PJM Non-Firm Pricing and Discounting Policy.....	33
1.15	PJM Long-term/Short-term Firm Pricing Policy.....	33
1.16	Transmission Service Reservation Bidding and Displacement Process.....	34
1.17	Financial Transmission Rights (FTR)/Auction Revenue Rights (ARR).....	34

1.18	Reserved	34
1.19	Policy for Rebating Transmission Service and Forgiveness of Congestion Charges	34
1.20	Early Termination or Annulment of Service	35
1.21	Interface Pricing	35
1.21.1	Mapping of Balancing Authorities to Interface Pricing Points	36
1.21.2	Standard Interface Pricing Point Determination	36
1.21.3	Non-Standard Interface Determination	36
1.22	Service Across Multiple Transmission Systems (SAMTS)	36
1.22.1	SAMTS Request Process	37
1.22.2	Attestation and Reduction	37
Section 2:	Interchange Scheduling	38
2.1	Overview of Interchange Scheduling	38
2.2	Interchange Scheduling Business Rules	38
2.2.1	PJM Contact Information	38
2.2.2	Interchange Schedule Timing Requirements	39
2.2.3	General Information	40
2.2.4	Ramp Limits	41
2.2.5	Ramp Limit Violations	42
2.2.6	Interchange Cap	43
2.2.7	OASIS Business Rules	43
2.2.8	Transmission Service Sliding	44
2.2.9	Financially Responsible Party (FRP) Approvals	47
2.2.10	Ramp Reservations	47
2.2.11	Dispatchable Interchange Schedules	48
2.2.12	Dynamic Transfers	48
2.2.13	Day-ahead Bids	50
2.2.14	PJM-MISO Coordinated Transaction Scheduling	50
2.2.15	Interface Limits	51
2.3	Interchange Approval Protocols	51
2.3.1	Data Requirements	51

2.3.2	Data Validations	52
2.3.3	Interchange Schedule Evaluation and Checkout	54
2.3.4	Dispatchable Interchange Schedule Evaluation and Checkout	54
2.3.5	Day-ahead Bid Evaluation and Checkout	55
2.3.6	PJM-MISO Coordinated Transaction Scheduling Evaluation and Checkout	55
2.4	Distribution of Interchange Information	55
2.5	Implementation of Interchange Information	55
2.6	Curtailment of Transmission or Recall of Energy	56
2.6.1	Non-Firm Over Secondary Points NPC	57
2.6.2	Non-Firm NPC	57
2.6.3	Network Import NPC	57
2.6.4	Spot Market Energy Imports (SPOT_IN)	57
2.6.5	Non-Firm Over Secondary Points WPC	57
2.6.6	Non-Firm WPC	58
2.6.7	Network Import WPC	58
2.6.8	Firm	58
2.6.9	Example of Recall of Energy	58
2.6.10	Firm	58
2.6.11	Curtailment of Capacity-backed Resources	59
2.7	Tagging Priority Codes	59
Section 3:	Ancillary Services	61
Section 4:	RTOR Elimination	62
4.1	Service Not Charged	62
4.2	Service Charged	62
4.3	Firm Service	62
4.4	Redirects	62
4.4.1	Redirect on Non-Firm Basis (Non-Firm Secondary)	62
4.4.2	Redirect on Firm Basis	63
4.4.3	Temporary Redirects on a Firm Basis	63
Revision History		64

Approval

Approval Date: MRC: ~~1/22/2026~~7/26/2023

Effective Date: ~~1/22/2026~~7/26/2023

Richard Souder, Manager
Transmission Service Department

Current Revision

~~V132~~ – ~~71/2622/2023~~2026

1. Approvals
 - a. Approval Date: MRC – ~~71/2622/2023~~2026
 - b. Effective Date: ~~71/2622/2023~~2026
2. Edits
 - a. Section 1
 - i. Section 1.1.1 – Fixed broken links
 - ii. ~~Definitions~~Section 1.1.4 - Fixed broken link to PJM source/sink combinations
 - iii. Section 1.2 – Fixed broken link
 - iv. Section 1.2.3 - Minor addition for clarification
 - v. Section 1.6 - Updated customer confirmation timings in accordance with new NAESB 4.0 requirements. Updated reseller response to rebid timings for consistency.
 - vi. Section 1.9 – Minor update for clarification
 - vii. Section 1.21.1 – Fixed broken links
 - b. Section 2
 - i. Section 2.2.4 - Minor update to clarify timing of ramp limit validations
 - ii. Section 2.6 - Administrative update to consolidate and reformat this entire section for clarity and consistency with interchange curtailment/recall procedures in Manual 13: Emergency Operations. No changes to PJM business processes.
 - iii. Section 2.7 – Removed redundant link. Product list is provided separately under section 1.1.3
 - a. —
 - b. ~~Added definitions for Application and Studies Agreement and Phase I System Impact Study in accordance with IPRTF~~
 - c. ~~Removed definition for Firm Transmission Feasibility Study in accordance with IPRTF~~
 - d. ~~Section 1~~
 - e. ~~Section 1.2 – Updated to reflect changes due to the IPRTF process~~
 - f. ~~Section 1.2.3 – Updated to reflect changes due to the IPRTF process~~

Definitions

Term	Definition
Adjacent Balancing Authority	Shall have the meaning provided in the NERC Reliability Standards
Affiliate	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Ancillary Service	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Application and Studies Agreement	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Assignee	Shall have the meaning provided in the NAESB Business Practice Standards
Arranged Interchange	Shall have the meaning provided in the NERC Reliability Standards
Auction Revenue Rights	Shall have the meaning provided in the PJM Operating Agreement
Available Flowgate Capability	Shall have the meaning provided in the NERC Reliability Standards
Available Transfer Capability	Shall have the meaning provided in the NERC Reliability Standards
Balancing Authority	Shall have the meaning provided in the NERC Reliability Standards
Capacity Resource	Shall have the meaning provided in the PJM Reliability Assurance Agreement.
Challenger	Shall have the meaning provided in the NAESB Business Practice Standards
Completed Application	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Confirmed Interchange	Shall have the meaning provided in the NERC Reliability Standards
Control Zone	Shall have the meaning provided in the PJM Operating Agreement

Term	Definition
Coordinated Transaction Scheduling	Shall have the meaning provided in the PJM Operating Agreement
Coordinated Request	Shall have the meaning provided in the NAESB Business Practice Standards
Counterparty	Shall have the meaning provided in the PJM Operating Agreement
CTS Bid	Shall have the meaning of “CTS Interface Bid” as provided in the PJM Operating Agreement
Curtailement	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Day-ahead Bid	A mechanism used for participating in PJM’s Day-ahead Market as outlined in Section 2.2.13 of this document
Day-ahead Market	Shall have the meaning of “Day-ahead Energy Market” as provided in the PJM Operating Agreement
Defender	Shall have the meaning provided in the NAESB Business Practice Standards
Dispatchable Interchange Schedule	As described in Section 2.2.11 of this document, the Interchange Schedule resulting from PJM’s economic dispatch of a Dispatchable Reservation and the associated Tag
Dispatchable Reservation	As described in Section 2.2.11 of this document, a mechanism by which a Market Participant may provide pricing criteria to PJM for the purpose of enabling the economic dispatch of an Interchange Schedule
Dynamic Schedule	Shall have the meaning provided in the PJM Operating Agreement
Dynamic Transfer	Shall have the meaning provided in the PJM Operating Agreement
Electric Industry Registry	Shall have the meaning provided in the NAESB Business Practice Standards
Financial Transmission Rights	Shall have the meaning provided in the PJM Operating Agreement
Firm	Shall have the meaning of “Firm Point to Point Transmission Service” as provided in the PJM Open Access Transmission Tariff

Term	Definition
Generation Control Area	Shall have the meaning of “Source Balancing Authority” as provided in the NAESB Business Practice Standards
Good Utility Practice	Shall have the meaning provided in the PJM Open Access Transmission Tariff
In Queue Ramp Reservation	A Ramp Reservation request, currently in violation of PJM’s net interchange ramp limit, but placed into queue for the purpose of continual evaluation against PJM’s net interchange ramp capability and potential approval if changing conditions allow
Independent Market Monitor	Shall have the meaning provided in the PJM Operating Agreement
Interface Pricing Point	Shall have the meaning provided in the PJM Operating Agreement
Interchange Distribution Calculator	Shall have the meaning of “NERC Interchange Distribution Calculator” as provided in the PJM Operating Agreement
Interchange Schedule	Shall have the meaning provided in the NERC Reliability Standards
Load Control Area	Shall have the meaning of “Sink Balancing Authority” as provided in the NAESB Business Practice Standards
Load Serving Entity	Shall have the meaning provided in the PJM Operating Agreement
Locational Marginal Price	Shall have the meaning provided in the PJM Operating Agreement
Long-Term Firm Point to Point Transmission Service	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Managed Encumbrance	Shall have the meaning provided in the NAESB Business Practice Standards
Market Monitoring Unit	Shall have the meaning provided in the PJM Operating Agreement
Market Operator	Shall have the meaning provided in the NAESB Business Practice Standards

Term	Definition
Market Participant	Shall have the meaning provided in the PJM Operating Agreement
Maximum Generation Emergency	Shall have the meaning provided in the PJM Operating Agreement
Merchant Transmission Facilities	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Minimum Accepted Capacity	A parameter contained within a Transmission Service Request for use by a Transmission Customer to indicate to PJM the minimum amount of Transmission Service the customer will accept in the event full capacity cannot be granted
Native Load Customer	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Net Scheduled Interchange	Shall have the meaning provided in the NERC Reliability Standards
Network Customer	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Network Integration Transmission Service	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Network Load	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Network Resource	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Non-Firm	Shall have the meaning of “Non-Firm Point to Point Transmission Service” as provided in the PJM Open Access Transmission Tariff
Non-Firm Redirect	A request or reservation to redirect Firm Point-to-Point Transmission service to a different POR and/or POD on a Non-Firm basis in accordance with section 22.1 of the PJM Open Access Transmission Tariff.
Open Access Same-Time Information System	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Phase I System Impact Study	Shall have the meaning provided in the PJM Open Access Transmission Tariff
PJM Region	Shall have the meaning provided in the PJM Operating Agreement

Term	Definition
PJM Settlement	Shall have the meaning provided in the PJM Operating Agreement
Point of Delivery	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Point of Receipt	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Point to Point	Shall have the meaning of “Point-To-Point Transmission Service” as provided in the PJM Open Access Transmission Tariff
Pre-Confirmed	Shall have the meaning of “Pre-Confirmed Application” as provided in the PJM Open Access Transmission Tariff
Pseudo-Tie	Shall have the meaning provided in the PJM Operating Agreement
Purchasing Selling Entity	Shall have the meaning provided in the NAESB Business Practice Standards
Ramp Reservation	A mechanism used by a Market Participant to reserve PJM net interchange ramp capability as described in Section 2.2.10 of this document
Regional Transmission Organization	Shall have the meaning provided in FERC Order 2000
Reliability Coordinator	Shall have the meaning provided in the NERC Reliability Standards
Reliability Pricing Model	Shall have the meaning provided in PJM Manual 18
Reseller	Shall have the meaning provided in the NAESB Business Practice Standards
Right of First Refusal	A Transmission Customer’s right to keep their existing service intact by responding to a preemption event with a request for additional service that will meet or exceed the duration of the challenging request
Short-Term Firm Point-to-Point Transmission Service	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Spot Market Energy	Shall have the meaning provided in the PJM Operating Agreement

Term	Definition
System Impact Study	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Tag	Shall have the meaning of “Electronic Tag” as provided in the NAESB Business Practice Standards
Tag Agent	Shall have the meaning of “e-Tag Agent Service” as provided in the NAESB Business Practice Standards
Tag Approval Service	Shall have the meaning of “e-Tag Approval Service” as provided in the NAESB Business Practice Standards
Tag Authority	Shall have the meaning of “e-Tag Authority Service” as provided in the NAESB Business Practice Standards
Total Transfer Capability	Shall have the meaning provided in the NERC Reliability Standards
Transition Date	Transition Date is the later of: (i) the effective date of PJM’s Docket No. ER22-2110 transition cycle filing seeking FERC acceptance of Tariff, Part VII (which is January 3, 2023) or (ii) the date by which all AD2 and prior queue window Interconnection Service Agreements or wholesale market participation agreements have been executed or filed unexecuted.
Transmission Customer	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Transmission Loading Relief	Shall have the meaning provided in the PJM Operating Agreement
Transmission Operator	Shall have the meaning provided in the NERC Reliability Standards
Transmission Owner	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Transmission Provider	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Transmission Service	Shall have the meaning provided in the PJM Open Access Transmission Tariff
Transmission Service Request	A request for Transmission Service on the PJM OASIS that <u>is not</u> in CONFIRMED status.
Transmission Service Reservation	A reservation for Transmission Service on the PJM OASIS that <u>is</u> in CONFIRMED status.

Term	Definition
Transmission Service Provider	Shall have the meaning provided in the NERC Reliability Standards
Transmission System	Shall have the meaning provided in the PJM Open Access Transmission Tariff

Note:

Please note the certain terminology under the PJM Open Access Transmission Tariff and this Manual may change effective as of the Transition Date. The Transition Date is the later of: (i) the effective date of PJM's Docket No. ER22-2110 transition cycle filing seeking FERC acceptance of Tariff, Part VII (which is January 3, 2023) or (ii) the date by which all AD2 and prior queue window Interconnection Service Agreements or wholesale market participation agreements have been executed or filed unexecuted. Because this second condition happened last, this date establishes the Transition Date.

Section 1: Transmission Service Across the PJM Border

1.1 *Requesting Transmission Service on the PJM OASIS*

1.1.1 PJM Contact Information

Requests for cross-border Transmission Service are made on the PJM Open Access Same-Time Information System (OASIS). For assistance with submitting a request, or for clarification on the PJM Regional Transmission and Energy Scheduling Practices ("Regional Practices" or "Business Practices"), contact PJM's OASIS Administrators.

- For general information about the PJM OASIS: <http://oasis.pjm.com>
- For detailed information on how to navigate the PJM OASIS, see the user guide at: [OASIS User Guide](#)
- For technical information on how to utilize the OASIS API, including references to custom PJM templates, see the API guide at: [OASIS API Guide](#)
- For OASIS Data Elements and their detailed descriptions, see the [OASIS Data Dictionary](#)

PJM Member Relations: (610) 666-8980 or custsvc@pjm.com

OASIS Administrators: oasisadmin@pjm.com

1.1.2 Transmission Service Request Paths

Requests for cross-border Transmission Service can be submitted via the PJM OASIS application (<https://pjmoasis.pjm.com>) on any posted path. All reasonable commercial paths can be posted with Available Transfer Capability (ATC) and requests for paths that are not already posted may be submitted to an OASIS Administrator via the contact information listed in Section 1.1.1. Paths may be updated without notice due to the addition of Transmission Customer-requested paths, the deletion of inactive paths, the modifications necessary for transmission modeling purposes, or the modifications required to accommodate Merchant Transmission Facilities. A current list of paths is available in the PJM OASIS application via the *list* template. Path names conform to the requirements outlined in the North American Energy Standards Board (NAESB) WEQ 001-6 standard. Paths are listed according to the following structure: Region/Transmission Provider/Path/(Optional)From-To. If a path spans more than one NERC region, the POD will determine the NAESB region code shown in the path structure.

NAESB WEQ Standards can be found on the NAESB website: http://www.naesb.org/weq/weq_standards.asp

1.1.3 Transmission Service Products

The transmission products available on the PJM OASIS are:

Type	Class	Subclass	Periods
FACILITY	FIRM	RIGHTS	Full
FACILITY	NON-FIRM	RIGHTS	Full
FACILITY	FIRM	PRIMARY	Full
FACILITY	NON-FIRM	PRIMARY	Full
FACILITY	FIRM	RELEASED	Full
FACILITY	NON-FIRM	RELEASED	Full
NETWORK	FIRM	DESIGNATED	Full
NETWORK	FIRM	LOAD	Full
NETWORK	FIRM	MKT_INT	Full
NETWORK	FIRM	STIPULATED	Full
NETWORK	NON-FIRM	NON-DESIGNATED-NPC	Full, on-peak, off-peak
NETWORK	NON-FIRM	NON-DESIGNATED-WPC	Full, on-peak, off-peak
NETWORK	NON-FIRM	SPOT-IN	Full
POINT_TO_POINT	FIRM	GRANDFATHERED	Full
POINT_TO_POINT	FIRM		Full
POINT_TO_POINT	NON-FIRM	NPC	Full, on-peak, off-peak
POINT_TO_POINT	NON-FIRM	WPC	Full, on-peak, off-peak
POINT_TO_POINT	SECONDARY	NPC	Full
POINT_TO_POINT	SECONDARY	WPC	Full

*Note: Secondary Products will be discussed in Sections 1.2.5.1 and 1.3.2.1.

A current list of available products is available on the [OASIS](#). Product availability for each Transmission Customer is dependent on the execution of an appropriate PJM Open Access Transmission Tariff (OATT) service agreement.

1.1.4 PORs and PODs

The PORs and PODs listed on the PJM OASIS are:

- **ALTE** – Alliant Energy (East)
- **ALTW** – Alliant Energy (West)
- **AMIL** – Ameren (Illinois)
- **CIN** – Cinergy Corporation
- **CPLE** – Carolina Power & Light (East)
- **CPLW** – Carolina Power & Light (West)
- **DUK** – Duke Energy

- **IPL** – Indianapolis Power & Light
- **LGEE** – LG&E Energy
- **MEC** – MidAmerican Energy
- **MECS** – Michigan Electric Coordinated System
- **NIPS** – Northern Indiana Public Service
- **NYIS** – New York Independent System Operator
- **PJM** – PJM Interconnection
- **TVA** – Tennessee Valley Authority
- **WEC** – Wisconsin Energy Corporation

A current list, including PORs and PODs associated with Merchant Transmission Facilities, is available on the OASIS.

- Effective April 22, 2013 PJM eliminated internal sources and sinks from fixed and dispatchable transactions on OASIS.
- For more details about OASIS source and sink combinations, please see the OASIS reference [page-file](http://www.pjm.com/markets-and-operations/etools/oasis/oasis-reference.aspx) at: [OASIS Transmission Path Source/Sink Values](http://www.pjm.com/markets-and-operations/etools/oasis/oasis-reference.aspx)~~http://www.pjm.com/markets-and-operations/etools/oasis/oasis-reference.aspx~~

All Transmission Customers may request service or view Total Transfer Capability (TTC) on the OASIS; however, cross-border Network Integration Transmission Service (NITS) requests specifically must be submitted on the PJM OASIS by the Load Serving Entity (LSE) responsible for serving its share of Network Load. All data must be supplied, including source and sink, in order for the request to be evaluated.

The process of responding to Short-term Firm, Non-Firm, and Network-External-Non-Designated Transmission Service Requests is automated and performed by PJM's OASIS.

1.1.5 Requested and Min Accepted Capacity

PJM does not counteroffer short-term service requests; instead, PJM offers an alternate approach via the use of Minimum Accepted Capacity that is better aligned with the PJM Market. Customers enter the minimum amount of capacity they are willing to accept as part of their initial request for service (*Min Accepted* on the user interface; *CAPACITY_MINIMUM* as a template data element). This streamlines the request process for PJM customers and removes the delays inherent to the traditional counteroffer process. A Minimum Accepted Capacity value is required for Pre-Confirmed requests.

On the PJM OASIS, the customer indicates, in a single submission, both the amount of service the customer wishes to secure and the minimum amount of capacity the customer will accept when ATC is limited. Since PJM requires Minimum Accepted Capacity as an up-front data input and does not accept counteroffers, requests with a status of REBID will not be permitted.

Table 1.1.5: Requested and Minimum Accepted Capacity

Desired Amount of Transmission Service	Requested Capacity Value	Min Accepted Capacity Value	PJM Response		
			<i>ATC >= Capacity Requested</i>	<i>Capacity Requested > ATC >= Min Accepted</i>	<i>ATC < Min Accepted</i>
All or nothing	Full Capacity	Full Capacity	Grant full capacity requested.	Grant no capacity.	
Any amount up to capacity requested	Full Capacity	0	Grant full capacity requested.	ATC available on path up to Full Capacity requested	N/A
Specified range of capacity	Full Capacity	Minimum acceptable capacity	Grant full capacity requested.	Grant all remaining path capability (up to Capacity Requested).	Grant no capacity.

1.2 Long-Term Firm Point-to-Point Transmission Service Requests

Long-term Firm (LTF) Point-to-Point Transmission Service Requests (a period of one year or longer as defined in Section 13.1 of the PJM OATT) will be granted on a first-come, first-served basis as outlined in Tariff, Section 13.2 and Tariff, Parts VII and VIII, as applicable. All requests must begin on the first day of a calendar month and Transmission Customers must submit the request on the PJM OASIS at least 60 days in advance of the month in which the service is to commence. PJM will respond to the Transmission Customer within 30 days of receipt of the Completed Application and will either accept the request, refuse the request, or tender an Application and Studies Agreement. If the request is accepted, the Transmission Customer must either confirm the request or withdraw the request. If an Application and Studies Agreement is tendered, the Transmission Customer must execute the agreement within 15 days, and provide the required Study and Readiness Deposits. Failure by the Transmission Customer to take the described actions will result in the withdrawal and termination of the request by PJM.

Firm Point-to-Point Transmission Customers may be eligible for Auction Revenue Rights (ARRs) in the ARR/FTR Market up to the MW level of the Transmission Service Reservation. For information on requesting ARR or FTR see the following resources.

- PJM Manual [M-6: Financial Transmission Rights](#)
- FTR Center tool [FTR Center](#)
- Financial Transmission Rights web page [Financial Transmission Rights](#)

1.2.1 Rollover Rights

Transmission Customers with existing LTF service have the right to rollover/renew that service prior to the end of service. Although the NAESB Business Practice Standards provide for a mechanism that allows Transmission Customers to waive their Rollover Rights, PJM does not accommodate this option. Eligible LTF requests will receive applicable Rollover Rights by default, and if those rights are not desired, the Transmission Customer may forfeit them by choosing not to renew their service by the deadline listed below.

Minimum Term of Service and Deadline for Renewal

The minimum term of service and the deadline for requesting renewal of service change as a result of FERC Order 890.

- A five-year minimum contract term is required in order for a Transmission Customer to be eligible for rollover rights
- In order to be eligible for a subsequent rollover, a Transmission Customer must agree to another five-year contract term or, if necessary, to match any longer-term competing request. Rollover rights must be exercised no later than one year prior to the end of an eligible Transmission Service Reservation's five-year contract term.

1.2.2 Right of First Refusal

If PJM receives a new request for long-term service that cannot be accommodated without completing a System Impact Study, Transmission Customers with rollover rights may need to defend those rights. Existing service with a shorter duration than the new request will have a Right of First Refusal (ROFR) and the customer may immediately renew existing service to keep their rollover rights, or instead, forfeit their rollover rights. The existing Transmission Customer's rollover must meet the minimum 5-year contract term and at least match the duration and price of the competing request for new service.

If a competing request is received, PJM will notify the existing Transmission Customer. Within 30 days of notification, the existing Transmission Customer must either notify PJM by email that it intends to exercise its rollover rights as described above or enter a renewal request on the OASIS. If the Transmission Customer fails to notify PJM or enter a renewal request by the deadline, the Transmission Customer's rollover rights shall be forfeit.

1.2.3 Clarification of Transmission Service Queue for ATC

Notwithstanding the Right of First Refusal, new long-term requests for service compete based on queue timestamp, not duration. New long-term (1 year or more) requests for service [within the ATC horizon](#) are

reviewed based on queue timestamp. In an example where a second queued reservation is longer than the first, the request with the earlier timestamp would still take priority.

A new long-term request for service may preempt an existing long-term reservation's rollover rights as described in Section 1.2.2. The existing reservation has Right of First Refusal. If the existing reservation's owner is notified of a competing request and that owner does not exercise the rollover rights associated with the existing reservation, then the new Transmission Customer's request can be granted.

1.2.4 Deferring the Start of Service

In the event that the required studies, the execution of legal agreements, or other unforeseen circumstances infringe upon the requested start date of a long-term reservation, PJM will defer the start of that reservation. PJM will perform this deferral without requiring Transmission Customer actions or input via the OASIS. The original Transmission Service Request will be modified in a manner that ensures the minimum contract term continues to be met and the eligibility for rollover rights is preserved.

1.2.5 Modifications to Receipt and Delivery Points for Long-term Firm Service - Redirects

Section 22 of the PJM OATT provides that a Transmission Customer taking Firm Point-to-Point service may modify its receipt and delivery points, i.e. redirect its service, on either a Non-Firm or a Firm basis. All redirects shall be treated as a new request for service in accordance with Section 17 of PJM OATT (Procedures for Arranging Firm Point-to-Point Transmission Service) except that the Transmission Customer shall not be obligated to pay any additional deposit if the requested redirect capacity does not exceed the amount reserved in the existing Transmission Service Reservation. Section 4 of these practices documents the impact of Regional Through and Out Rate (RTOR) Elimination on redirected service.

1.2.5.1 Non-Firm Redirect

A Long-term Firm Point-to-Point Transmission Customer may request to redirect their service to a different POR and/or POD on a Non-Firm basis (Non-Firm Redirect) in accordance with section 22.1 of the PJM OATT. The Non-Firm Redirect shall not exceed the unused capacity of the Firm reservation. Non-Firm Redirects will not be assessed a Non-Firm Point-to-Point service charge.

A Transmission Customer requesting a modification of the POR and POD of a Firm service request on a Non-Firm basis must adhere to the following:

- The Transmission Customer must have CONFIRMED Firm Transmission Service.
- The Transmission Customer must submit a Secondary, Non-firm request on the OASIS.
- The new request(s) must be Pre-Confirmed.
- The Transmission Customer must enter the Firm OASIS Number in the 'Related Reference' field on the new request.

1.2.5.2 Firm Redirect

A Long-term Firm Point-to-Point Transmission Customer may request a Firm redirect (different POR and/or POD) in amounts not to exceed the unused capacity of the Firm reservation, on a permanent or temporary basis. A **temporary redirect** is one that does not transfer rollover rights. A **permanent redirect** is (a) one that transfers rights including rollover to the redirected Transmission Service Reservation, (b) forfeits rights including rollover on the existing reservation upon confirmation of the redirect, (c) starts at a future time within the existing reservation start and end times and (d) ends on the end date of the existing reservation.

A Transmission Customer requesting a modification of the POR and POD on a Firm basis must adhere to the following:

- The Transmission Customer must have CONFIRMED Firm Transmission Service.
- The Transmission Customer must submit a day, week, month, or year Firm request on the OASIS.
- The request(s) must be Pre-Confirmed.

1.3 Short-Term Firm Point-to-Point Transmission Service Requests

The duration of Short-Term Firm (STF) Point-to-Point Transmission Service shall be one day, one week, or one month as defined in Section 13.1 of the PJM OATT. All requests for STF service submitted during the initial window will be deemed to have been queued simultaneously as defined in Section 1.11 of this document. Request deadlines for STF service can be found in the table in Section 1.6.

Per Section 6 of the FERC-approved Congestion Management Process Master Document, which PJM honors as part of various interregional agreements, both ATC and Available Share of Total Flowgate Capability (ASTFC) limitations will be respected when PJM evaluates a request for Short-term Firm service.

Monthly STF Transmission Service Reservations may be preempted by new LTF requests if insufficient capacity exists to grant the LTF request. The monthly STF reservation remains eligible for preemption up to two months prior to the start of service. These monthly STF reservations will not have a Right of First Refusal, and preemption will occur on a last-in/first-out basis. Monthly service requested less than two months prior to the start of service will not be subject to preemption by LTF requests.

Although PJM OATT Section 13.2 protects STF reservations from preemption by longer-term STF requests, a request in ACCEPTED status may still be preempted by a Pre-Confirmed STF request of equal duration. In this scenario, preemption is handled automatically by PJM's OASIS and requires no action by the impacted Transmission Customers.

When posted ATC is insufficient to grant full service to a Challenger, preemption will be initiated as long as the Challenger is Pre-Confirmed. All Challengers may opt-out of triggering a preemption event, if desired. The

options available for waiving the initiation of a preemption event are dictated by the NAESB Business Practice Standards and are outlined in PJM's OASIS User Guide.

When multiple Defender Transmission Service Reservations are involved in a preemption event, PJM will rank those Defenders per the criteria established in the NAESB Business Practice Standards. PJM will first preempt the lowest-ranked Defender and then continue preempting Defenders until the Challenger request has been satisfied or the list of Defenders has been exhausted.

When the preemption process is complete, PJM will attempt to restore preempted capacity to impacted Defenders by using excess preempted capacity, if available. Excess capacity will be distributed to the ranked Defenders from highest priority to lowest priority. Transmission Customers may globally opt-out of this restoration via settings available in the OASIS application.

When a Defender reservation is partially preempted by a Challenger, the capacity granted to that Defender is reduced as long as the Defender's Minimum Accepted Capacity is not violated by the capacity reduction. Despite this change to the capacity profile, the Defender TSR remains in ACCEPTED status and may still be confirmed by the Transmission Customer. On the other hand, when a Defender is fully preempted, or when the remaining capacity on a partially-preempted Defender cannot satisfy the Minimum Accepted Capacity, the Defender TSR is set to SUPERSEDED status and cannot be confirmed.

1.3.1 Granting Partial Service for Short-term Firm Transmission Service Requests - Counteroffers

If a Firm Transmission Service Request exceeds the remaining Firm ATC for a path, the Transmission Customer may elect to receive partial service for the remaining Firm ATC as described in section 1.1.5 Requested and Min Accepted Capacity.

1.3.2 Modifications to Receipt and Delivery Points for Short-term Firm Service - Redirects

Section 22 of the PJM OATT provides that a Transmission Customer taking Firm Point-to-Point service may modify its receipt and delivery points, i.e. redirect its service, on either a Non-Firm or a Firm basis. All redirects shall be treated as a new request for service in accordance with Section 17 of PJM OATT (Procedures for Arranging Firm Point-to-Point Transmission Service) except that the Transmission Customer shall not be obligated to pay any additional deposit if the requested redirect capacity does not exceed the amount reserved in the existing Transmission Service Reservation. Section 4 of these practices documents the impact of Regional Through and Out Rate (RTOR) Elimination on redirected service.

1.3.2.1 Non-Firm Redirect

A Short-term Firm Point-to-Point Transmission Customer may request to redirect their service to a different POR and/or POD on a Non-Firm basis in accordance with section 22.1 of the PJM OATT. The Non-Firm Redirect shall not exceed the unused capacity of the Firm reservation. Non-Firm Redirects will not be assessed a Non-Firm Point-to-Point service charge.

A Transmission Customer requesting a modification of the POR and/or POD of a Firm service request on a Non-Firm basis must adhere to the following:

- The Transmission Customer must have CONFIRMED Firm Transmission Service.
- The Transmission Customer must submit a Secondary, Non-firm request on the OASIS.
- The new request(s) must be Pre-Confirmed.
- The Transmission Customer must enter the Firm OASIS Number in the 'Related Reference' field on the new request.

1.3.2.2 Firm Redirect

A Short-term Firm Point-to-Point Transmission Customer may request a Firm redirect (different POR and/or POD) in amounts not to exceed the unused capacity of the Firm reservation.

A Transmission Customer requesting a modification of the POR and POD on a Firm basis must adhere to the following:

- The Transmission Customer must have CONFIRMED Firm Transmission Service.
- The Transmission Customer must submit a day, week, or month Firm request on the OASIS.
- The request(s) must be Pre-Confirmed.

1.3.2.3 RESERVED

1.3.2.4 RESERVED

1.4 Short-Term Non-Firm Point-to-Point Transmission Service Requests

The duration of Short-Term Non-Firm Point-to-Point Transmission Service shall be one hour, one day, one week, or one month as defined in Section 14.1 of the PJM OATT. All requests for Non-Firm service submitted

during the initial window will be deemed to have been queued simultaneously as defined in Section 1.11 of this document. Request deadlines for Non-Firm service can be found in the table in Section 1.6.

PJM offers Non-Firm products with a variation of Not-willing-to-Pay-Congestion (NPC) or Willing-to-Pay-Congestion (WPC) attributes as listed in Section 1.1.3. Non-Firm Customers identify the desire to pay through congestion by choosing the WPC product. Alternately, schedules utilizing NPC reservations will be curtailed in the event of a constraint on the PJM System that generates congestion on the reservation path. If a curtailment occurs, a pro-rata share of the Non-Firm reservation charges will be credited back to the Transmission Customer during each hour that PJM curtails the Interchange Schedule.

Non-Firm Point-to-Point WPC and NPC Transmission Service is limited to the posted ATC amount. ATC values are updated and posted every hour, usually no-later than 20 minutes after the top of the hour. If reserved Transmission Service is not used, a portion of the unused capacity may be re-posted as Non-Firm ATC. More information on ATC calculations can be found in Attachment C of the PJM OATT.

1.4.1 Preemption and Right of First Refusal

When insufficient capacity exists on a posted path to satisfy a newly-submitted request for service (a Challenger Transmission Service Request), a preemption event will be automatically triggered and immediately processed by PJM's OASIS.

For all preemption event types listed below, the Defender request/reservation will be set to SUPERSEDED status when either:

- The Defender is fully preempted by the Challenger Transmission Service Request
- The remaining capacity on a partially-preempted Defender cannot satisfy the Minimum Accepted Capacity

When insufficient ATC is posted to grant full service to a Challenger, a preemption event will be initiated if the Challenger is Pre-Confirmed. All Challengers have the ability to opt-out of triggering a preemption event, if desired. The options available for waiving the initiation of a preemption event are dictated by the NAESB Business Practice Standards and are outlined in PJM's OASIS User Guide.

When multiple Defenders are involved in a preemption event, PJM will rank those Defenders per the criteria established in the NAESB Business Practice Standards. Regardless of the number of Defenders that have been identified, PJM will begin by preempting the lowest-ranked Defender and continuing until the Challenger Transmission Service Request has been satisfied or the list of Defenders has been exhausted.

After a preemption event has been finalized, PJM will attempt to restore preempted capacity to impacted Defenders by using excess preempted capacity, if available. Excess capacity will be distributed to the ranked Defenders from highest priority to lowest priority. Transmission Customers may globally opt-out via settings available in the OASIS application.

1.4.1.1 Defender is a Transmission Service Request in ACCEPTED Status

Non-Firm Point-to-Point Transmission Service Requests in ACCEPTED status may be preempted by Pre-Confirmed Network requests, regardless of duration, or Point-to-Point requests of equal or longer duration. When partially preempted by a Challenger, the capacity that was previously granted to a Defender will be reduced accordingly, but the Defender will only stay in ACCEPTED status if the Minimum Accepted Capacity is not violated by the capacity reduction. Despite this change to the capacity profile, the Defender request may still be confirmed by the Transmission Customer.

1.5 Network Transmission Service Requests

1.5.1 Network External Designated

This service is defined as network transmission use by PJM LSEs to serve load from designated resources located outside the PJM Balancing Authority. Each use of cross-border network transmission capability to deliver designated resources to serve PJM designated load must be requested on the PJM OASIS by the load serving company or a PJM Network Customer importing installed Capacity Resources into the PJM Balancing Authority. When a Network Customer requests a designated Network Resource it must demonstrate that it owns generation, or it must demonstrate that it has an executed contract to purchase the generation, or that it has a contract contingent upon receiving Transmission Service. (Reference PJM OATT Section 30.2)

Network Customers intending to import external designated resources into PJM shall follow these conditions:

1. Refer to PJM Manual 18, PJM Capacity Market, Section 4.2.2, Existing Generation Resources-External when planning to import external generation capacity into PJM. Please direct any questions to RPM_Hotline@pjm.com.
2. Submit a Network External Designated request on the PJM OASIS indicating the designated resource in the request's LINKED_RESOURCES data element. Enter the designated resource name.

Network Customers are eligible to receive ARRs as described in Section 3 of PJM Manual 06: Financial Transmission Rights.

Per FERC Order 890 Paragraph 1293, Network Customers may not redirect network service.

Network Customers who intend to deliver designated resources shall follow the conditions in accordance with Section 30.7 of the PJM OATT.

1.5.2 Network External Non-Designated

This service is defined as network transmission use by PJM LSEs to serve load from non-designated resources located outside the PJM Balancing Authority. This service must be requested on the PJM OASIS by the load serving company.

Network Customers should identify the desire to pay through congestion by choosing a product of NPC or WPC, see Section 1.4 for an example. NPC reservations with schedules will be curtailed in the event of a constraint on the PJM System.

Network External Non-Designated Transmission Service will be granted up to the amount requested, limited to the posted ATC amount.

Network External Non-Designated Transmission Service Requests in ACCEPTED status may be preempted by Pre-Confirmed Network External Non-Designated requests of equal or longer duration. The rules and process outlined in Section 1.4.1 are applicable.

1.5.3 Spot Market Energy Imports (SPOT_IN)

On the PJM OASIS, 'SPOT_IN' is listed as a product. A reservation of this product represents the capability allocated to a PJM Market Participant for use in delivering Spot Market Energy to the PJM border. A user of the SPOT_IN product does not have possession of PJM Transmission Service. PJM delivers these Spot Market Energy import transactions from the border to load via secondary NITS (non-designated) on behalf of PJM LSEs. The following principles apply to the SPOT_IN product:

1. Users of the SPOT_IN product do not hold Transmission Service rights on the PJM Transmission System and are not necessarily PJM Network Customers. The following principles apply:
 - a. Users of the SPOT_IN product are not charged for Transmission Service.
 - b. Users of the SPOT_IN product do not have any Transmission Service rights.
 - c. Users of the SPOT_IN product may not exercise practices reserved for Network Customers such as changing the designation of Network Resources.
 - d. Users of the SPOT_IN product may not exercise practices reserved for Point-to-Point Transmission Customers, such as redirecting or reselling service.
 - e. The source and sink of SPOT_IN requests must be set to a PJM interface (because delivery is taken at the border).
 - f. The deadlines to request to hold and/or release interface capacity for the SPOT_IN product may vary from the deadlines that apply to Transmission Customers.
2. PJM accepts offers from Market Participants to deliver Spot Market Energy to the border using the SPOT_IN product. This product then becomes a service to the PJM LSEs. The following principles apply:
 - a. Imports using the SPOT_IN product are accepted as price takers in the real-time market. The Market Participant is paid for the energy at the Interface Pricing Point designated for the interface where the energy is delivered and cannot set real-time price. Imports using the SPOT_IN product can set Day-ahead price.

- b. The source and sink are not selectable and are set to the Interface Pricing Point for the path specified.
 3. Interface capability is used to support Spot Market Energy Imports using the SPOT_IN product.
 - a. In order to properly account for use of interface capability and to provide transparency, imports using the SPOT_IN product are listed on the OASIS.
 - b. Market Participants who wish to import using the SPOT_IN product must first request that PJM hold interface capability based on ATC.
 - c. PJM limits the magnitude of imports using the SPOT_IN product based on ATC. ATC is allocated on a first-come-first served basis like a Network Customer taking secondary NITS. These SPOT_IN reservations on the OASIS represent NITS taken by the LSEs, and not the Market Participant. (The user of the SPOT_IN product is listed as the Transmission Customer on the PJM OASIS due to limitations of NAESB WEQ-002).
 4. The SPOT_IN product may be preempted.
 - a. SPOT_IN requests in ACCEPTED status may be preempted by Pre-Confirmed Network requests of any duration or Point-to-Point and SPOT_IN requests of equal or longer duration.
 - b. The rules and process outlined in Section 1.4.1 are applicable.

1.5.3.1 Retracting Unused Portion of SPOT_IN Reservations

PJM will evaluate SPOT_IN reservations to determine schedule usage and will return the unused portion back as Non-Firm ATC for other participants to reserve. After SPOT_IN reservations have been confirmed for 2 hours, reservations made for the next day will be evaluated. If the reservations have been used on a Tag, PJM will reduce the capacity granted value to match the profile of the Tag. If the reservations have not been scheduled at all, PJM will annul the reservation entirely. For reservations that are requested for the same day, users of the SPOT_IN product have 30 minutes from the queued timestamp to schedule; afterwards, PJM will retract unscheduled capacity by reducing the capacity granted for partially scheduled reservations to the Tag profile or annulling reservations that have not been scheduled.

1.5.3.2 Background on Spot Market Energy Imports

PJM introduced the concept of Spot Market Energy imports using the SPOT_IN product with the PJM energy market on April 1, 1997 (Marginal Clearing Price). The SPOT_IN product was created as an option for non-LSEs to offer Spot Market Energy into PJM at the border/interface as price takers, therefore reducing the marginal cost of energy to load. Spot Market Energy imports are delivered to LSEs using secondary NITS (non-designated) the same way energy from an interconnected, energy only, generation resource is delivered to load. The energy is delivered using the LSEs secondary NITS. In 2007, a placeholder for Spot Market Energy imports was added to the OASIS to add transparency and to properly account for the impacts of this NITS on flowgates external to the PJM Transmission System (in accordance with PJM's joint operating agreements (JOA)). Monthly, Weekly, and Daily SPOT_IN are not offered.

1.5.4 Network Resources

The qualifications for NITS, Reliability Pricing Model (RPM) Capacity Resources, and secondary NITS (Non-Firm network) vary as described below:

- **NITS** – The Network Resource must be non-recallable. A unit specific Capacity Resource qualifies. It is the firmness of a power purchase contract, not the presence or absence of a make a liquidated damages provision that determines the eligibility of that power purchase to be designated as a Network Resource. Inclusion of a make whole provision does not disqualify a contract from qualifying as a Network Resource (FERC Order 890).
- **RPM** – RPM resources must be a non-recallable, unit specific, Capacity Resource (iron in the ground). Firm products that include a liquidated damages provision do not qualify
- **Secondary NITS** – Any import to PJM by an LSE can be considered secondary NITS.

1.5.5 Network External Load

This service is defined as network transmission use by PJM LSEs to serve pseudo-tied load external to PJM's footprint from resources located inside the PJM Balancing Authority (Section 31.3 of the PJM OATT). Each use of network transmission capability to deliver internal resources to serve external PJM-designated load must be requested on the PJM OASIS by the load serving company. The timing requirements and transmission priority pertaining to Network External Designated service will apply.

1.5.6 Network Stipulated

This service is defined as network transmission use for the purpose of serving load physically located inside the PJM Balancing Authority from resources located outside the PJM Balancing Authority. Each use of network transmission capability for this purpose must be pre-arranged and requires the identification of circumstances that prevent the use of Designated or Non-Designated network service. This service will be subject to specific stipulations referenced in the executed Network Integration Transmission Service Agreement. Renewals of this service, when permitted, may be requested on the PJM OASIS by the load serving company. The timing requirements and transmission priority pertaining to Network External Designated service will apply.

1.5.7 Network Market Integration

This service is defined as network transmission use by PJM LSEs to serve load from resources located outside the PJM Balancing Authority. Each use of network transmission capability for this purpose must be arranged to meet the specific requirements surrounding a PJM market integration effort. Renewals of this service, when permitted, may be requested on the PJM OASIS by the load serving company. The timing requirements and transmission priority pertaining to Network External Designated service will apply.

1.6 Transmission Service Timings

The table below highlights the Transmission Service Request timing information.

All times listed in the chart below are **EPT** (Eastern Prevailing Time).

PJM Member Relations: (610) 666-8980 Email: oasisadmin@pjm.com

Deadline Type	Time Period	Short-Term Firm Point-to-Point / Network External Designated	Non-Firm Point-to-Point / Network External Non-Designated	SPOT_IN Reservations (Section 1.5.3)	Secondary Non-Firm Point-to-Point
Earliest Request <i>(amount of time prior to commencement of service)</i>	Monthly	00:00, 1st calendar day, 17 months before the date	00:00, 60 calendar days before the date	Not Available	00:00, 60 calendar days before the date
	Weekly	00:00, 14 days before the date	00:00, 14 days before the date	Not Available	00:00, 14 days before the date
	Daily	00:00, 7 days before the date	00:00, 3 business days before the date	Not Available	00:00, 3 business days before the date
	Hourly	Not Offered	08:00, day before the date	09:00, day before the date	08:00, day before the date
Latest Request <i>(amount of time prior to commencement of service)**</i>	Monthly	00:00, 14 days before the date	00:00, 2 business days before the date	Not Available	00:00, 2 business days before the date
	Weekly	00:00, 7 days before the date	30 hours before the date	Not Available	30 hours before the date
	Daily	14:00, business day before	14:00, day before	Not Available	14:00, day before
	Hourly	Not Offered	0 minutes	0 minutes	0 minutes
Provider Response <i>(within this amount of time after receiving request)</i>	Monthly	7 business days	12 hours	N/A	12 hours
	Weekly	2 business days	4 hours	N/A	4 hours
	Daily	4 business hours	30 minutes	N/A	30 minutes
	Hourly	Not Offered	15 minutes	N/A	15 minutes

Deadline Type	Time Period	Short-Term Firm Point-to-Point / Network External Designated	Non-Firm Point-to-Point / Network External Non-Designated	SPOT_IN Reservations (Section 1.5.3)	Secondary Non-Firm Point-to-Point
Customer Confirmation <i>(within this amount of time after response)</i>	Monthly	15 days after the accept date OR 12:00 EPT prior to the start of service after PJM accepts the request. Whichever deadline is applicable based on start date of the request.	24 hours	N/A	24 hours
	Weekly		24 hours	N/A	24 hours
	Daily		2 hours	N/A	2 hours
	Hourly		30 minutes / 5 -10 minutes*	30 minutes / 5 -10 minutes*	30 minutes / 5 -10 minutes*
Simultaneous Start Window <i>(time frame in which all reservations are considered received simultaneously from Earliest Request)</i>	YEARLY	30 minutes	N/A	N/A	N/A
	MONTHLY	30 minutes	5 minutes	N/A	N/A
	WEEKLY	30 minutes	5 minutes	N/A	N/A
	DAILY	30 minutes	5 minutes	N/A	N/A
	HOURLY	N/A	5 minutes	5 minutes	N/A
Automatic Release of Service <i>(If not associated with an accepted Tag by the listed deadline, the service may be refused any time after the specified deadline. See Section 1.10)</i>					
	HOURLY (service reserved before the day of service)†	N/A	N/A	2 hours after queued timestamp	N/A
	HOURLY (service reserved on the day of service)†	N/A	N/A	30 minutes after queued timestamp	N/A

Deadline Type	Time Period	Short-Term Firm Point-to-Point / Network External Designated	Non-Firm Point-to-Point / Network External Non-Designated	SPOT_IN Reservations (Section 1.5.3)	Secondary Non-Firm Point-to-Point
Manual Release of Service <i>(The latest time by which a customer may voluntarily release service relative to commencement of service. See Section 1.10)</i>	YEARLY THROUGH DAILY	N/A	N/A	N/A	N/A
	HOURLY (service reserved before the day of service)	N/A	N/A††	Up to 2 hours after queued timestamp	N/A
	HOURLY (service reserved on the day of service)	N/A	N/A††	Up to 30 minutes after queued timestamp	N/A
Reseller Response to Rebid¶	RESALES only:				
	YEARLY	4 hours	N/A	N/A	N/A
	MONTHLY	4 hours	4 hours		
	WEEKLY	4 hours	4 hours		
	DAILY	4 hours‡	10-30 minutes		
	HOURLY	N/A	10-30 minutes§		

* Requests queued more than 8 hours prior to start get 30 minutes. All others get ~~5-10~~ minutes.

** In cases where the Customer Confirmation deadline would fall beyond the start of service, the Latest Request Time for non-Pre-Confirmed requests may be slightly earlier to ensure that confirmation will occur before the start of service.

† For Spot-In service, the “day-before” release deadline will only apply until 23:00 EPT on the day before the start of the reservation, after which, the “day-of” deadline will apply.

†† Manual release of service does not apply to NITS or Point-to-Point service. Point-to-Point service cannot be released. Network Customers cannot release service but can undesignate a Network Resource (per 30.3 of the OATT) which may result in annulment of service.

‡ 4 hours OR 30 minutes if queued less than ~~24-8~~ hours prior to start of service

§ ~~10-30~~ minutes OR ~~5-10~~ minutes if queued less than ~~24-8~~ hours prior to the start of service

¶ The Reseller Response to Rebid time shall not exceed the Provider Response time or the time to commencement of service.

1.7 Reservation Priorities for Granting Transmission Service

Below is a list of available Transmission Service types, in order of priority from first to last granted:

1. Long-Term Firm Point-to-Point Transmission Service and Network External Designated Transmission Service shall be available on a first-come, first-served basis or on a continuation basis (see the discussion of rollover rights in Section 1.2.1). Long-Term Firm Point-to-Point Transmission Service and Network External Designated Transmission Service have the same priority as Network Customers and Native Load Customers. Long term service is defined as service of one year or more.
2. Short-Term Firm Point-to-Point Transmission Service and Network External Designated Transmission Service are available on a first-come, first-served basis based on the durations defined in Section 1.3 of this document.
3. Network External Non-Designated service used to serve Network Load from non-designated resources has a higher priority than Non-Firm service requests. Network WPC requests will have priority over network NPC requests.
4. Non-Firm Point-to-Point Transmission Service will be available in durations from one hour to one month requests. Higher priority is assigned to requests of longer duration. Non-Firm WPC requests will have priority over Non-Firm NPC requests.

Note: WPC requests have priority over NPC requests.

1.8 Time Block Conventions for Requests

Monthly Transmission Service Requests will be submitted on a calendar-month basis. Weekly requests will begin Monday hour 00:00 and will end the following Monday hour 00:00. Daily requests will be submitted by calendar-day. Begin time and end time are posted using the '24-hour clock' convention.

1.9 On-Peak and Off-Peak Transmission Service Requests

PJM offers on-peak and off-peak Non-Firm Transmission Service in addition to the full term Non-Firm Transmission Service. On-peak is defined as Monday-Friday, hours 07:00-23:00 (24-hour clock) with NO exceptions for holidays. Off-peak is defined as Monday-Friday, hours 23:00-07:00 (24-hour clock), and all day Saturday and Sunday. ~~If you submit~~To clarify, a daily off-peak request for ~~one a~~ week-day, ~~that request~~ would include hours 00:00-07:00 (24-hour clock) and hour 23:00.

1.10 Reserving but not Utilizing Transmission Service

PJM's external Market Monitoring Unit, Monitoring Analytics, will monitor and document the continued reservation but under-utilization of Transmission Service. After-the-fact (older than 8 days) Interchange Schedules associated with Transmission Service Reservations can be found in the PJM OASIS.

1.10.1 Manual Release of SPOT_IN Reservations

Market Participants who requested and were granted SPOT_IN reservations but no longer expect to sell Spot Market Energy to PJM should release said service by emailing the OASIS hotline at oasisadmin@pjm.com. The received date of the email will be used to determine if the request to manually release service was received prior to the deadline. See Section 1.6 of these Regional Practices for the deadlines for release of SPOT_IN.

1.10.2 Automatic Release of SPOT_IN Reservations

Per Section 1.6 of the Regional Practices, PJM will retract SPOT_IN reservations that have not been associated with a confirmed/implemented Tag with an energy profile greater than 0 MW and that has been confirmed on OASIS. Service may be refused any time after the specified automatic release deadline. If a portion of service has been scheduled, the unused amount will be reduced on the Transmission Service Reservation. For reservations that have not been scheduled at all, the entire reservation will be annulled.

1.11 Allocation Process for Earliest Request Time

The allocation process pertains to all short-term service with a Section 1.6 Earliest Request time in accordance with Sections 17.8 and 18.3 of the PJM OATT.

If a path is constrained (i.e. the number of requests submitted exceed the ATC posted): PJM will accept requests from the Earliest Request time defined in Section 1.6, on a proportional basis, up to the amount of posted ATC. For purposes of determining whether existing capability is adequate to accommodate a request for Transmission Service, all requests for new Transmission Service received during the initial period as specified in Section 1.6 will be deemed to have been queued simultaneously based on the following limitation:

Multiple requests for Transmission Service by a Transmission Customer (this includes any of the Transmission Customer's Affiliate companies) will be aggregated as a single request for purposes of this determination, and its aggregated share of Transmission Service will be apportioned among its requests on a pro-rata basis.

The allocation will be based on the total number of requests, not the amount of capacity requested. Only one offer per company (and Affiliates) per contract path will be included in the allocation of ATC, and the amount of ATC allocated will not exceed the amount of the request.

Starting at the first valid time of submittal (after calculations are made for the allocation), PJM will begin responding to Network External Non-Designated and Non-Firm requests by placing them in either ACCEPTED or REFUSED status. PJM will respond to Firm and Network External Designated requests by placing them in STUDY or REFUSED status. Requests that do not comply with the requirements set forth in this document will be set to REFUSED status. If ATC remains after the allocation process, requests will be reviewed on a first-come, first-served basis.

The allocation of requests will be based on contract path and time block selected.

If ATC is insufficient to grant Transmission Service Requests in full and ATC is greater than the request's specified Minimum Accepted Capacity, then the Transmission Customer will be granted as much ATC as possible. If no minimum is defined, the Transmission Customer will be granted as much ATC as possible. If ATC is less than the request's Minimum Accepted Capacity, then the Transmission Service Request will be refused.

Example (submittals from 14:00 to 14:30):

100 MW of ATC exists on a path, Customer A asks for 25 MW (no minimum specified), Customer B asks for 50 MW (min amount = 15 MW), and Customer C has two requests: 50 MW and 70 MW (both have min=40 MW). Since only one request per customer per related path will be considered for allocation, it is assumed that Customer C wants 120 MW.

The allocated ATC is determined by dividing the amount of ATC posted by the number of Transmission Customers making service requests (100 MW/3 customers = 33 MW/customer). Since Customer C has specified a minimum of 40 MW, and desires no less than that amount, both requests will be REFUSED. Since Customer A will accept any allocated amount, and since the minimum amount defined for Customer B is less than the allocation, requests from both customers will be reviewed. The process of determining the ATC allocation is done again, this time with only the remaining valid Transmission Customers (100 MW/2 customers = 50 MW/customer). Customer A will receive 25 MW, Customer B will receive 50 MW, and the remaining 25 MW will be posted.

1.12 Posting Transactions for Resale

Customers may not resell to themselves. Instead, the Consolidation function serves this purpose, as described in the NAESB WEQ-001 standard and the PJM OASIS User Guide.

1.12.1 OASIS Postings

Confirmed Firm and/or Non-Firm Point-to-Point Transmission Service may be resold at any price. The resale must be posted on the PJM OASIS before the commencement date, and the buyer must have a signed

Transmission Service agreement in place in order to purchase a resale transaction. Service may be resold in smaller increments or partial capacity, e.g. daily service resold as hourly, and the resale holds the same priority as the original reservation priority. To accommodate the Resale transaction keeping the same priority as the Transmission Service Reservation from which it was resold, PJM does not permit the OFFER_INCREMENT to deviate from the SERVICE_INCREMENT. For example, monthly service may be resold for only one-hour, if desired, but both the OFFER_INCREMENT and SERVICE_INCREMENT of the Resale must still be MONTHLY. Resale requests must be made in full-hour increments. Any ancillary charges will be passed proportionately to the resale transaction from the original.

The following Transmission Service is not eligible for resale under Part II of the OATT:

- Grandfathered. Grandfathered service will depend on the existing grandfathered agreement to determine if service can be resold.
- SPOT_IN
- NITS

1.12.2 OFF-OASIS Resale

The Reseller is required to post the resale transaction to the PJM OASIS. Bilateral transactions may be completed off the PJM OASIS but must be reported by posting on the PJM OASIS before commencement of service. The parties to this transaction must have filed with PJM an executed PJM OATT Attachment A-1 agreement, prior to confirming on the PJM OASIS. These agreements must specify the length of the agreement. The order in which the steps must occur is:

1. Executed PJM OATT Attachment A-1 agreement received by PJM
2. Reseller posts the transaction on the PJM OASIS
3. Assignee must Confirm the service
4. Assignee may schedule the service

If an executed PJM OATT Attachment A-1 agreement does not exist, then an OFF-OASIS transaction cannot be confirmed.

The seller of an Off-OASIS transaction shall place the transaction in ACCEPTED status and await confirmation by the Buyer.

If a Reseller completes resale transactions for more capacity than it can support through existing, owned Transmission Service Reservations, PJM shall bill the Reseller for both after-the-fact service and an overuse penalty.

1.12.3 ON-OASIS Resale

The Assignee is required to initiate the resale transaction on the PJM OASIS. Resales that are conducted through the PJM OASIS have the following fields defined: Primary Provider is always PJM, Seller is the company reselling the service (who initially bought it from PJM), and Customer is the new/potential Assignee. The Assignee initiates a new reservation request as "RESALE" on the PJM OASIS to communicate to the

potential Reseller the request is in process. Once an Assignee posts this request, the status is set to QUEUED and the offer goes into negotiations between the Assignee and the Reseller.

1.12.4 Negotiating ON-OASIS Resales

The Reseller and Assignee may negotiate the transaction details on the PJM OASIS, and each are required to respond at the appropriate stages, by the deadlines set forth in Section 1.6. If the Reseller agrees with the request as is, it must (1) change the status to ACCEPTED or (2) update the relevant fields and set the request to COUNTEROFFER. If accepted, the Assignee can then decide, after completing an executed PJM OATT Attachment A-1 agreement, to set its request to CONFIRMED to complete the resale. In the case of a counteroffer, the Assignee submits an updated request to the Reseller. In the event that the Reseller or Assignee didn't follow basic guidelines in regard to the Primary Provider's Regional Practices, the Primary Provider may cancel the transaction and set the status to ANNULLED. The request stays in the COUNTEROFFER status until both parties agree on the capacity, price, and start/stop times. Once confirmed, the Assignee can begin scheduling on the reservation, or may resell it to another party.

1.12.5 Billing and Settlements

The rate for resales of Point-to-Point Transmission Service is not capped.

Resales shall be settled and billed by PJM Interconnection L.L.C, and PJM Settlement Inc. as the Counterparty. PJMSettlement shall bill the Reseller in full for the original transaction at the PJM OATT rate. PJMSettlement shall bill the Assignee at the rate agreed upon with the Reseller and PJMSettlement shall credit the Reseller at that same rate.

In the event that Interchange Schedules associated with either the original or resale reservations are curtailed by PJM, Transmission Customers will be billed only for the non-curtailed portion of the capacity.

Example 1:

- Company A purchased 120 MW from PJM
- Company A sold Company B 50 MW and scheduled energy on the remaining 70 MW
- Company B scheduled 50 MW -- this was not curtailed or was curtailed by someone other than PJM
- Company A is charged for 120 MW @ PJM OATT rate
- Company A is credited for 50 MW resold at rate agreed between Reseller and Assignee
- Company B is charged for 50 MW at the rate agreed between Reseller and Assignee

Example 2:

- Company A purchased 120 MW from PJM
- Company A sold Company B 50 MW and scheduled energy on the remaining 70 MW
- Company B scheduled 50 MW -- this was all curtailed by PJM
- Company A is charged for 70 MW @ PJM OATT rate
- Company A receives no credit from the resale
- Company B receives no charge

Example3:

Company A purchased 120 MW from PJM
Company A sold Company B 50 MW and scheduled energy on the remaining 70 MW
Company B scheduled 50 MW -- 25 curtailed by PJM
Company A is charged for 95 MW @ PJM OATT rate
Company A is credited for 25 MW resold at the rate agreed between Reseller and Assignee
Company B is charged for 25MW at the rate agreed between Reseller and Assignee

Capacity-based Ancillary Service charges (reactive and black start) shall be assessed based on the amount of capacity retained.

Example 4:

Company A purchased 120 MW from PJM
Company A sold Company B 50 MW and scheduled energy on the remaining 70 MW
Company B scheduled 50 MW -- this was not curtailed or was curtailed by someone other than PJM
Company A is charged for capacity-based Ancillary Service charges for the 70 MW retained
Company B is charged for capacity-based Ancillary Service charges for the 50 MW

Example 5:

Company A purchased 120 MW from PJM
Company A sold Company B 50 MW and scheduled energy on the remaining 70 MW
Company B scheduled 50 MW -- 25 MW was curtailed by PJM
Company A is charged capacity-based Ancillary Service charges for the 70 MW retained
Company B is charged capacity-based Ancillary Service charges for the 25 MW of non-curtailed capacity

PJM shall bill, as appropriate, for resales that have no corresponding original Transmission Service Reservation. PJM shall either 1) create an after-the-fact reservation that corresponds to the resale, and charge the Reseller at the PJM OATT rate or 2) apply a penalty for overuse, if applicable.

1.12.6 Special Considerations

Only when the offer and bid prices match may a Reseller accept a request, and likewise, only when offer and bid prices match may an Assignee confirm an accepted request. A Reseller may post a resale offer on the PJM OASIS without an intended Assignee.

Point-to-Point reservations that have been previously resold or redirected may be resold.

Point-to-Point reservations may be combined for resale. The reservations being combined must be for the same product, path, and Reseller. Reservations that are themselves previous resale or redirect service transactions cannot be combined into a new resale transaction, but may be resold in separate transactions.

Renewal rights, if any, are not conveyed in a resale (per NAESB WEQ 001-11.1.4).

PJM will charge the Assignee of a resale Ancillary Service charges. The Reseller will not be charged unless the Assignee of the resale fails to make payment. If PJM curtails the use of Transmission Service, Ancillary Service and Transmission Service charges will not be applied to scheduled portion of the curtailed service.

According to the current practices in Schedules 7 and 8 of the PJM OATT, the Reseller shall pay the higher of the congestion or Transmission Service charge. This discount shall not apply to resale transactions. Resale Assignees shall pay the full amount of the congestion charge and the resale rate.

The Reseller retains any existing ARRs.

1.12.7 Transfers

Subject to the limitations below, assignee may request the transfer of all or part of a confirmed monthly or yearly point-to-point reservation held by a reseller to themselves.

- Resales and Consolidations may not be transferred.
- A Transmission Service agreement must be executed by both the Reseller and the Assignee before PJM confirms the transfer of service.
- Requests for Transfer of transmission service must be submitted by the assignee on the OASIS.
- The transfer shall be the same increment as the parent.
- The transfer must end on the same date as its parent reservation.
- The transfer must be agreed to by the reseller, assignee and PJM.
- Upon confirmation, the reseller transfers **all rights and obligations** associated with its confirmed monthly or yearly reservation, including renewal and/or revenue rights to the assignee.
- Service may be transferred in smaller duration or partial capacity as described in section 1.12.1.
- Transfers shall retain all the same Transmission Service attributes, Transmission Service priority, and PORs and PODs of the Parent Reservation.

Upon confirmation of the Transfer on OASIS, the Reseller is released from the financial obligation to the Transmission Provider for the capacity granted over the time period of that Transfer and those financial obligations are conveyed to the Assignee.

Additional information may be obtained from the NAESB OASIS SC&P Implementation Guide (www.naesb.org) reference WEQ-013-2.6.7, FERC Order 890, Paragraphs 808-825, or by contacting PJM Member Relations at 610-666-8980 or by emailing oasisadmin@pjm.com.

1.13 Submitting Request for Renewal

A Transmission Customer has the option to renew LTF service as stated in Section 2.2 of the PJM OATT. A Transmission Customer requesting a renewal of a LTF (Point-to-Point or Network External Designated) reservation must adhere to the following:

- The Transmission Customer must have CONFIRMED Firm Transmission Service.
- The Transmission Customer must submit a new request on the OASIS that has a request type of Renewal.
- The Transmission Customer must enter the LTF OASIS Number in the 'Related Reference' field on the new request.

Acceptance of LTF Service Without Renewal Rights

PJM will limit approvals of requests for Transmission Service, including rollover Transmission Service, so as to not exceed the lesser of the sum of the thermal or stability capabilities of the tie lines that interconnect the parties with which PJM has an executed JOA, provided that Firm Transmission Customers with renewal rights retain the rollover rights and reservation priority granted to them under the PJM OATT, and further provided that if explicitly stated in the applicable service agreement, a party may limit rollover rights for new LTF service if there is not enough Available Flowgate Capability (AFC) to accommodate rollover rights beyond the initial term (Midwest ISO/PJM JOA, Section 5.1.7.c).

1.14 PJM Non-Firm Pricing and Discounting Policy

The charges for Non-Firm Point-to-Point Transmission Service are listed in Schedule 8 of the PJM OATT. Additionally, Non-Firm Point-to-Point service is discounted as described in Section 6 of PJM Manual 27. PJM does not permit Transmission Service price negotiation via the OASIS REBID mechanism.

1.15 PJM Long-term/Short-term Firm Pricing Policy

The charges for LTF and STF Point-to-Point Transmission Service are listed in Schedule 7 of the PJM OATT. PJM does not permit Transmission Service price negotiation via the OASIS REBID mechanism.

1.16 Transmission Service Reservation Bidding and Displacement Process

The Transmission Service Reservation bidding and displacement process will no longer be applicable for Non-Firm Transmission Service beginning April 1, 1998. All Transmission Customers have the option to select WPC for congestion.

1.17 Financial Transmission Rights (FTR)/Auction Revenue Rights (ARR)

Information about ARRs can be found in Section 3 of PJM Manual 06: Financial Transmission Rights.
(<http://www.pjm.com/library/manuals.aspx>)

1.18 Reserved

1.19 Policy for Rebating Transmission Service and Forgiveness of Congestion Charges

PJM's policy related to rebating Transmission Service Reservations is as follows. Rebating of Transmission Service occurs after the fact for specific conditions. See Section 1.20 for practices regarding requests to annul service prior to commencement.

1. PJM does *not* rebate Transmission Service due to "lost deals" or "ramping issues," except in the following instance:
 - a. If a Transmission Customer was unable to schedule due to a PJM instituted Curtailment (i.e. TLR, thermal limit), PJM will consider rebating Non-Firm Point-to-Point service after first confirming the final Curtailment status with PJM Operations, PJM Dispatch, and PJM Settlements.
2. PJM will consider rebating Transmission Service due to legitimate errors or application variances. PJM first verifies a corresponding correct Transmission Service Reservation, with the identified changes prior to annulling the reservation.
3. PJM reserves the right to rebate Transmission Service on a case-by-case basis when unique issues occur.
4. Ancillary Service charges may still apply to reservations with rebates.
5. Rebates may occur due to off-setting explicit congestion charges.

PJM's policy related to forgiveness of congestion charges is as follows:

PJM does not charge (or credit) congestion for NPC transactions, even if those transactions were loaded during constrained periods.

1.20 Early Termination or Annulment of Service

Transmission Service that is not Pre-Confirmed may be withdrawn by the Transmission Customer as an alternative to transitioning the request to CONFIRMED status. These requests are not eligible for annulment.

Transmission Service that is Pre-Confirmed may not be withdrawn by the Transmission Customer. Instead, customers with Pre-Confirmed reservations in CONFIRMED status may request annulment if the service was the result of an 'inadvertent' submission error and the issue is reported promptly to PJM. Annulment requests must be submitted via the OASIS and should include the reservation identifier from the PJM OASIS (TSR ID), a valid reason for annulment, and a replacement TSR ID, if applicable. PJM will review and respond to each annulment request in a non-discriminatory manner. Acceptance of the request is an act of PJM's discretion as a Transmission Provider. The list of valid annulment reasons is subject to change without notice.

Regardless of Pre-Confirmed status, long-term service may be terminated by mutual agreement between PJM and the Transmission Customer when permitted via the executed Transmission Service Agreement. Requests for early termination or modification are evaluated in a non-discriminatory manner, subject to PJM's discretion as a Transmission Service Provider, and decided on a case-by-case basis. Termination requests should be directed to oasisadmin@pjm.com.

1.21 Interface Pricing

Only Interface Pricing Points may be selected as the source and sink on a Transmission Service Reservation unless service-specific circumstances require more detailed source and sink values. The subset of source and sink values available to be assigned to Transmission Service Reservations is based on the selected POR and POD values, which are typically modeled after Balancing Authorities adjacent to PJM. Interchange Schedules, however, may ultimately sink in Balancing Authorities that are not adjacent to PJM. For this reason, the Interface Pricing Points assigned to an Interchange Schedule for settlement purposes may differ from the source and sink values on the associated Transmission Service Reservation.

The following guidelines apply for the assignment of Interface Pricing Points to Interchange Schedules:

1. Each Balancing Authority is mapped to one Interface Pricing Point that covers all schedules or a pair of Interface Pricing Points that individually cover either imports or exports.
2. Interface Pricing Points are assigned based on the Tag Generation Control Area (GCA) and Tag Load Control Area (LCA).

1.21.1 Mapping of Balancing Authorities to Interface Pricing Points

A mapping of Balancing Authorities to Interface Pricing Points is available to participants.

<https://www.pjm.com/-/media/DotCom/etools/exschedule/interface-pricing-point-assignment-methodology.pdf>

Alternately, Market Participants can enter a proposed Tag GCA and LCA into the Interface Pricing Point Calculator in order to see which Interface Pricing Points will be assigned to that Tag.

[Interface Pricing Point Calculator](#)

1.21.2 Standard Interface Pricing Point Determination

Interface Pricing Point assignments are normally determined by the Tag GCA and LCA.

Examples

- Export: GCA = PJM, LCA = ONT. The Export Pricing Point assignment is IMO.
- Import: GCA = FPL, LCA = PJM. The Import Pricing Point assignment is SOUTH.
- Wheel: GCA = NYIS, LCA = MISO. The Import Pricing Point assignment is NYIS. The Export Pricing Point assignment is MISO.

1.21.3 Non-Standard Interface Determination

In some scenarios, the Interface Pricing Point assignment is not determined by the Tag. For example, the interface for grandfathered service (service predating Order 888) is listed on the Transmission Service Reservation. Non-Standard pricing for grandfathered transactions, reserve sharing schedules, Dynamic Schedules, and other non-standard schedules require discussion with PJM. Questions may be directed to PJM Member Relations at 610-666-8980 or custsvc@pjm.com.

1.22 Service Across Multiple Transmission Systems (SAMTS)

Service Across Multiple Transmission Systems (SAMTS) describes a process through which Transmission Customers can coordinate independent requests for service on multiple Transmission Providers' systems. Each Transmission Provider specified in the Transmission Customer's request will continue to independently evaluate requests submitted to them with no requirement for additional coordination. If the Transmission Customer enters the status and details required by NAESB WEQ-001 for each request and one or more

Transmission Providers refuse all or part of a Coordinated Request, the Transmission Customer is able to reduce or request annulment for the other Coordinated Requests on other OASIS nodes.

1.22.1 SAMTS Request Process

A Transmission Customer links two or more Coordinated Requests into a “**Coordinated Group**.” The Transmission Customer is responsible for the contiguity requirements as defined in the NAESB WEQ standards. Transmission Customers may submit either proposed requests or Confirmed requests as a Coordinated Request. A “**Proposed Coordinated Request**” is an ORIGINAL request for monthly or longer Transmission Service, with a Coordinated Group Status (cgstatus) of PROPOSED. A “**Confirmed request**” is an existing reservation that has a Coordinated Group Status (cgstatus) of Null and a transaction status of CONFIRMED.

1. Submit an eligible Coordinated Request(s)
 - a. Request Type must be ORIGINAL
2. Create a Coordinated Group
 - a. Identify all transactions that are part of the Coordinated Group (all other PJM and non-PJM requests).
 - b. Provide all required information for each transaction in a Coordinated Group.
3. Attest each Coordinated Request in a complete Coordinated Group within 24 hours of the Coordinated Request submittal time
4. Update each Coordinated Request after it is evaluated (PJM and non-PJM requests). If a Coordinated Request for service on another Transmission Provider’s system is not granted in full, the Transmission Customer may update the capacity for any Coordinated Requests with a disposition of Proposed or Attested (cgstatus is not Null) on the PJM OASIS using the rebid process. PJM will not automatically adjust any requests or reservations.
5. Once all requests are in a final state, Transmission Customers cannot make changes to the reservations in the Coordinated Group.

1.22.2 Attestation and Reduction

Transmission Customers must attest that the required information has been provided for all Transmission Service Requests/Reservations in the Coordinated Group before the 24-hour attestation deadline.

PJM’s automated approval of short-term requests will continue to process all short-term transactions as described in Section 1.3. Requests will be CONFIRMED, not held in ACCEPTED status. To honor SAMTS Business Practice Standards, Transmission Customers may modify Coordinated Requests as follows:

- 1) Until the attestation window closes, a Transmission Customer may attest, request a reduction, or request a full annulment of its Proposed Coordinated Request. If the requested reduction causes a violation of the Proposed Coordinated Request’s Minimum Accepted Capacity, the request will be annulled.
- 2) After the attestation window closes, any Proposed Coordinated Requests that have not been attested will be set to DECLINED or ANNULLED.
- 3) After the attestation window closes and before commencement of service, a Transmission Customer can request a reduction or an annulment of an attested Coordinated Request, even if in CONFIRMED status, if and only if another attested Coordinated Request (cgstatus is not Null) has been refused or

granted less than the requested capacity. If the requested reduction causes a violation of the Coordinated Request's Minimum Accepted Capacity, the request will be annulled.

2Section 2: Interchange Scheduling

2.1 Overview of Interchange Scheduling

Market Participants who wish to transact energy into, out of or through the PJM Regional Transmission Organization (RTO) are required to create Interchange Schedules via the submission of Tags. Tag requests must be consistent with the requirements contained in the NERC Reliability Standards, the NAESB Business Practice Standards, and the PJM Interchange Scheduling rules contained within this document. Where these requirements conflict, the most restrictive requirement will take precedence.

PJM has developed the ExSchedule application in order to facilitate the utilization of Tags as a primary source of Interchange Schedule data. Despite PJM's treatment of the Tag as a Market Participant's Interchange Schedule, participants are ultimately responsible for ensuring that the Interchange Schedule created in ExSchedule via the Tag is valid and complete prior to the start of the schedule. This confirmation can be completed via a review of either the energy profile data or the customer reports available in ExSchedule.

An important aspect of creating Interchange Schedules is finding a start and stop time for the schedule while respecting the PJM net ramp limits that have been imposed for security (see "Ramp Limits" section for additional information on PJM's ramp limits). PJM allows Market Participants to reserve ramp in advance of submitting a Tag via the ExSchedule application. This is an optional step in creating an Interchange Schedule since ExSchedule has the capability to reserve ramp on the participant's behalf when the Tag is validated against PJM's business rules.

In cases where the Tag does not have the required fields to request a PJM market-specific transaction (e.g. Dispatchable Interchange Schedule, Day-ahead Bid, etc.) the ExSchedule application must be used in concert with the Tag (see "Dispatchable Interchange Schedules" and "Day-ahead Bids" sections).

The Tag serves as the communication medium PJM utilizes for notification to all affected Transmission Customers of any scheduled Curtailments or Interruptions and is consistent with Good Utility Practice.

2.2 Interchange Scheduling Business Rules

2.2.1 PJM Contact Information

The following can be used to contact PJM regarding Interchange Schedules:

- Transmission Service and Interchange Support email: tsi.support@pjm.com
- PJM Member Relations: 610-666-8980 or custsvc@pjm.com (used to report technical issues or to ask questions about business rules and processes)
- Real-time Transaction phone number: 610-666-4510

2.2.2 Interchange Schedule Timing Requirements

Interchange Schedules that move power into, out of, or through PJM, may begin on any 15-minute scheduling interval (xx:00, xx:15, xx:30, or xx:45). All schedules must be a minimum of 15-minutes in duration and must end on a 15-minute scheduling interval.

The following timing requirements are imposed by PJM for the submission of Ramp Reservations:

- Ramp Reservations may be submitted up to 30 minutes prior to the reservation start time.
- Ramp Reservations can be modified up to 30 minutes prior to the modification start time.
- Dispatchable Reservations must be submitted prior to 18:00 EPT one day prior to the reservation start time.
- Dispatchable Reservation MW and Price values may be modified as long as the submission occurs no later than 65 minutes prior to the modification start time.
 - Modifications to the duration of the Dispatchable Reservation will not be permitted after the submission deadline of 18:00 EPT one day prior to the reservation start.

Ramp Reservations and Dispatchable Reservations expire if not attached to an Approved Tag. Regardless of the reservation duration, when the expiration threshold is met, the entire reservation will expire. The following expiration times are imposed on Ramp Reservations and Dispatchable Reservations.

	Submission Time	Expiration Time
Ramp Reservation	Less than or equal to 60 minutes prior to reservation start	10 minutes after submission
	Less than or equal to 4 hours but greater than 60 minutes prior to reservation start	15 minutes after submission
	After 14:30 EPT one day prior to reservation start but greater than 4 hours prior to reservation start	90 minutes after submission
	Before 14:30 EPT one day prior to start of reservation	14:30 EPT one day prior to reservation start
In Queue Ramp Reservation	Any time	30 minutes prior to reservation start
Dispatchable Reservation	Before 18:00 EPT one day prior to reservation start	18:00 EPT one day prior to reservation start

The following timing requirements are imposed by PJM for the submission of Tags. (The Tag is considered submitted when it is received by the PJM Tag Approval Service, not when it is submitted by the Market Participant's Tag Agent software):

- Tag requests can be submitted up to 20 minutes prior to the request start time.
- Tag requests associated with a Dispatchable Reservation must be submitted by 18:00 EPT one day prior to the reservation start time.

PJM's Tag Approval Service is designed to respond to requests for interchange or emergency requests for interchange as specified in NERC Standard INT-006 Attachment 1. [NERC Standard INT-006 R1, R2, R3]

The following timing requirements are imposed by PJM for the submission of Day-ahead Bids in ExSchedule:

- Day-ahead Bids must be submitted by 11:00 EPT one day prior to the bid start time.
- Day-ahead Bids may not be modified after the submission deadline.
 - NOTE: Day-ahead Bids in ExSchedule may span multiple days. Only the portion of the bid that has been included in a Day-ahead Market case will be locked against modification. For example, after 11:00 EPT on the first day of the month, only the first and second days of a month-long Day-ahead Bid would be locked. The remainder of the bid could still be modified.

The following timing requirements are imposed by PJM for the submission of Coordinated Transaction Scheduling (CTS) Bids along the PJM-MISO Interface:

- CTS Bids may be submitted up to 75 minutes prior to the transaction start time.
- Modifications to CTS Bids may be submitted up to 75 minutes prior to the modification start time.
- CTS Bids must be linked to an approved Tag at least 75 minutes prior to the bid's start time or the bid will expire. Similarly, CTS Bid modifications must be reflected on the approved Tag at least 75 minutes prior to the modification start time or the modified CTS Bid will expire, leaving the original CTS Bid intact.

2.2.3 General Information

- External offers can be made either on the basis of an individual generator (resource specific offer) or an aggregate of generation supply (aggregate offer).
- PJM will only accept Interchange Schedules for which a PJM Market Participant is designated as being financially responsible.
- Transmission Service Reservations that are not used due to canceled Spot Market Energy offers will be subject to transmission charges as appropriate.
- PJM does not accept Tags where PJM is identified as both the source (GCA) and sink (LCA).
- PJM does not accept offers for resources committed to supply operating reserves to another Balancing Authority. PJM does not double count units internal to PJM for operating reserves. If energy is being offered from a resource to PJM and is already included in the PJM operating reserves, the energy can be accepted, but does not participate in PJM operating reserves accounting.

- Offers not properly submitted are rejected. The PJM Market Participant is notified of the reason for rejection and may then take action to submit a new offer.
- PJM functions as the Balancing Authority, Reliability Coordinator, Transmission Operator, and Transmission Service Provider for the PJM Region including the PJM Merchant Transmission Facilities [NERC Standard INT-009, R3]

2.2.4 Ramp Limits

PJM validates all Interchange Schedule requests against a net interchange ramp limit. This validation occurs at the time of submission or modification of a Ramp Reservation or a Tag, with a few ~~the~~ exceptions: ~~of~~

- Dispatchable Reservations on all interfaces ~~and~~
- Tags scheduled across the NYISO interface ~~;~~
- PJM-MISO CTS transactions

Dispatchable Reservations and Ramp Reservations associated with PJM-MISO CTS transactions are validated prior to curtailing or reloading the Tag or as part of the ~~Tag request~~ transaction's market adjustment validation process. Tags scheduled across the NYISO interface will be validated only after NYISO has initiated an economic evaluation and has issued the preliminary results of that evaluation. The net interchange ramp limits may be modified by PJM system operators based on an evaluation of current and expected operating conditions.

PJM enforces two separate ramp limits:

- PJM Variable Ramp

At no time can the difference in the net interchange between two consecutive 15-minute intervals be greater than the ramp limit designated by PJM system operators at those intervals. Ramp availability is allocated on a first-come, first-served basis. Refer to Exhibit 1 for an example that illustrates how the ramp is calculated for any given 15-minute interval. PJM's default ramp limit is ± 1000 MW for each interval.

- NYISO Interface Ramp

PJM also monitors an interface ramp limit with the NYISO. At no time can the difference in the net interchange on the NYISO interface between two consecutive 15-minute intervals be greater than ± 1000 MW. Ramp availability is allocated on a first-come, first-served basis. Interchange Schedules on the NYISO interface will be evaluated first against the PJM net interchange ramp limit and then against the NYISO Interface ramp limit. The PJM net interchange ramp and the NYISO interface ramp are not cumulative.

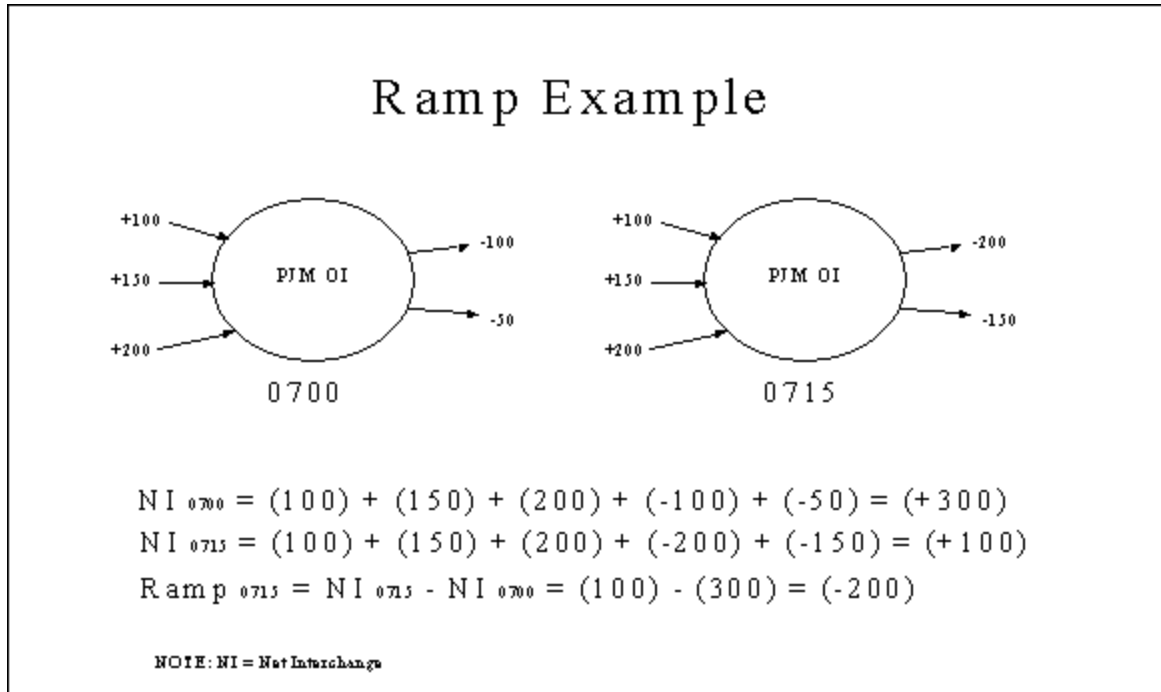


Exhibit 1: Example Ramp Calculation

2.2.5 Ramp Limit Violations

Though ExSchedule actively prevents many of the user-initiated actions that could cause the PJM net interchange ramp limit to be exceeded, there are still certain actions, such as the expiration of a Ramp Reservation, which can cause a ramp limit violation. The ramp limit may also be exceeded as a result of curtailed Tags and TLR procedures enacted by either PJM or another Balancing Authority or Reliability Coordinator.

Corrective actions to alleviate ramp limit violations are pursued at the discretion of PJM system operators, who will determine whether PJM shall remediate a ramp limit violation by taking into account current and expected system conditions. In the event that a ramp limit violation merits corrective action, Tags will be curtailed to bring the interval back within the established limit. Due to the extremely volatile nature of ramp, these Tag modifications may be classified as *late* based on the Timing Requirements in the NERC INT Reliability Standards. To the extent possible, PJM will coordinate *late* reliability-based modifications with Adjacent Balancing Authorities.

All Tags are eligible to be curtailed, regardless of their contribution to the ramp violation. For Tags contributing to the ramp in the violated interval, PJM utilizes a last-in, first-out methodology to determine which Tags will be curtailed, and Transmission Service priority is ignored. For Tags not contributing to the ramp in the violated interval, Transmission Service priority is a primary consideration and timestamps are only used to rank Tags within the same Transmission Service priority level.

Tags curtailed via this process will always be modified for the shortest possible duration, meaning that the minimum modification will be 15 minutes in length. If necessary, the eligible Tags may be terminated earlier than the originally requested stop time or pushed to start later than the originally requested start time. If the

next eligible Tag holds a constant MW value over the time of the violation, that Tag may be curtailed at the time of the violation in order to provide relief.

If PJM system operators determine that a Market Participant has directly contributed to a ramp limit violation, Tags belonging to that Market Participant will specifically be curtailed in order to correct the violation. In the event that these actions are insufficient to correct the violation, PJM system operators will default to the last-in, first-out methodology described above.

For emergency circumstances in which a Market Participant needs to terminate a Tag but is prevented from doing so by the ramp limit, PJM must be contacted directly. PJM system operators will then manually approve the Tag adjustment and notify the Market Participant of the resulting ramp limit violation. If the Market Participant has additional Tags that could be curtailed to bring the ramp back within the limit, it will be required to modify those Tags to fix the violation. If the Market Participant does not have a Tag that can be used to correct the ramp limit violation, PJM will default to the last-in, first-out methodology described above.

All observed cases of inappropriate behavior surrounding the reservation and use of ramp will be reported to PJM's Independent Market Monitor.

[NERC Standard INT-006 R1.1, R1.2, R2.1]

2.2.6 Interchange Cap

Dispatch may elect to implement an interchange cap to stabilize the amount of interchange during peak hours to protect against volatility. This interchange cap can limit the amount of net interchange beyond the ATC and ramp limits. Details on the process and timing requirements are outlined in PJM Manual 11.

If the interchange cap is set, PJM may validate all SPOT_IN and Non-Firm hourly Point to Point Interchange Schedule requests against the interchange cap. This validation occurs at the time of submission or modification of the Tag, with the exception of Dispatchable Reservations. The interchange cap may be modified by PJM system operators based on an evaluation of current and expected operating conditions.

For emergency circumstances in which a Market Participant needs to terminate a Tag but is prevented from doing so by the interchange cap, PJM must be contacted directly. PJM system operators will then manually approve the Tag adjustment.

When system conditions dictate, PJM enforces one RTO-wide interchange cap. The interchange cap availability is applied only to SPOT_IN and Non-Firm hourly Point to Point transactions and is allocated on a first-come, first-served basis after the cap is established.

All observed cases of inappropriate behavior surrounding the reservation and use of the interchange cap may be reported to PJM's Independent Market Monitor.

2.2.7 OASIS Business Rules

All Interchange Schedules require a CONFIRMED Transmission Service Reservation from the PJM OASIS. PJM offers several transmission product types, such as hourly, daily, weekly, monthly, yearly, on and off-peak, Non-

Firm, Firm and NITS. PJM also offers the opportunity to state whether or not the Market Participant is willing to pay congestion.

PJM will only accept an Interchange Schedule or Day-ahead Bid that references a Transmission Service Reservation if it is submitted by the same company that made the reservation on the PJM OASIS. In some cases, companies have multiple accounts. Transmission Service reserved by one account may be scheduled by another account of that company, provided those accounts are registered with PJM as related. In the event that an unrelated account (or a related account that is not yet registered) desires to schedule this service, the service must first be resold from the account that owns the Transmission Service Reservation.

In order to establish a Transmission Service relationship between two accounts, Market Participants may submit the Transmission Service Sharing Request form located in the ExSchedule application. PJM shall verify that the relationship between accounts is valid and shall notify the requestor whether Transmission Service sharing shall be permitted.

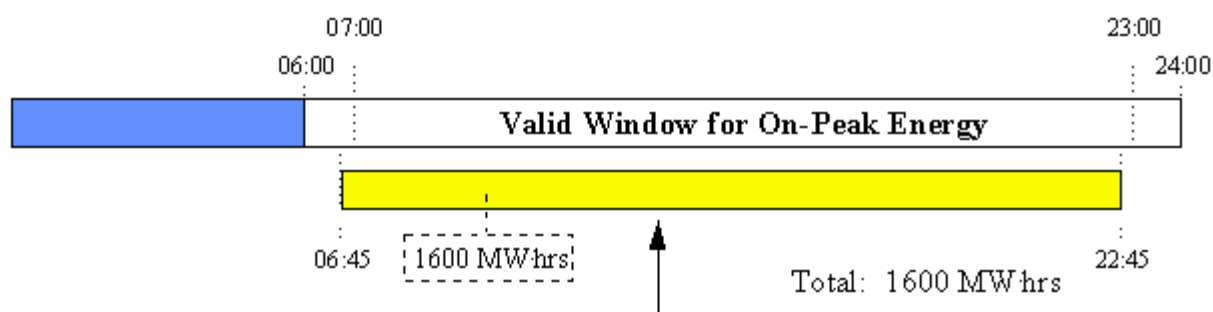
2.2.8 Transmission Service Sliding

On some occasions, due to PJM ramp limits, a Market Participant may need to shift the start and stop times of its Interchange Schedule. If the Market Participant shifts the energy profile up to one hour earlier or one hour later than its Transmission Service Reservation, it is not required to purchase additional Transmission Service to cover the shift. The following rules apply to Transmission Service sliding:

1. Both the POR and POD on the scheduling path must be eligible for sliding.
 - a. The Neptune Interface is ineligible for sliding per Schedule 14 Section 3.3.3 of the PJM OATT
 - b. The Linden VFT Interface is ineligible for sliding per Schedule 16 Section 3.3.3 and Schedule 16A Section 3.3.3 of the PJM OATT
 - c. The Hudson Interface is ineligible for sliding per Schedule 17 Section 3.3.3 of the PJM OATT
2. The start time of the schedule may not be more than 60 minutes earlier than the start time of the Transmission Service Reservation
3. The stop time of the schedule may not be more than 60 minutes later than the stop time of the Transmission Service Reservation
4. Regardless of schedule duration, the total MWh capacity of the Transmission Service Reservation may not be exceeded

For graphical representations of these scenarios, refer to Exhibits 2 - 5.

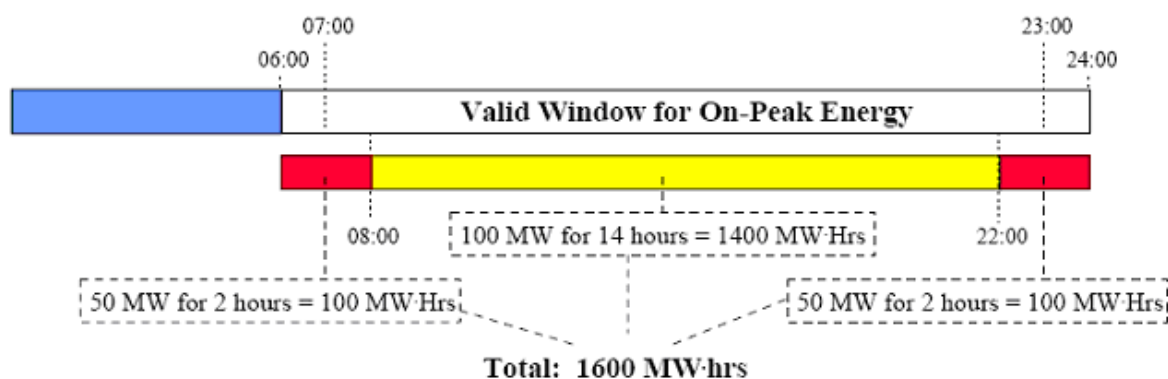
On-Peak Monday-Friday



Example of Valid Energy Schedule using a 100MW Capacity
On-Peak Transmission Service Reservation
Over 16 Hour Period

Exhibit 2: On-Peak Transmission Service Over 16 Hour Period Example

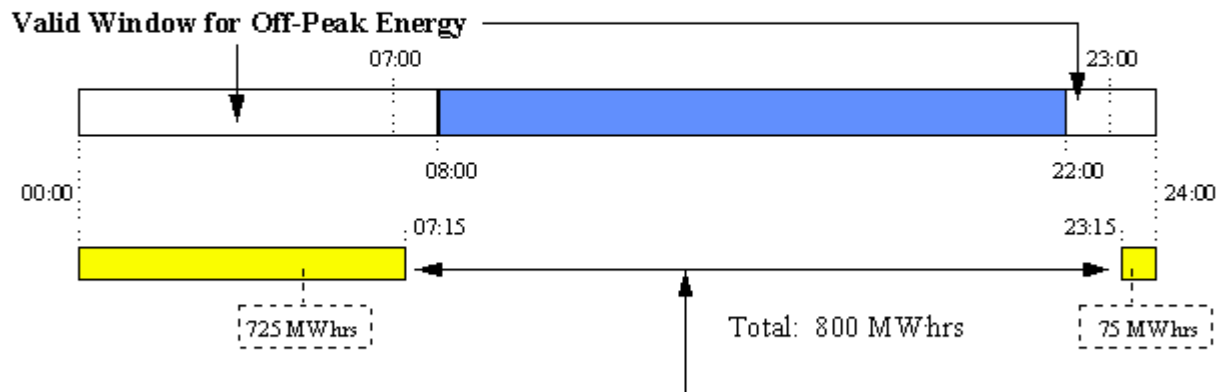
On-Peak Monday-Friday



Example of Valid Energy Schedule using a 100MW Capacity
On-Peak Transmission Service Reservation
Over 18 Hour Period

Exhibit 3: On Peak Transmission Service over 18 hour period Example

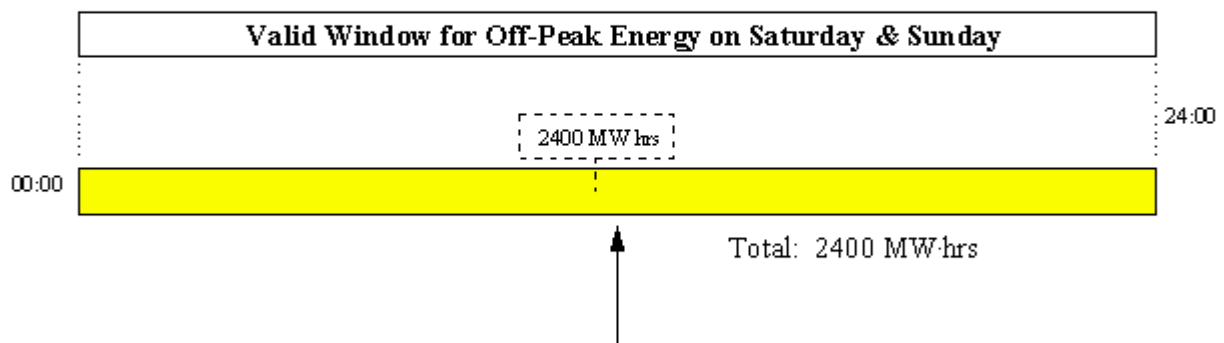
Off-Peak Monday-Friday



Example of Valid Energy Schedule using a 100MW Capacity
Off-Peak Transmission Service Reservation

Exhibit 4: Off-Peak Monday-Friday Transmission Service Example

Off-Peak Saturday & Sunday



Example of Valid Energy Schedule using a 100MW Capacity
Off-Peak Transmission Service Reservation

Exhibit 5: Off-Peak Saturday-Sunday Transmission Service Example

Frequently Asked Questions (regarding on-peak and off-peak energy scheduling):

(Q1) A Market Participant has reserved off-peak daily Transmission Service for Wednesday, but ramp room is not available at 07:00 or 23:00.

(A1) Two possible solutions are:

- 1) The energy may be scheduled from 00:00 to 08:00 or
- 2) The energy may be scheduled from 00:00 to 07:15 and from 23:15 to 24:00.

(Q2) A Market Participant has reserved on-peak weekly Transmission Service. Ramp room is available from 07:00 to 23:00 Tuesday through Friday, but ramp room is not available at 07:00 or 23:00 on Monday.

(A2) The energy may be scheduled 07:00 to 23:00 Tuesday through Friday. One solution to the Monday ramp limit is to schedule the energy from 06:45 to 22:45.

2.2.9 Financially Responsible Party (FRP) Approvals

PJM recognizes the Purchasing Selling Entity (PSE) listed on the PJM Transmission Provider (TP) segment of a Tag as being the FRP for that Tag. Since the entity who submits a Tag may not always be consistent with the entities listed for each TP segment on that Tag, PJM requires the FRP to actively acknowledge receipt of a Tag when the Tag submitter and the PJM FRP are not the same entity. The acknowledgement can be performed in the ExSchedule application.

2.2.10 Ramp Reservations

Ramp Reservations are required for all Tags and enable Market Participants to secure the ramp availability needed to create or modify an Interchange Schedule. For normal Interchange Schedules, Market Participants have the option to either create a Ramp Reservation in advance of submitting the Tag or to allow PJM to attempt to create the reservation on the participant's behalf at the time of Tag submission. Ramp Reservations are generally created in advance of Tag submission in order to ensure the ability to schedule prior to purchasing Transmission Service or making other potentially cost affecting decisions. For CTS transactions, Market Participants may not manually create Ramp Reservations and must wait for PJM to create the reservation as part of the Tag approval process.

When a Tag is submitted without an attached Ramp Reservation, PJM will attempt to create a reservation that matches the Tag's path and the energy profile. For normal Interchange Schedules, this automatically created Ramp Reservation will be evaluated against the applicable ramp limits. For CTS transactions, this automatically created Ramp Reservation will be created with a 0 MW energy profile to cover the duration of the CTS Bid. If the reservation is successfully created it will be associated with the Tag and PJM will continue with the

remaining Tag validations. Ramp Reservations created automatically via Tag submission may be viewed in ExSchedule.

Ramp Reservations can be acquired in advance of Tag submission via the ExSchedule application. Market Participants must supply a scheduling path and an energy profile that PJM will validate against the applicable ramp limits. If the Ramp Reservation is successfully created, it must be manually attached to a Tag or it will expire per Section 2.2.2. Ramp Reservations can be attached to a Tag by placing a specialized Token/Value pair in the Misc. Info column of the PJM Transmission Provider line in the Physical Path of the Tag. The Token entry should be “RAMPRES” and the Value entry should be the Ramp Reservation ID obtained from ExSchedule.

Ramp Reservations manually attached to a Tag will not be subject to a ramp limit validation as long as the Tag energy profile and the Ramp Reservation energy profile are identical. If the Tag energy profile differs from the Ramp Reservation energy profile, PJM will attempt to adjust the reservation to match the Tag by validating the changes against the applicable ramp limits.

Once a Ramp Reservation has been linked to an implemented Tag, it may not be unlinked.

2.2.11 Dispatchable Interchange Schedules

Dispatchable Interchange Schedules differ from normal Interchange Schedules in that the creation of a Dispatchable Reservation in advance of Tag submission is not optional. Market Participants must create a Dispatchable Reservation in ExSchedule that associates a price with each energy block and then manually attach the reservation to a Tag.

Because Dispatchable Reservations contain price information associated with each energy block, PJM is unable to adjust the Dispatchable Reservation to mirror the Tag when there is a mismatch between them. The Dispatchable Reservation must be modified prior to the submission of a matching Tag adjustment.

- Dispatchable Tags submitted on all interfaces, with the exception of NYISO, must have a Tag energy profile of 0 MW and a Tag transmission profile matching the Dispatchable Reservation.
- Dispatchable Tags associated with the NYISO interface must have a Tag energy profile that matches the Dispatchable Reservation.

2.2.12 Dynamic Transfers

An entity that owns or controls a generating resource in the PJM Region may request to have all or part of the generating resource’s output electrically removed from the PJM Region via dynamically transferring the output to a load outside the PJM Region. Likewise, an entity that owns or controls a generating resource outside of the PJM Region may request to have all or part of the generating resource’s output electrically added to the PJM Region via dynamically transferring the output to a load inside the PJM Region.

Due to the complexity of these arrangements, requesting entities must coordinate extensively with PJM and complete several steps before a new Dynamic Transfer can be implemented. Among the required setup items:

- The requesting entity must arrange for the provision of signal processing and communications between the generator, PJM, and other participating Balancing Authorities.
- The requesting entity must reserve a quantity of Firm or Non-Firm Transmission Service sufficient to deliver the range of the Dynamic Transfer and any required Ancillary Services.
- The requesting entity must assist PJM in defining the appropriate external nodes in the PJM network model to be utilized in developing an Interface Pricing Point for the Dynamic Transfer.

Further detail can be found in PJM Manual 12: Attachment F

Dynamic and Pseudo-Tie Schedules

When the necessary coordination is complete, the requesting entity will be responsible for issuing a Tag of type Dynamic Schedule or Pseudo-Tie to match the scheduled output of the generating resource. A Tag special exception will be made available for the sole use of the requesting entity in flagging the Tag as a special case in ExSchedule. This exception can be attached to a Tag by placing a specialized Token/Value pair in the Misc. Info column of the PJM TP line in the Physical Path of the Tag. The Token entry should be "EXCEPTION" and the Value entry should be the special exception ID obtained from PJM.

The Tag will allow the Interchange Distribution Calculator (IDC) to determine the reliability impact of the Dynamic Schedule. In order to ensure that the IDC always has the most accurate information regarding the expected schedule, the Tag must be updated for the next available scheduling hour, and for future hours, when any one of the following occurs:

- The average energy profile in an hour is greater than 250 MW and in that hour the actual hourly integrated energy deviates from the hourly average energy profile indicated on the Tag by more than $\pm 10\%$.
- The average energy profile in an hour is less than or equal to 250 MW and in that hour the actual hourly integrated energy deviates from the hourly average energy profile indicated on the Tag by more than ± 25 megawatt-hours.
- PJM determines that the deviation, regardless of magnitude, is a reliability concern and notifies the requesting entity of that determination and the reasons.

In the event that system conditions dictate a need to reduce the energy profile of a Dynamic Transfer, a reliability limit will be placed on the schedule via curtailing the associated Tag. When system conditions improve to a point that would allow for the reloading of the Dynamic Transfer, the reliability limit will be released via a Tag reload.

Each Pseudo-Tie that PJM implements or operates must be registered by the requesting Market Participant in the NAESB Electric Industry Registry (EIR) publication.

Untagged Pseudo-ties and Managed Encumbrances

Each implemented Pseudo-Tie for which the owner does not submit Tags must encumber the supporting Transmission Service reservation as if a matching Tag was in place. Per NAESB WEQ 001-26.7, PJM's OASIS administrators will reduce the unused capacity of these reservations via the creation of Managed Encumbrance (ME) records as part of implementing and maintaining the Pseudo-Tie. ME records ensure that the portion of TSR capacity needed to support the Pseudo-Tie remains intact and protected against unintentional overuse. ME records are plainly visible for each TSR viewed on the PJM OASIS.

Due to the extensive coordination and operational requirements surrounding Pseudo-Ties, PJM does not permit Transmission Customers to directly modify ME records; however, a temporary modification to both the ME records and the corresponding Pseudo-Tie may, at PJM's discretion, be permitted if the request is submitted a minimum of 5 business days prior to the start of the modification and PJM identifies no resulting issues. The requirements outlined in NAESB WEQ-013 R2.6.1.5 do not apply.

2.2.13 Day-ahead Bids

Market Participants can submit bids to the PJM Day-ahead Market through ExSchedule. Day-ahead Bids represent financial obligations and are not considered to be real-time Interchange Schedules requiring a Tag.

Day-ahead Bids require the attachment of a Transmission Service Reservation to identify the bid path as well as selection of the Interface Pricing Point(s) at which the Market Participant would like the bid to be evaluated (import pricing point for an import, export pricing point for an export, both import and export pricing points for wheels). Two Day-ahead Bid types are available in ExSchedule. "Fixed" type bids are price-takers in the Day-ahead Market. "Dispatchable" type bids allow the Market Participant to set floor or ceiling price criteria for acceptance in the Day-Ahead Market.

2.2.14 PJM-MISO Coordinated Transaction Scheduling

Coordinated Transaction Scheduling is an optional product intended to facilitate the efficient scheduling of interchange by utilizing forecast LMPs to enable a coordinated clearing process between PJM and MISO. In order to participate, Market Participants must use PJM's ExSchedule application to create a bid that specifies the price differential between PJM and MISO that would be sufficient for the participant to flow an Interchange Schedule between the PJM and MISO Balancing Authorities. CTS Bids can then be attached to a Tag by placing a specialized Token/Value pair in the Misc. Info column of the GCA line in the Physical Path of the Tag. The Token entry should be "BID" and the Value entry should be the CTS Bid ID obtained from ExSchedule.

Once the CTS Bid has been linked to an approved Tag, the bid is factored into a process by which PJM and MISO jointly determine which Tags are eligible to flow. Based on that output, PJM and MISO will modify the Tags to match the MW output set by the cleared CTS Bid.

PJM and MISO leverage Tag adjustment requests to ensure CTS Tags are modified to flow at the economically cleared MW amount. The adjustment of a Tag requires approval by several impacted entities, including the Tag's PSE. As such, the CTS Market Participant has an obligation to approve all CTS Tag adjustments, and to ensure that the approvals are supplied in a timely manner. A Market Participant's consistent failure to approve CTS Tag adjustment requests could lead to suspension of the Market Participant's right to submit CTS transactions. All observed cases of inappropriate behavior, including failure to approve CTS Tag adjustments, will be reported to PJM's Independent Market Monitor.

2.2.15 Interface Limits

In accordance with NAESB WEQ-023 R1.4.1, PJM implements Interface Limits to govern the net interchange schedule on each ATC path. Upon receipt of a Tag request, PJM validates the resulting net interchange schedule to ensure the interface limit is not exceeded. PJM shall deny Tag requests that cause a violation of this limit. In the event of a limit violation that requires corrective action, PJM will modify the net interchange schedule via Tag curtailments per Section 2.6.

2.3 Interchange Approval Protocols

2.3.1 Data Requirements

Market Participants are expected to keep PJM informed of all Interchange Schedules that involve the operation of the PJM RTO. The following information is submitted to PJM via eCredit, ExSchedule, and the Market Participant's Tag Agent service.

- eCredit
 - Credit Available for Export Transactions per Attachment Q of the PJM OATT
- ExSchedule
 - NAESB EIR entity code
 - Market Participants must supply PJM with the EIR entity code that will be used to submit Tags. PJM uses this code to establish Tag ownership and to link Tags to a PJM organization ID
 - An EIR entity code may only be linked to a single PJM organization ID at any given time
 - Multiple EIR entity codes may be linked to a single PJM organization ID
 - Price/energy profile associated with a Dispatchable Reservation
 - Price/energy profile associated with a PJM-MISO CTS Bid
- Tag
 - Tag ID
 - PJM FRP
 - Physical Path
 - (optional) Ramp Reservation ID
 - If omitted, ExSchedule will attempt to create and assign a Ramp Reservation
 - (optional) Tag Special Exception
 - Assigned to Market Participants on an as-needed basis to facilitate special tagging arrangements
 - (optional) PJM Control Zone
 - Used by PJM for the purpose of determining load dump allocations
 - Energy Profile
 - Transmission Profile
 - Transmission Allocation
 - (optional) Loss Accounting

2.3.2 Data Validations

All data validations are programmatically performed by PJM's ExSchedule application. In the event of an application failure, PJM system operators will manually evaluate each Tag request and communicate the results of that reliability assessment to the Balancing Authority. [NERC Standard INT-006 R1, R1.1, R1.2, R2, R2.1]

On submission, the following validations are performed on Ramp Reservations:

- Path is valid for the duration of the energy profile
- Energy profile
 - Stop time after start time
 - Start and stop times must be in the future
 - All MW changes must occur on a quarter-hour interval
 - Price associated with every interval (only applicable for Dispatchable Interchange Schedules)
- Ramp availability (with the exceptions granted by Section 2.2.4 Ramp Limits)
- Timing Requirements (per Section 2.2.2 Interchange Schedule Timing Requirements)

On submission, the following validations are performed on Tags:

- Syntax validation (See NAESB Electronic Tagging Functional Specification)
- Physical Path
 - PJM must be listed as the LCA for Imports
 - PJM must be listed as the GCA for Exports
 - PJM must not be listed as the GCA or LCA for Wheels
 - PJM must not be listed as both the GCA and LCA
 - PJM may not be listed as a TP on multiple lines
 - As applicable, the TP lines preceding or following the PJM TP line must be Transmission Providers adjacent to PJM
 - PJM must be listed as the Market Operator on the PJM TP line
 - The POR and POD listed on the PJM TP line must match both the Ramp Reservation path and the Transmission Service path
 - Token/Value Pairs
 - For normal Tags, one Token/Value pair of each type may be listed (RAMPRES, EXCEPTION, ZONE)
 - For CTS Tags, the BID Token/Value pair must be listed on the GCA row of the Tag's Physical Path section. When the BID token is present, only the ZONE token is eligible to also be listed on the PJM TP line.
 - Ramp Reservations may only be associated to one Tag
- Energy Profile
 - All MW changes must occur on a quarter-hour interval
 - Start and stop times must be in the future
 - Ramp duration must be omitted or set to 10 minutes
 - CTS Tags must contain a 0 MW energy profile for all intervals defined on the associated bid.
- Timing requirements (per Section 2.2.2 Interchange Schedule Timing Requirements)

- Transmission Profile
 - Transmission Service allocated to each interval must be valid for the entire interval and must equal or exceed the energy profile MW value
 - Transmission Service allocation across all Tags referencing a certain Transmission Service Reservation may not exceed
 - the total MWh capacity of the reservation
 - the instantaneous capacity of the reservation in any given interval
 - Market Participants may not vertically stack Transmission Service on a Tag
 - CTS Tags must contain a Transmission Profile whereby the amount of Transmission Service allocated to each interval is sufficient to accommodate the maximum MW bid point on the CTS Bid for that interval
- Transmission Allocation
 - Transmission Service must be in Confirmed status
 - Market Participants must select the appropriate transmission priority based on the Transmission Service purchased from PJM.
 - Transmission Service must be owned by the Tag FRP
- Loss Accounting
 - Market Participants may either omit loss accounting information for the PJM TP or assign financial losses
- Ramp availability (if no Ramp Reservation is identified and with the exceptions granted by Section 2.2.4 Ramp Limits)
- Interchange Cap (with the exceptions granted by Section 2.2.6 Interchange Cap when applicable)
- Interface Limits (as described in Section 2.2.15 Interface Limits)
- FRP
 - FRP must be an EIR entity code registered to a PJM Market Participant and listed on the PJM TP line of the Physical Path
 - FRP must approve the Tag in order for validations to proceed
- Export Transaction Credit Screening (per Attachment Q of the PJM OATT)
 - Credit available for export transactions must be sufficient to cover both existing export Tags and the newly submitted export Tag

On submission, the following validations are performed for Day-ahead Bids:

- Transmission Service
 - Reservation must be in Confirmed status
 - Transmission Service Product must be of type WPC
 - Reservation path is valid for the duration of the bid energy profile
 - Reservation has at least 1 MW of capacity for the duration of the bid energy profile
 - Reservation must be owned by the company submitting the bid
- Timing requirements (per Section 2.2.2 Interchange Schedule Timing Requirements)
- Interface Pricing Points
 - Valid for the duration of the bid energy profile
 - Selection must match direction of Transmission Service path
- Energy profile
 - Stop time after start time
 - Start and stop times must be in the future

- All MW changes must occur on a quarter-hour interval
- Price associated with every interval (only applicable for Dispatchable bid type)

On submission, the following validations are performed for CTS Bids:

- Timing requirements (per Section 2.2.2 Interchange Schedule Timing Requirements)
- Bid may be defined in only one direction
 - Market Path is valid for the duration of the CTS energy profile
- Energy profile
 - Stop time after start time
 - Start and stop times must be in the future
 - Bid must be at least 15 minutes in duration, and no greater than 25 hours in duration
 - All MW values should be non-negative integers
 - All MW changes must occur on a quarter-hour interval
 - At least one MW/Price pair must be associated with each interval
 - An interval may have no more than 10 MW/Price pairs
 - All bid prices must be greater than or equal to \$0.01.
 - Each MW/Price pair must increase both the MW and Price values as compared to the previous pair

2.3.3 Interchange Schedule Evaluation and Checkout

If all data validations are successful, PJM will approve the Tag. Once the Tag is approved by all entities with Tag approval rights, the Interchange Schedule will be ready for the Adjacent Balancing Authority checkout. If during the Adjacent Balancing Authority checkout, both parties agree to the Net Interchange Schedule resulting from the Tag, the Interchange Schedule will flow.

2.3.4 Dispatchable Interchange Schedule Evaluation and Checkout

Dispatchable Interchange Schedules are verified differently than normal Interchange Schedules. Dispatchable Interchange Schedules are evaluated hourly to determine if loading is possible for the upcoming hour. When it is determined that the economics for the schedule warrant the Tag to be loaded or unloaded, the Tag will be modified by PJM. This evaluation is based on a very conservative approach, and works similar to the way PJM dispatches generation. In addition to the economics of the schedule, PJM will also take into consideration the ramp availability required to load or unload the schedule. Since Dispatchable Interchange Schedules are not initially validated against the ramp limits, there may be times where the economics warrant a schedule to be loaded, but the schedule will not be loaded due to a lack of ramp availability. Once a Dispatchable Interchange Schedule has been loaded it will be subject to the Adjacent Balancing Authority checkout process before it will flow.

2.3.5 Day-ahead Bid Evaluation and Checkout

ExSchedule serves only as an interface to the Day-ahead Market. Day-ahead Bids are sent for inclusion and evaluation in the Day-ahead Market, and the results are fed back to ExSchedule for display to Market Participants. Adjacent Balancing Authority checkout is not performed for Day-ahead Bids which are financial in nature and not considered physical flows.

2.3.6 PJM-MISO Coordinated Transaction Scheduling Evaluation and Checkout

PJM-MISO CTS schedules are verified differently than traditional Interchange Schedules. These CTS schedules are evaluated by PJM and MISO's market systems to determine whether the schedule should be loaded. This evaluation is performed on a 15 minute scheduling interval basis. When it is determined that the economics for the schedule warrant the Tag to be loaded or unloaded, the Tag will be modified by PJM or MISO depending on which serves as the transaction's sink BA. Once a PJM-MISO CTS Tag has been loaded, it will be subject to the Adjacent Balancing Authority checkout process before it will flow.

2.4 *Distribution of Interchange Information*

In order to comply with the actions required of a sink Balancing Authority, PJM has contracted with a vendor that provides these services on its behalf. Although the responsibility for carrying out these actions ultimately remains with PJM, the third-party Tag Authority Service provides for:

- The receipt of Arranged Interchange
- The distribution of Arranged Interchange to all reliability entities involved in the Interchange
- The distribution of the status of both Arranged Interchange and Confirmed Interchange to all Balancing Authorities, Transmission Service Providers, and Purchasing Selling Entities involved in the Interchange
- The communication of Confirmed Interchange start and stop times, ramps, and megawatt profile to Balancing Authorities
- The communication of necessary Interchange information to NERC identified reliability analysis services

2.5 *Implementation of Interchange Information*

PJM conducts an hourly checkout with each Adjacent Balancing Authority and any Balancing Authority operated by an independent transmission company. PJM performs the checkout using both the electronic

approval of Tags and telephone calls. This checkout process includes the Merchant Transmission Facilities and contacting the Transmission Owner to set the MW flow on the facility. [NERC Standard INT-009, R1, R1.1, R1.2]

PJM requires all Interchange Schedules, other than reserve sharing or other emergency events, to be tagged in accordance with the NERC INT Standards. For reserve sharing and other emergency schedules that are not tagged, the involved parties will enter after the fact schedules into the scheduling systems in order to facilitate checkout between the parties. When there is a scheduling conflict, PJM will work with the Adjacent Balancing Authority to modify the Interchange Schedule as soon as practical. If there is a scheduling conflict that is identified before the Interchange Schedule has started, then each BA will make the correction in real-time and not wait until the next quarter-hour. If the Interchange Schedule has already started and an error is identified, then each BA will make the correction at the earliest quarter hour increment. If a scheduling conflict cannot be resolved between the BAs (but the source and sink have agreed to a MW value), then the BAs will both implement that same MW value. If the Source BA and Sink BA are unable to agree to a MW value, then the previously tagged value will stand for both BAs.

When available, PJM will perform checkout by electronic means; otherwise, PJM will perform checkouts via telephone.

PJM and its Adjacent Balancing Authorities will perform the following types of checkouts [NERC Standard INT-009, R1, R1.1, R1.2]:

- Hourly Before-the-Fact (Real-Time):
 - Hourly before-the-fact checkout includes the verification of Net Scheduled Interchange with each Adjacent Balancing Authority.
 - Hourly checkout is performed starting at the half hour and ending at the ramp hour.
 - Intra-hour checkout/schedule confirmation will occur as required due to intra-hour scheduled changes.
- After the fact (day end) daily starting at 0100 hours; and
- After the fact (monthly) daily on a month to date basis (usually via email) starting on the first business day of the following month and ending by the tenth (10th) business day of that month.

PJM and its Merchant Transmission Facilities will perform the following types of checkouts [NERC Standard INT-009 R3]:

- PJM will confirm, with the facility operator, the Net Scheduled Interchange at least 15 minutes prior to a change of flow on a Merchant Transmission Facility (including HVDC lines).

PJM requires that when a checkout discrepancy is discovered, the BAs will use the Tag to determine where the discrepancy exists. PJM requires any entity that conducts business within its Region to checkout using Tag values; special naming conventions used by that entity or other naming conventions given to schedules by other entities will not be permitted.

2.6 Curtailment of Transmission or Recall of Energy

In addition to (or in place of) the use of Transmission Loading Relief procedures, PJM may occasionally need to implement curtailments in order to maintain reliable operations. In the event curtailments are necessary, the following principles will apply to PJM's curtailment decisions:

- All Curtailments will be made on a nondiscriminatory basis to the transaction(s) that effectively relieve the constraint or emergency condition.
- Advance notice of Curtailment will be provided to customers whenever possible.
- **Firm Service**
 - Firm service Curtailments will be proportionally allocated among all Firm service customers as practicable, and consistent with Good Utility Practice; however, at PJM's sole discretion, Firm service can be curtailed in whole or in part and in any order for the purpose of maintaining reliability.
- **Non-Firm Service**
 - Non-Firm service will have a lower priority than Firm service.
 - Non-Firm Network service from non-designated resources will have a higher priority than Non-Firm Point-To-Point service.
 - Non-Firm service for which congestion costs *will not be paid* (NPC products) shall have a lower priority than service for which congestion costs *will be paid* (WPC products).
 - Non-Firm service resulting from a redirect of Firm service over secondary Point(s) of Receipt and Point(s) of Delivery will have the lowest reservation priority.
 - Curtailments to transactions using Non-Firm service will be applied first to the shortest term products (hourly) and then progress in order through the longer term products (daily, weekly, and monthly).
 - Within a Non-Firm product and service increment grouping, products that specify a Period of ON PEAK or OFF PEAK will have lower priority than FULL PERIOD reservations
 - Where no other ranking criteria applies, PJM will curtail on a Last-In, First-Out basis, using a Transmission Service Reservation timestamp or Interchange Schedule timestamp, as appropriate.
- **Spot-In Service**
 - Spot-In service may be curtailed if either the applicable Interface Pricing Point or PJM's System Cost is approaching or has reached \$0.
 - Spot-In service will have a higher priority than NPC products, but a lower priority than Non-Firm WPC products.

PJM publishes a list of all Transmission Service products along with the priority rankings used to determine curtailment order. PJM Transmission Service Products

PJM dispatch may deviate from this ranking criteria, as necessary, to maintain reliable operations. The following is the Curtailment order used by PJM for curtailing due to system constraints, Maximum Generation Emergency and other PJM emergencies. This Curtailment order is used for transmission as well as capacity related Curtailments.

PJM dispatch may deviate from this pattern as necessary to maintain reliability.

2.6.1 ~~Non-Firm Over Secondary Points~~ NPCRESERVED

Firm Transmission Service redirected to a path other than the Firm reservation's original POR/POD. (NERC Transmission Bucket 1) Curtail by Interchange Schedule timestamp (LIFO).

2.6.2 ~~Non-Firm NPC~~RESERVED

- ~~— Curtail descending by Transmission Service product service increment (hour NERC Transmission Bucket 2, day NERC Transmission Bucket 3, week NERC Transmission Bucket 4, and then month NERC Transmission Bucket 5)~~
- ~~• Within a product service increment grouping, curtail on/off-peak before curtailing all-day reservations.~~
- ~~• Within the above categories curtail lower priced Transmission Service first.~~
- ~~• 2.6.2 Within the above categories curtail by Transmission Service Reservation timestamp (LIFO).~~

2.6.3 ~~Network Import NPC~~RESERVED

~~(NERC Transmission Bucket 6) Curtail by Interchange Schedule timestamp (LIFO).~~

2.6.4 ~~Spot Market Energy Imports (SPOT_IN)~~RESERVED

~~(NERC Transmission Bucket 6) Unload based on dispatch rate (non-zero rate schedules)~~

~~Unload SPOT_IN with zero dispatch rates~~

~~Must take SPOT_IN schedules are to be curtailed after Non-Firm NPC but before Non-Firm WPC.~~

2.6.5 ~~Non-Firm Over Secondary Points WPC~~RESERVED

~~Firm Transmission Service redirected to a path other than the Firm reservation's original POR/POD. (NERC Transmission Bucket 1) Curtail by Interchange Schedule timestamp (LIFO).~~

2.6.6 ~~Non-Firm WPC~~RESERVED

Curtail descending by Transmission Service product service increment (~~hour — NERC Transmission Bucket 2, day — NERC Transmission Bucket 3, week — NERC Transmission Bucket 4, and then month — NERC Transmission Bucket 5~~).

- ~~Within a product service increment grouping, curtail on/off-peak before curtailing all day reservations.~~
- ~~Within the above categories curtail lower priced Transmission Service first.~~
- ~~Within the above categories curtail by Transmission Service Reservation timestamp (LIFO).~~

2.6.7 ~~Network Import WPC~~RESERVED

~~(NERC Transmission Bucket 6) Curtail by Interchange Schedule timestamp (LIFO).~~

2.6.8 ~~Firm~~RESERVED

Curtail schedules that effectively relieve the constraint, proportionally among Native Load Customers, Network Customers and Firm Point-to-Point Transmission Customers. ~~(NERC Transmission Bucket 7)~~

2.6.9 ~~E~~Energy Recalls~~ample of Recall of Energy~~

~~During emergency conditions~~When implementing emergency procedures, PJM may recall ~~energy~~off-system sales being supplied by PJM capacity resources. ~~that is being sold off-system by curtailing the associated export interchange schedule.~~The procedures ~~by~~applicable to curtailing the associated~~these~~ export interchange schedules. ~~applicable during these~~emergency conditions can be found in Manual 13 Sections 2.3.2 (Capacity Emergencies - Real-Time Emergency Procedures) and 5.2 (Transmission Security Emergency Procedures).An example of Curtailment of capacity would be placing a reliability limit on an Interchange Schedule due to a Maximum Generation Emergency. After schedules using Non Firm Transmission Service (which effectively relieves the constraint) are curtailed in the order specified above, schedules using Firm Transmission Service would be curtailed. Note: the Transmission Service is not curtailed; only the energy profile of the Interchange Schedule is curtailed.

Based on the PJM OATT, PJM formed the following wording, which describes the method for curtailing energy using a Firm Transmission Service Reservation.

2.6.10 Firm Pro-Rata Curtailment Methodology

Curtailments to Interchange Schedules using Firm Transmission Service are applied proportionately across all Firm schedules in effect at the intended start time of the curtailment. PJM determines a desired relief amount and then distributes that schedule reduction across all Firm schedules. If the relief distribution results in individual Tag curtailments of less than one MW (the minimum curtailment amount), Firm schedules are removed from the stack on a First-In, First-Out basis until the recalculated distribution across the remaining Firm schedules ensures at least one MW of curtailment across all impacted Firm schedules for each. Curtail schedules that effectively relieve the constraint, proportionally among Native Load Customers, Network Customers and Firm Point-to-Point Transmission Customers. (NERC Transmission Bucket 7)

Exports would be curtailed for Maximum Generation Emergency; Native Load Customers, Network Customers, and other imports would not be curtailed (imports are helpful during times of capacity shortage). This guideline is used for Curtailment (on a whole contract basis) of Interchange Schedules using Firm Transmission Service.

The method used to determine which Firm schedules to curtail and in what order is explained below:

First, all effective cuts of schedules using lower priority Transmission Service Reservations (Non-Firm) are curtailed. Then recallable energy using Firm Transmission Service is curtailed. Interchange Schedules using Firm Transmission Service are cut on a whole contract basis and approximately proportionately among the Transmission Customers. The method used is to subdivide the schedule into two approximately equal segments, with about half of any given company's energy in each block. These blocks are then subdivided repeatedly until each block is less than or equal to 400 MW. The blocks are then cut from first to last, as needed to follow load. If a block is to be subdivided and there are multiple Transmission Customers, each with only one schedule in that block, the last Transmission Customer to submit an Interchange Schedule will be curtailed first. Similarly, a Transmission Customer's schedules will be curtailed in descending timestamp order.

2.6.11 Curtailment of Capacity-backed Backed Transactions Resources

PJM's procedures associated with the curtailment of capacity-backed transactions can be found in Manual 13 Sections 2.3.2 (Capacity Emergencies - Real-Time Emergency Procedures) and 5.2 (Transmission Security Emergency Procedures). PJM's procedures associated with the curtailment of capacity-backed resources can be found in Manual 13: Emergency Operations, section 2.3.2.

2.7 Tagging Priority Codes

Product Code	Product Description	Used by PJM
0 - NX	Next hour at market	No

1 - NS	Non-Firm Secondary	Yes
2 - NH	Non-Firm Hourly	Yes
3 - ND	Non-Firm Daily	Yes
4 - NW	Non-Firm Weekly	Yes
5 - NM	Non-Firm Monthly	Yes
6 - CF	Conditional Firm	No
6 - NN	Non-Firm Network	Yes
7 - CB	Firm Capacity Benefit Margin	Yes
7 - F	Firm	Yes
7 - FN	Firm Network Service	No
C - NS	On-Demand non-Spinning Reserve obligation/resource	No
C - RE	Energy recallable within 10 minutes	No
C - SP	On-Demand Spinning Reserve obligation/resource	No
G - EX	WECC 'Exchange' or 'displacement' energy delivered from a resource remote from the control area	No
G - F	Generator, Firm	No
G - F1	WECC Firm energy and capacity recallable within 1 hour	No
G - FC	WECC Unit Contingent Firm energy and capacity	No
G - FP	WECC Firm Provisional Energy	No
G - NF	Generator - Non-Firm	No
L	Load	No

Note: For an updated list of these codes from the NAESB webRegistry, go to:

<https://www.naesbwry.oati.com/>

~~For a list of PJM's Transmission Service products mapped to priority codes, go to:~~

~~<https://pjm Oasis.pjm.com/OASIS/PJM/products.htm>~~

3Section 3: Ancillary Services

Detailed information regarding Ancillary Services is located in the Open Access Transmission Tariff Accounting Manual. Additional detailed operating procedures are located in the PJM manuals.

<http://www.pjm.com/library/manuals.aspx>

This section has been replaced by PJM's Guide to Billing located at: <http://www.pjm.com/markets-and-operations/billing-settlements-and-credit/guide-to-billing.aspx>

4Section 4: RTOR Elimination

RTOR elimination is the elimination of charges for Transmission Service Reservations with a POD in the combined MISO and PJM region. Charges to reservations with a POD other than MISO will not be impacted by RTOR elimination. (FERC Docket No. EL02-111-004)

4.1 *Service Not Charged*

A reservation with a POD (on the PJM OASIS node) of MISO will not be charged if submitted on or after November 17, 2003 for service commencing on or after April 1, 2004.

4.2 *Service Charged*

Service will be charged for:

- Reservations with a POD other than MISO
- Reservations with a POD of MISO that do not meet the date criteria listed in Section 4.1

4.3 *Firm Service*

All Firm service, including LTF is included in the RTOR elimination.

4.4 *Redirects*

4.4.1 **Redirect on Non-Firm Basis (Non-Firm Secondary)**

No charge should be applied to service redirected on a Non-Firm basis. The original reservation will be charged if applicable.

4.4.2 Redirect on Firm Basis

Permanent redirects (where rollover rights follow the Firm redirect and rollover rights on the initial path are forfeit) are treated as new reservations for the purpose of RTOR charges.

4.4.3 Temporary Redirects on a Firm Basis

- a) For a Firm redirect from a pancaked path (e.g., POD = NYIS) to a de-pancaked path (POD = MISO), the original path should still be charged, because it held capacity, potentially preventing others from obtaining service.
- b) For a Firm redirect from a de-pancaked (POD = MISO) path to a pancaked path (e.g., POD = NYIS), the redirect should be charged.

For additional information on RTOR elimination, refer to Monitoring Analytics:

<http://www.monitoringanalytics.com>

The PJM Independent Market Monitor will review all reservations that are associated with the RTOR Elimination.

Revision History

Amendments to the Regional Practices will follow the rules defined in PJM Manual 34: PJM Stakeholder Process located on this page: <http://www.pjm.com/library/manuals.aspx>

09/04/1997

Section 1.10: The procedure for submitting transmission service requests with minimum(s) defined was updated based on recommendations from the 8/27 PJM Market Operations Committee meeting.

09/15/1997

1. Section 1.4: A note was added to remind customers that non-firm reservation charges will be credited back to the transmission customer if the PJM system is constrained.
2. Section 1.1: A clarification was made to inform customers that the only valid sinks for energy scheduling purposes on the PJM-NYPP-W path are NYSEG, NIMO, Rochester, and OH.

12/12/1997

Section 1.10: A clarification was made in reference to affiliate companies regarding the monthly and weekly ATC allocation process. Currently, multiple requests from one company are aggregated as a single request for this process. Multiple requests from a company OR its affiliate companies will also be aggregated as a single request.

01/28/1998

1. Section 1.1: Automated request review process implemented February 2, 1998.
2. Section 1.1: Network paths modified from company specific paths to 5 generic Network paths, the new paths will be effective for service beginning April 1, 1998.
3. Section 1.4: Change made in policy regarding Non-Firm Transmission Service Requests. Willing to Pay Congestion option will be added effective for service starting April 1, 1998. Customers will not be limited by ATC postings when choosing 'Willing to Pay' option.
4. Section 1.5: The option to pay for congestion for Network Import service will be implemented for transmission service beginning April 1, 1998.
5. Section 1.5: Under LMP, effective April 1, 1998, Network Import transmission service will be granted up to the amount requested (not limited to the posted ATC amount)
6. Section 1.4 & 1.6: Hourly non-firm and network import requests can be submitted up to 60 minutes prior to the beginning of the hour due to the automation of the approval process (rather than 90 minutes).
7. Section 1.10: Allocation process is modified for requests beginning April 1, 1998.
8. Section 1.12: The policy on rebating charges when an energy schedule is associated with a transmission reservation will be discontinued on April 1, 1998.
9. Section 1.11: Removed the paragraph concerning the customers option of converting June/July 1997 monthly postings to ON/OFF Peak or returning the service without penalty before 5/15/97
10. Section 1.14 The Bidding process applies only to Non-Firm point to point transactions electing not to pay for congestion.

03/11/1998

Section 1.14 The Transmission Service Reservation Bidding and Displacement Process will no longer be applicable for Non-Firm transmission service beginning post April 1, 1998. All transmission service customers have the option to select 'willing to pay' for congestion. (Also removed 1/28 bidding comment noted above)

03/18/1998

Section 1.16 Added a section explaining Fixed Transmission Rights (FTRs).

03/20/1998

Section 1.13 Added a section for Long-term/Short-term Firm Pricing Policy effective for service post April 1, 1998.

04/07/1998

Section 1.14 (Previously) Removed bidding section.

07/08/1998

Section 1.3 Added a comment to clarify multiple weekly firm request submittals.

07/10/1998

1. Section 1.3 Added Practice for extending weekly and daily FIRM transmission service requests.
2. Section 1.3 Added comment on Granting Partial Service for FIRM Transmission Service Requests.

08/05/1998

Section 1.2 Changed customer response time to the earlier of (1) noon on the day before service commences or (2) 15 days after PJM responds to the request.

08/07/1998

Section 1.3 Paragraph added on the modification of POR/POD for firm transmission requests.

09/23/1998

1. Section 1.10 Fifteen minute allocation window extended to FIRM service.
2. Section 1.3 Eliminated practice of extending weekly and daily FIRM service. Modified monthly firm service earliest request criteria.
3. Section 1.15 Became section 1.7. Sections 1.7 thru 1.14 became sections 1.8-1.15, respectively. Modified monthly firm service earliest request criteria.

10/27/1998

Section 1.1 Added HQ (western HQ deliveries/receipts at Chateauguay) as a sink/source for NYPP-W.

11/02/1998

Section 1.1 Added definition of PJM Hubs.

01/09/1998

Section 1.14 Changed FIRM Zonal Prices.

02/17/1999

1. Section 1.3 Firm monthly earliest request time changed to 14:00, 1st business day, seventeen months.
2. Section 1.4 Non-Firm/Network hourly latest request time changed to 45 minutes.
3. Section 1.6 Table Summary for transmission submittals updated to reflect the above two changes.
4. Section 1.11 Correction made to clarify that if no minimum is specified during allocation submittal times, that the request will be changed to the allocated capacity amount. This included a correction to the example.
5. Section 1.16 Info regarding secondary ARR trading on the ARR Oasis was removed (effective Jan, 1, 1999). All secondary ARR trading will be done via email/spreadsheet until the FTR Auction is ready in April, 1999.
6. Section 1.16 FTR flag for all Firm transmission requests defaults to "YES" instead of "NO" to be consistent with guidelines regarding Firm transmission services.

03/08/1999

1. Section 1.1 CEI was changed to FE as a valid POR/POD.
2. Section 1.3 Status type ANNULLED was added and defined as a transaction that removed by mutual agreement of PJM and the customer.
3. Section 1.11 Status type ANNULLED was added and defined as a transaction that removed by mutual agreement of PJM and the customer.
4. Section 1.5 Update to add product types Network Extended Designated and non-Designated.
5. Section 1.7 Update to add product types Network Extended Designated and non-Designated.
6. Section 1.9 Update to switch to wall-clock time convention.

03/12/1999

Section 1.2, 1.3, 1.6 Clarified customer confirmation for long term/short term Firm reservation to close of business on the 15th day.

04/09/1999

1. Section 1.1,1.16 Spelling errors corrected.
2. Section 1.8 Replaced "hour ending" with "real time or clock time" to reflect original change on 3/8/99 Sect. 1.9.
3. Section 1.1 Updated to add capacity types TLR Buy Thru.

04/14/1999

1. Section 1.3 Updated to include day-Secondary service type.
2. Section 1.16 Numeric values are now entered into FTR fields, no longer a YES, NO, Partial drop-down selection.
3. Section 1.17 Added to discuss TLR product type.

04/25/1999

Section 1.16 Updated - Network Ext Designated request ARRs via eCapacity tool.

05/01/2000

Section 1.3 Corrected the definition of weekly transmission service from Monday 0000 - Sunday 0000 with Monday 0000 - Monday 0000.

05/31/2000

1. Section 1.6 and 1.4 Changed the earliest request time for hourly service for willing to pay for congestion (WPC) to 8am one business day prior to the start of service.
2. Section 1.14 Changed the prices for Firm Point-to-Point Transmission Service

06/26/2000

Section 1.2 Added a third paragraph regarding Entergy ruling in the Right of First Refusal for Long term firm point-to-point transmission service requests and added language to sect. 1.6 customer confirmation times.

07/07/2000

1. Section 1.1 Removed language describing NYPPE and NYPPW valid sink and sources. This paragraph has been removed because it is no longer applicable.
2. Chapter 2 Energy Scheduling has been removed and replaced by an updated version from the scheduling manual
3. Chapter 3 Ancillary Services section has been added
4. Section 1.11 is renamed to Allocation Process for Firm and all non-firm allocation language has been removed. PJM does not support non-firm allocation of transmission at this time.

09/08/2000

Section 1.6 Update latest request time for hourly transmission from 45 minutes to 30 minutes due to EMC ruling effective 09/09/00 at 0900

09/20/2000

1. Section 1.2 Removed Entergy ruling paragraph and replaced this with a paragraph describing PJM's Tariff change that reflects the Entergy original ruling
2. Section 1.7 Paragraph one was modified to include the PJM tariff change reflected in the Entergy ruling.

12/28/2000

Section 1.6 Updated latest request time for hourly transmission from 30 minutes to 20 minutes

01/29/2001

1. Section 1.4 Paragraph 7 regarding hourly transmission. Removed the on-peak and off-peak restrictions for purchasing transmission and added the ability of a 24 hour block of hourly transmission.
2. Section 1.9 has also been modified to remove references to hourly on and off peak transmission respectively.

01/31/2001

Chapter 2 Energy Scheduling had been updated to reflect changes in the scheduling manual including

amendments to PJM Contact Information, External Transaction Submission Deadlines, and Validating and Confirming Transaction Requests sections.

03/01/2001

Network Service Language has been modified to include customers that import installed capacity backed resources from outside the PJM Control Area

04/26/2001

Modified Section 1.14 prices from Kilowatt per dollar to Megawatt per dollar.

05/24/2001

Modified Section 1.14 prices changed to reflect new Firm Pt to Pt Transmission rate increase.

06/08/2001

Modified Section 1.6 the latest request time for Daily Firm transmission per EMC ruling on 06/07/01.

07/03/2001

Modified Section 1.5 to include clarify conditions needed for ICAP into PJM

09/24/2001

Modified Section 1.1 to include new paths for PJM West implementation.

11/20/2001

Modified Section 1.17 to clarify Buy-thru-TLR procedures

11/30/2001

Modified Section 1.14 prices changed to reflect new Firm Pt to Pt Transmission rate decrease effective 01/01/2002

02/05/2002

Modified Section 1.14 to reflect old Firm Pt to Pt prices due to PJM West delay.

03/01/2002

Modified Section 1.14 to include new Firm Pt to Pt prices due to additional Rockland Load.

04/25/2002

Modified section 1.1 Removed pre-PJM West paths

05/09/2002

Modified section 1.17 Clarified use of TLR_Buy_Thru Product

11/06/2002

Modified section 1.6 to add new Secondary Products and deadlines

12/13/2002

Modified Chapter 2 Clarification of Curtailment Order and Recall of Energy. Example of Recall of Energy added.

02/14/2002

Modified section 1.17 to include TLR_Buy_Thru Product procedures

03/13/2003

Added Section 1.18 Rebating Transmission Service Policy

09/17/2003

Modified Section 1.5 to clarify Network Designated Service

11/20/2003

Added Section 2.1 NERC Tagging - Priority Codes obtained from NERC "Tagging Essentials for ETag 1.7" located at <http://server06.nerc.com/tag/E-tag/Tagging%20Essentials.pdf>.

02/13/2004

Modified Redirect Section to describe updated process

03/08/2004

Added new CE Paths and Prices

03/15/2004

Added updated Scheduling and Curtailment section and removed section of annulment policy for NYISO curtailments. This policy was effective prior to automated scheduling because NYISO schedules didn't hold ramp prior to 11/01/04.

03/31/2004

Updated to Correct CE Prices

04/08/2004

Removed References to DELI, RIVER and ALEC in the path list

04/26/2004

Added Section 1.19 Pathway Allocation Process

06/18/2004

1. Update path list for AEP and DPL
2. Fixed all dead links to point to the correct documentation
3. Clarified customer confirmation deadlines for firm service

09/24/2004

Added Zone prices for AEP and DPL

11/24/2004

Added RTOR Chapter

12/03/2004

Updated RTOR Information based on FERC Dec 18th ruling

12/21/2004

Updated Path List

02/25/2005

Updated interface list and source/sink examples, various minor formatting changes, updated allocation process for OATT reference, removed outdated pricing table tables, removed CE pathway section

02/28/2005

Update Path List

03/08/2005

Added Ramp Information Section and Loss Section to Ancillary Service Chapter

04/13/2006

1. Update Language in Section 1.2.
2. Updated Information in Section 1.4.
3. Update Timing Language in Section 1.9.
4. Updated Information in Section 1.14. Updated AEP East Zonal pricing in table in Section 1.15. Updated Language in Section 1.17. Updated Language in Section 1.19.

05/02/2006

1. Added row to table in section 1.6 for requests for annulment.
2. Update to Language in Sections 1.17, 1.19 and 1.20.
3. Added section 1.21 along with links to www.pjm.com. Updated some spacing and style of text. Corrected spelling and grammar throughout the document.

11/02/2006

1. Section 1.1 added SPOT_IN capacity type.
2. Section 1.3 moved timings to table in Section 1.6.
3. Added example in Section 1.4 for the new products added that end with NPC and WPC.
4. Section 1.5 changed because the WPC box has been removed and necessary for selection of WPC and NPC products.
5. Section 1.6 reformatted Table and change of times.

03/01/2007

1. Section 1.1 updated PATH list and POR/POD list.
2. Section 1.19 updated rebate information.

03/30/2007

Section 1.6 updated times as per Tariff changes Section II. 17.8 and Section II 18.3.

04/04/2007

Section 1.6 updated times as per Tariff changes Section II 17.9 and Section II 18.4.

04/05/2007

Updated capacity types in section 1.1, NPC/WPC information in section 1.4, matched table to tariff in 1.15, repaginated for Appendix, minor misc changes for new oasis web page migration, etc.

05/10/2007

Update for SPOT keyword removal from EES, due to Business Practice change effective 5/10/2007 12:00

06/22/2007

Updates for FERC 890 ATC/OASIS regulations.

07/01/2007

Added reference to Amendment Process document.

08/06/2007

Updated timing requirements.

10/06/2007

Finalized Order 890 revisions.

12/28/2007

Updated section 1.12 business practices for resales.

01/07/2008

Updated section 1.12 business practices for resales.

03/12/2008

1. Added section 1.5.3 Spot Market Imports (SPOT_IN)
2. updated section 1.10 to reflect manual and automatic release of SPOT_IN
3. updated section 1.6 table for SPOT_IN timing requirements
4. clarified language in section 4 RTOR information.

04/01/2008

Updated SPOT-IN rules per MIC meeting discussion.

04/11/2008

Updated SPOT_IN rules per MIC recommendation. Changed early time to 9:00AM

10/17/2008

1. Minor updates to Table 1.6
2. added clarification of OASIS queue under section 1.2
3. added changes for resales under section 1.12 OASIS Postings
4. added rebid timings to table 1.6
5. added section 1.5.4 Network Resources
6. updated other minor typographical errors.

05/08/2009

1. Updated section 1.5.3 for Spot Imports based on MIC/MRC review and conference call.
2. Updated section 1.10 for Spot Import releases.
3. Updated table of contents.

05/14/2009

Updated automatic release of service timings (section 1.5.3 and table 1.6) due to market participants 5/13/09 MIC review.

10/20/2010

1. Updated Section 1.1 paths and product lists.
2. Added clarification for annulments in Section 1.20.
3. Updated Chapter 3 to refer to the Guide to Billing document from Market Settlements.
4. Updated minor language inconsistencies, references, and hyperlinks throughout document.

10/27/2011

Added "PJM Settlement Inc." as the counterparty to section 1.12 under Billing and Settlements.

11/15/2011

Added language for transfer of service under section 1.12 Resales.

02/28/2012

Removed outdated language from Section 1.2 Rollover Rights

09/14/2012

Removed references to 'Up-to' (congestion) from several sections as this offering has been moved to eMarket.

02/8/2013

1. Section 1.6 added 'business' day clarification.
2. Section 1.21 changed to valid path for example.
3. Section 2.1 updated TSIN to NAESB webRegistry and hyperlink.

05/21/2013

1. Section 1.1 removed EKPC as a POR/POD due to integration.
2. Added language about elimination of internal sources and sinks.
3. Section 1.2 and 1.3 added note to include source and sink in customer comments field.

06/12/2013

1. Section 1.12 updated Billing and Settlements to reflect correct PJMSettlement name consistent with tariff language.
2. Corrected minor misspelled words throughout document via spellchecker.

11/21/2013

1. Added Interchange Schedule language from Manual 41 in support of retiring this Manual
2. Administrative Changes
 - a. Updated fax number with a customer support email address
 - b. Added PJM's default 1000 MW ramp limit
 - c. Added clarifying language around NYISO interface ramp limit
 - d. Changed MMU reference to PJM's Independent Market Monitor

03/27/2014 – Retirement of EES and Introduction of ExSchedule

1. Replaced mentions of "Control Area" with "Balancing Authority"
2. Replaced mentions of "Energy Schedule" with "Interchange Schedule"
3. Replaced mentions of "transaction" with less ambiguous terminology, as appropriate
4. Replaced mentions of "OASIS Reservation" with "Transmission Service reservation"
5. Replaced mentions of "NERC Tag" with "Tag"
6. Replaced mentions of "EES" with "ExSchedule"
7. Replaced mentions of "Real-Time with Price" with "Dispatchable"
8. Replaced mentions of "Two Settlement Schedule" with "Day-ahead Bid"
9. Capitalized mentions of "Transmission Service"
10. Capitalized mentions of "Firm"
11. Capitalized mentions of "Non-Firm"
12. Capitalized mentions of "Point-to-Point"
13. Capitalized mentions of "Interface Pricing Point"
14. Capitalized mentions of "Ramp Reservation"
15. Section 1.11 Allocation Process for Earliest Request Time
 - a. Added clarifying language and removed incorrect example.
16. Section 1.21 Interface Pricing revised for clarity. No material changes made.
17. Revised section numbering in Chapter 2 to conform with Chapter 1
18. Revised entirety of section 2.1 for clarity and to replace EES specific language with ExSchedule specific language
19. Section 2.1.1 renamed from "External Transaction Scheduling Business Rules" to "Interchange Scheduling Business Rules"
20. Section 2.1.2.2 renamed from "External Transaction Minimum Duration" to "Interchange Schedule Minimum Duration"
21. Section 2.1.2.3
 - a. Renamed from "External Transaction Timing Requirements" to "Interchange Schedule Timing Requirements"
 - b. Removed ramp reservation timing requirement based on reservation duration
 - c. Removed ramp reservation expiration timing requirement based on reservation duration

- d. Converted expiration times into a table
 - e. Removed reference to tag submission deadline for day-ahead checkout
 - f. Removed tag submission deadline based on tag request duration
 - g. Removed reference to the scheduling deadline for Interchange Schedules utilizing Firm transmission service
22. Section 2.1.2.5 Data Requirements removed and moved to Section 2.2.1
23. Section 2.1.2.5 Ramp Limits modified to clarify when Dispatchable Reservations and Tags on the NYISO interface are evaluated against the ramp limits
24. Section 2.1.2.6 Ramp Limit Violations
- a. Renamed from “Ramp Violations” to “Ramp Limit Violations”
 - b. Removed language that states PJM will not correct ramp limit violations caused by a TLR and modified the language to ensure that PJM has the discretion to correct ramp limit violations when needed
 - c. Added clarifying language regarding how Transmission Service priority is utilized when PJM determines which Tags are eligible for curtailment to alleviate ramp limit violations
 - d. Removed explicit mention of ramp violations caused by market participants possessing offsetting ramp reservations in order to give PJM the leeway to take corrective actions for all ramp limit violations intentionally caused by market participants.
25. Section 2.1.2.8 Transmission Service Sliding
- a. New section created to delineate between general OASIS rules and Sliding rules
 - b. Added explicit mention of the validations PJM will perform to evaluate Transmission Service Sliding
26. Section 2.1.2.9 Financially Responsible Party (FRP) Approvals
- a. New section created to clarify PJM’s FRP approval rules
27. Section 2.1.2.10 renamed from “Entering Ramp Reservations” to “Ramp Reservations”
28. Section “Entering Schedules” removed and content merged into Sections 2.1.2.10 and 2.1.2.11
29. Section 2.1.2.10 renamed from “Entering Real Time With Price Schedules” to “Dispatchable Interchange Schedules”
30. Section 2.1.2.12 renamed from “Entering Dynamic Schedules” to “Dynamic Transfers”
31. Section 2.1.2.13 renamed from “Entering Two Settlement Schedules” to “Day-ahead Bids”
32. Revised entirety of section 2.2 for clarity and to replace EES specific language with ExSchedule specific language
33. Section 2.2.1 replaced with Section 2.1.2.5 Data Requirements with modifications to account for specific information PJM requires for Interchange Scheduling
34. Section 2.2.2 Data Validations
- a. renamed from “Validations” to “Data Validations”
 - b. listed major data validations being performed by ExSchedule
35. Section 2.2.3 renamed from “Real Time Evaluation and Checkout” to “Interchange Schedule Evaluation and Checkout”
36. Section 2.2.4 renamed from “Real Time with Price Evaluation and Checkout” to “Dispatchable Interchange Schedule Evaluation and Checkout”
37. Section 2.4 Implementation of Interchange Information

05/19/2014

Section 2.1.2.2, 45-minute scheduling requirement, was removed due to FERC Order 764 ruling

10/17/2014 –INT Standard Revisions mandated via the NERC Project 2008-12 Coordinate Interchange Standards

1. Section 2.1.2.2
 - a. Added clarifying language around responding to emergency requests
 - b. Added reference to INT-006
2. Section 2.1.2.3
 - a. Added clarifying language around NERC Registry and roles that PJM function under
 - b. Added reference to INT-006 and 009
3. Section 2.1.2.5 Added reference to INT-006
4. Section 2.1.2.11 Added clarifying language around Pseudo Tie Schedules
5. Section 2.2.2
 - a. Replaced mention of “Interchange Authority” with “Balancing Authority”
 - b. Added reference to INT-006
6. Section 2.3
 - a. Replaced mention of “Interchange Authority” with “Sink Balancing Authority”
 - b. Added reference to INT-006
 - c. Removed distribution language referenced in retired standard INT-007
7. Section 2.4
 - a. Added clarifying language around Merchant Facility checkout process
 - b. Added reference to INT-009 and INT-010
 - c. Removed reference to retired standards INT-003 and 007

v23 - 01/01/2015 – Interchange Volatility Regional Practices updates with MRC approval on 11/20/2014

1. Section 2.1.2.2 – Updated Dispatchable Reservations deadline from 12:00 to 18:00
2. Section 2.1.2.6 – Added this section label ‘Interchange Cap’
 - a. The existing section numbers were advanced by one for Section 2.1.2.6 – Section 2.1.2.12 i.e.:
 - i. ‘2.1.2.6 OASIS Business Rules’ was renumber to ‘2.1.2.7 OASIS Business Rules’
 - ii. ‘2.1.2.12 Day Ahead Bids’ was renumber to ‘2.1.2.13 Day Ahead Bids’
3. Section 2.2.2 – Added the Interchange Cap validation in the Tag validations performed

v24 - 02/02/2015

1. Added Section 1.22 – Service Across Multiple Transmission Systems (“SAMTS”)
 - a. Implementation of NAESB 3.0
2. Section 2.1.2.12 – Dynamic Transfers
 - a. Corrected a typo
3. Section 2.2.2 – Data Validations
 - a. Added items pertaining to the Export Credit Screen required per Attachment Q of the PJM OATT

v25 - 03/31/2016

1. Section 1.4 Short-Term Non-Firm Point-to-Point Transmission Service Requests
 - a. Removed Scheduling Horizon information redundant with PJM's ATCID.
2. Section 1.6 Table Summary: Transmission Service Submittals
 - a. Added Shotgun Start Window for the hour-SPOT_IN product
3. Section 2.1.2.2 Interchange Schedule Timing Requirements
 - a. Changed the Day-ahead Bid submission time from 12:00 EPT to 10:30 EPT

v26 – 10/03/2017

1. Approvals
 - a. Approval Date: 08/24/2017
 - b. Effective Date: 10/03/2017
2. Section 2.1.2.2 Interchange Schedule Timing Requirements
 - a. Added CTS Bid timing requirements
 - b. Modified language surrounding when Dispatchable MW and Price values can be change
3. Section 2.1.2.4 Ramp Limits
 - a. Added clarification on the timing of the Dispatchable and CTS transaction ramp evaluation
4. Section 2.1.2.10 Ramp Reservations
 - a. Added clarification on the relationship between CTS transactions and Ramp Reservations
5. Section 2.1.2.11 Dispatchable Interchange Schedule
 - a. Added language to clarify when Dispatchable Tags must be submitted to match the Dispatchable Reservation and when they must be submitted at 0 MW.
6. Section 2.1.2.14 PJM-MISO Coordinated Transaction Scheduling (CTS)
 - a. New section to capture the business rules surrounding CTS transaction scheduling
7. Section 2.2.1 Data Requirements
 - a. Added mention of CTS Price/Energy input requirement
8. Section 2.2.2 Data Validations
 - a. Added Market Operator requirement per eTag Specification 1.8.3
 - b. Added Physical Path validation for CTS
 - c. Added Energy Profile validation for CTS
 - d. Added Transmission Profile validation for CTS
 - e. Added CTS Bid validations
9. Section 2.2.6 PJM-MISO Coordinated Transaction Scheduling (CTS) Evaluation and Checkout
 - a. New section to capture CTS evaluation process

v05 – 03/01/2018

1. Approvals
 - a. Approval Date: (administrative)
 - b. Effective Date: 03/01/2018
2. Administrative Edits
 - a. Major reformatting to better align with current PJM documentation guidelines
 - b. Addition of a Definitions section
 - c. Stopped delineating major content by “Chapters” and instead switched to “Sections”
 - i. “Chapter 1: Transmission Reservation” to “Section 1: Transmission Service”

- ii. “Chapter 2: Interchange Scheduling and Interchange Curtailment Order” to “Section 2: Interchange Scheduling”
 - iii. “Chapter 3: Ancillary Services” to “Section 3: Ancillary Services”
 - iv. “Chapter 4: RTOR Elimination” to “Section 4: RTOR Elimination”
- d. Re-baselined the document version from v26 to v05 in order to align with PJM’s internal document management system
- e. Cleanup and standardization of the document’s Revision History section
- f. Various minor revisions to fix grammatical errors and to standardize terminology
- g. Various minor revisions to improve clarity of existing requirements
- h. Section 1
 - i. Renamed Section 1.3.2.3 from “Auction Revenue Rights” to “Auction Revenue Rights (ARR)”
 - ii. Renamed Section 1.5.3 from “Spot Market Imports (SPOT_IN)” to “Spot Market Energy Imports (SPOT_IN)”
 - iii. Renamed Section 1.5.3.1 from “Retracting unused portion of Spot Import Reservations” to “Retracting Unused Portion of SPOT_IN Reservations”
 - iv. Renamed Section 1.5.3.2 from “Background on Spot Market Imports” to “Background on Spot Market Energy Imports”
 - v. Renamed “1.6 Table Summary: Transmission Service Submittals” to “1.6 Transmission Service Timings”
 - vi. Renamed Section 1.10.1 from “Manual Release of SPOT_IN” to “Manual Release of SPOT_IN Reservations”
 - vii. Renamed Section 1.10.2 from “Automatic Release of SPOT_IN” to “Automatic Release of SPOT_IN Reservations”
- i. Section 2
 - i. Section 2.1.1 – Interchange Scheduling Business Rules promoted to Section 2.2 with all subheadings and references updated accordingly
 - ii. Section 2.2 – Interchange Approval Protocols promoted to Section 2.3 with all subheadings and references updated accordingly
 - iii. Section 2.3 – Distribution of Interchange Information promoted to Section 2.4 with all subheadings and references updated accordingly
 - iv. Section 2.4 – Implementation of Interchange Information promoted to Section 2.5 with all subheadings and references updated accordingly
 - v. Section 2.5 – Curtailment of Transmission or Recall of Energy promoted to Section 2.6 with all subheadings and references updated accordingly
 - vi. Section 2.6 – Tagging Priority Codes promoted to Section 2.7 with all subheadings and references updated accordingly
 - vii. Renamed Section 2.6.1 from “Non-Firm over Secondary Points not willing to pay congestion charges” to “Non-Firm Over Secondary Points NPC”
 - viii. Renamed Section 2.6.2 from “Non-Firm not willing to pay congestion charges (NF-NPC)” to “Non-Firm NPC”
 - ix. Renamed Section 2.6.3 from “Network Import not willing to pay congestion charges (Net-NPC)” to “Network Import NPC”
 - x. Renamed Section 2.6.4 from “Spot Market Imports (SPOT_IN)” to “Spot Market Energy Imports (SPOT_IN)”
 - xi. Renamed Section 2.6.5 from “Non-Firm over Secondary Points willing to pay congestion charges” to “Non-Firm Over Secondary Points WPC”

- xii. Renamed Section 2.6.6 from “Non-Firm willing to pay congestion charges (NF-WPC)” to “Non-Firm WPC”
- xiii. Renamed Section 2.6.7 from “Network Import willing to pay congestion charges (Net-WPC)” to “Network Import WPC”

v06 – 04/05/2018

- 1. Approvals
 - a. Approval Date: (administrative)
 - b. Effective Date: 04/05/2018
- 2. Administrative Edits
 - a. Definitions
 - i. Added definition for Firm Transmission Feasibility Study
 - ii. Removed definition for Initial Study
 - b. Section 1.2
 - i. Replaced Initial Study with Firm Transmission Feasibility Study in response to the modifications made to PJM’s Open Access Transmission Tariff as filed in FERC Docket No. ER18-750-000
 - ii. Minor revisions to add clarity
 - c. Section 1.6
 - i. Clarification that the Response to Rebid deadlines enforced during a RESALE apply to the Reseller and not the Transmission Provider

v07 – 12/19/2018

- 1. Approvals
 - a. Approval Date: (administrative)
 - b. Effective Date: 12/19/2018
- 2. Edits
 - 3. Section 2.1.2.2 Interchange Schedule Timing Requirements
 - a. Changed the Day-ahead Bid submission time from 10:30 EPT to 11:00 EPT in response to the modifications made to PJM’s Open Access Transmission Tariff as filed in FERC Docket No. ER19-305-000

v08 – 06/23/2019

- 1. Approvals
 - a. Approval Date: MRC - 04/25/2019
 - b. Effective Date: 06/23/2019
- 2. Edits
 - a. Various minor revisions to fix grammatical errors and to standardize terminology
 - b. Various minor revisions to improve clarity of existing requirements
 - c. Standardized PJM Contact Information throughout the document
 - d. Removed various references to specific Transmission Service product names
 - e. Section 1

- i. Section 1.1.2 - Updated description of how to retrieve data from the OASIS application.
- ii. Section 1.1.3 - Added detail to product descriptions and updated instructions on finding product information in the OASIS tool.
- iii. Section 1.1.5 - New section describing Minimum Accepted Capacity requirements.
- iv. Section 1.2 - Added references to FTR and ARR manuals and information. Removed ARR data entry requirements.
- v. Section 1.3.1 - Updated to reflect the Minimum Accepted Capacity requirements.
- vi. Section 1.5.1 – Specified that designated resources shall be listed in the LINKED_RESOURCES field instead of the CUSTOMER_COMMENTS field.
- vii. Section 1.6 - Updated table to reflect NAESB WEQ timings already adopted in the PJM tariff and removed reference to the 1/31/2009 effective date.
- viii. Section 1.10 - Updated instructions for where to find scheduled use of transmission service.
- ix. Section 1.12 – Specified that Transmission Customers may not resell to themselves and must instead use the Consolidation function.
- x. Section 1.12.2 - Modified language to align with NAESB WEQ BPS v3.1 which requires a RESALE to go to ACCEPTED instead of CONFIRMED. Updated the description of the mechanics for completing the task in the OASIS tool. Clarified the process for executing the A-1 service agreement for resale of service.
- xi. Section 1.12.6 - Removed "start time, stop time" as these values are inherent to the request for service.
- xii. Section 1.12.7 – Specified that Transfers are no longer manually implemented by PJM OASIS administrators. Indicated the validations that occur in the OASIS tool. Added a summary of financial obligation as required in the PJM tariff by reference to NAESB WEQ-001-12.2.
- xiii. Section 1.17 – Modified language to reflect that ARR/FTR requests are not submitted through the OASIS.
- xiv. Section 1.20 – Updated to reflect that the process for annulment of service is now evaluated by the oasis tool, instead of manually by the OASIS administrator.
- xv. Section 1.22.2 - Changed status applied after not attesting from "INVALID" to "DECLINED."
- f. Section 2
 - i. Section 2.7 – Replaced table containing a mapping of priority codes to products with a reference to the new online mapping page.

v09 – 08/05/2021

1. Approvals

- a. Approval Date: MRC - 04/25/2021
- b. Effective Date: 08/05/2021

2. Edits

- a. Section 1.18 - Removed language surrounding Transmission Loading Relief Buy-Through Capacity Type

V10 – 10/27/2021

1. Approvals
 - a. Approval Date: MRC - 09/29/2021
 - b. Effective Date: 10/27/2021
2. Edits
 - a. Various minor revisions to fix grammatical errors and to standardize terminology
 - b. Various minor revisions to improve clarity of existing requirements
 - c. Definitions
 - i. Added definitions for Challenger and Defender, which are NAESB-defined terms relating to the Preemption/ROFR process
 - ii. Added a definition for Right of First Refusal
 - iii. Added definitions for Non-Firm Redirect, Transmission Service Request, and Transmission Service Reservation
 - d. Section 1
 - i. Section 1.1.1 – modified section to contain updated links to the User Guide, API Guide, and the Data Dictionary
 - ii. Section 1.1.3 – added PJM’s Network External Load product
 - iii. Section 1.1.4 – removed unnecessary language related to trading hubs
 - iv. Section 1.1.5 – clarified that PJM neither engages in the traditional counteroffer process nor utilizes REBID requests for MW Profile negotiation
 - v. Section 1.2 – added language to clarify that LTF requests must start on the first day of the month in which service begins
 - vi. Section 1.2.1 – added language to clarify that rollover rights are always granted by default
 - vii. Section 1.2.2 – modified existing language to add clarity to renewals and the ROFR process
 - viii. Section 1.2.4 – new section added to clarify the LTF deferral process
 - ix. Section 1.2.5 – new section added to capture LTF redirect process
 - x. Section 1.3 – added language to clarify existing rules regarding LTF requests preempting monthly STF requests. Added language to clarify existing rules regarding the preemption of ACCEPTED requests. Added language that clarifies PJM’s consideration of ASTFC as part of the formal Congestion Management Process. Removed ARR information already covered in Section 1.17
 - xi. Section 1.3.2.2 – moved language that is only applicable to LTF redirects into new section 1.2.5
 - xii. Section 1.3.2.3 – removed ARR Section not applicable to STF.
 - xiii. Section 1.3.2.4 – moved Section 4 RTOR reference to Section 1.3.2
 - xiv. Section 1.4 – added a new introduction paragraph.
 - xv. Section 1.4.1 – new section added to contain language that clarifies existing rules regarding the preemption of ACCEPTED requests
 - xvi. Section 1.5.1 – deleted FERC Order 890 quotation. Modified ARR information to reference PJM Manual 06
 - xvii. Section 1.5.2 – modified existing language to clarify when preemption can occur
 - xviii. Section 1.5.3 – added language to clarify when preemption can occur
 - xix. Section 1.5.5 – new section to clarify PJM’s Network External Load product
 - xx. Section 1.6 – modified customer confirmation times for hourly service per the NAESB v3.2 Business Practice Standards. Specified Customer Confirmation times for Spot-In

service. Added new footnote on Latest Request Time to clarify when the published times may be earlier for non Pre-Confirmed requests. Added new footnote to clarify the boundary between Day-Before and Day-Of automatic release deadlines for Spot-In service.

- xxi. Section 1.7 – moved preemption language to Sections 1.3 and 1.4
- xxii. Section 1.12.1 – added language to clarify how OFFER_INCREMENT and SERVICE_INCREMENT must be used for Resales
- xxiii. Section 1.12.2 – removed incorrect language surrounding the Attachment A-1 agreement
- xxiv. Section 1.13 – removed requirement that Renewal requests must be Pre-Confirmed
- xxv. Section 1.14 – added language that speaks to PJM’s discount and clarified that PJM does not permit Non-Firm price negotiation
- xxvi. Section 1.15 – clarified that PJM does not permit Firm price negotiation
- xxvii. Section 1.17 – removed ARR/FTR language that duplicates the direction given in PJM Manual 06.
- xxviii. Section 1.19 – clarified that only Non-Firm Point-to-Point service is eligible for curtailment rebates
- xxix. Section 1.20 – modified the information regarding annulments and terminations in order to add clarity
- xxx. Section 1.21 – modified the language surrounding source/sink values to reflect current practices
- xxxi. Section 1.22.1 – clarified that Coordinated Requests must have the type ORIGINAL
- xxxii. Section 1.22.2 – added language to clarify that Coordinated Requests can be reduced as an alternate to being annulled
- e. Section 2
 - i. Section 2.2.2 – clarified the accepted scheduling intervals related to PJM’s 15-minute scheduling implementation
 - ii. Section 2.2.7 – updated language surrounding the process for Transmission Service sharing requests
 - iii. Section 2.2.12 – clarified PJM’s Pseudo Tie registration requirement
 - iv. Section 2.7 – Updated Tagging Priority Codes

V11 – 1/27/2023

1. Approvals
 - a. Approval Date: MRC – 1/25/2023
 - b. Effective Date: 1/27/2023
2. Edits
 - a. Definitions
 - i. Added a definition for Managed Encumbrance, which is a NAESB-defined term related to Transmission Service reservations
 - b. Section 1
 - i. Added “cross-border” reference in several locations for clarity
 - ii. Section 1.1.3 – Added PJM’s Network Stipulated and Network Market Internal products
 - iii. Section 1.5.5 – Clarified that certain attributes of the Network External Designated product will apply to the Network External Load product
 - iv. Section 1.5.6 – Added a description of the Network Stipulated product
 - v. Section 1.5.7 – Added a description of the Network Market Internal product

- c. Section 2
 - i. Section 2.2.12 – Added language to describe PJM’s handling of Managed Encumbrances in relation to Pseudo Ties
 - ii. Section 2.2.15 – New section added to describe PJM’s enforcement of Interface Limits
 - iii. Section 2.3.2 – Added PJM’s Interface Limit validation for Tag requests
 - iv. Section 2.6.11 – Replaced language duplicating Manual 13’s procedures for curtailing off-system capacity sales with a reference to Manual 13

V12 – 7/26/2023

- 1. Approvals
 - a. Approval Date: MRC – 7/26/2023
 - b. Effective Date: 7/26/2023
- 2. Edits
 - a. Definitions
 - i. Added definitions for Application and Studies Agreement and Phase I System Impact Study in accordance with IPRTF
 - ii. Removed definition for Firm Transmission Feasibility Study in accordance with IPRTF
 - b. Section 1
 - i. Section 1.2 – Updated to reflect changes due to the IPRTF process
 - ii. Section 1.2.3 – Updated to reflect changes due to the IPRTF process

ii.