



Open Access Same - Time Information System

Regional Transmission and Energy Scheduling Practices

Version 16: Effective February 29, 2012

Table of Contents

CHAPTER 1: Transmission Reservation..... 3

 1.1 Requesting Transmission Service on the PJM OASIS 3

 1.2 Long-Term Firm Point-to-Point Transmission Service Requests..... 5

 Rollover Rights 5

 Right of first refusal 6

 Clarification of OASIS Reservation Queue for ATC: 6

 1.3 Short-Term Firm Point-to-Point Transmission Service Requests 6

 Granting Partial Service for Firm Transmission Service Requests - Counteroffers 7

 Modifications to Receipt and Delivery Points for Firm Service - Redirects 7

 1.4 Short-Term Non-Firm Point-to-Point Transmission Service Requests 8

 1.5 Network Transmission Service Requests..... 9

 1.5.1 Network External Designated 9

 1.5.2 Network External Non-Designated 9

 1.5.3 Spot Market Imports (SPOT_IN)..... 10

 1.5.4 Network Resources 11

 1.6 Table Summary: Transmission Service Submittals 12

 1.7 Reservation Priorities for Granting Transmission Service 14

 1.8 Time Block Conventions for Requests 14

 1.9 On-Peak and Off-Peak Transmission Service Requests 14

 1.10 Reserving but not Utilizing Transmission Service 15

 Manual Release of SPOT_IN..... 15

 Automatic Release of SPOT_IN..... 15

 1.11 Allocation Process for Earliest Request Time 15

 1.12 Posting Transactions for Resale..... 17

 1.13 Submitting Request for Renewal 20

 1.14 PJM Non-Firm Pricing and Discounting Policy 20

 1.15 PJM Long-term/Short-term Firm Pricing Policy 20

 1.16 Transmission Service Reservation Bidding and Displacement Process 21

 1.17 Financial Transmission Rights (FTRs)/Auction Revenue Rights (ARRs) 21

 1.18 Transmission Loading Relief Buy Through (TLR_BUY_THRU) Capacity Type 21

 1.19 Policy for Rebating Transmission Service and Forgiveness of Congestion Charges 22

 1.20 Early Termination or Annulment of Service 23

 1.21 Interface Pricing..... 23

 Mapping of External Control Areas to Interface Pricing Point 23

CHAPTER 2: Energy Scheduling and Interchange Curtailment Order.....	25
External Transaction Scheduling	27
Entering Ramp Reservations.....	35
Entering Schedules.....	36
Entering Real-Time with Price Schedules	36
Entering Two-Settlement Schedules.....	37
2.1 NERC Tagging - Priority Codes.....	39
2.2 Ramp Information.....	41
CHAPTER 3: Ancillary Services.....	43
CHAPTER 4: RTOR Elimination.....	44
APPENDIX A: Regional Practices Update Log.....	45

© 2011 [PJM Interconnection](#) | [Legal & privacy Information](#)

CHAPTER 1: Transmission Reservation

1.1 Requesting Transmission Service on the PJM OASIS

OASIS Hotline

Requests for transmission service are made on the PJM Open Access Same-Time Information System (“OASIS”). In some cases, assistance or intervention by a PJM OASIS administrator may be needed. For assistance or clarification on the PJM Regional Transmission and Energy Scheduling Practices (“Regional Practices” or “Business Practices”), contact the OASIS Hotline phone or email. For technical information on how to navigate the PJM OASIS, see the online user guide at: <http://www.pjm.com/markets-and-operations/etools/oasis/oasis-user-guide.aspx>

OASIS Hotline Phone: (610) 666-8972

OASIS Hotline email: oasisadmin@pjm.com

Transmission Service Request Paths

Requests submitted via the PJM OASIS (<http://oasis.pjm.com>) should be made on a path name basis by selecting Point of Receipt (“POR”)/Point of Delivery (“POD”)/Product from the Display ATC option on the PJM OASIS Menu. The Buy Service (Buy ATC) option should only be used to CONFIRM or WITHDRAW existing transmission requests. All reasonable commercial paths can be posted with ATC, therefore if you don't see a path available, please call the OASIS Hotline or email before submitting a request. Paths may be updated without notice due to customers requesting new paths, deleting paths that have been inactive, modeling purposes, or merchant transmission lines. A current list is available on the PJM OASIS by selecting PJM Info, then PJM Transmission Paths link. Paths conform to the NAESB WEQ 001-6 PATHNAMING STANDARDS for the user interface and the template interface. Paths are listed according to the following structure: Region/Transmission Provider/Path//. 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

The transmission products available on the PJM OASIS are:

- FIRM
- NON_FIRM
- NON_FIRM_ON_PEAK
- NON_FIRM_OFF_PEAK
- NON_FIRM_INTERNAL
- NETWK_EXT_DESIGNATED
- NETWK_EXT_NON_DESIG
- NETWK_EXT_NON_DESIG_ON_PEAK
- NETWK_EXT_NON_DESIG_OFF_PEAK
- SECONDARY_NON_FIRM*
- SECONDARY_NON_FIRM_INTERNAL*

- SPOT_IN
- TLR_BUY_THRU*
- UP_TO_CONGESTION**

*Note: Secondary and TLR BUY THRU Products will be discussed in sections 1.3 and 1.18, respectively.

**Note: The UP_TO_CONGESTION product is NOT a transmission service reservation and therefore has no transmission rights associated with it. The UP_TO_CONGESTION product is available on the PJM OASIS strictly for the purpose of allowing market participants to submit Up-To Congestion bids into the PJM Day-Ahead Energy Market. It is listed on the OASIS as a request that 1) does not decrement ATC, 2) only serves as a mechanism to relay necessary information needed for an Up-to-Congestion bid, and 3) is not charged and does not receive any credited allocations.

Products are prefixed with a service increment. For a more detailed and current list of products including NPC / WPC designations, please go to the PJM Transmission Products link on the PJM OASIS, PJM Info menu. Product availability is determined by the appropriate tariff agreement.

The Points of Receipt (“POR”) and Points of Delivery (“POD”) 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
- EKPC – East Kentucky Power Cooperative
- 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
- OVEC – Ohio Valley Electric Corporation
- PJM – PJM Interconnection
- TVA – Tennessee Valley Authority
- WEC – Wisconsin Energy Corporation

For a current list including merchant transmission PORs and PODs, please go to the PJM Service Points link on the PJM OASIS, PJM Info menu.

PJM Trading Hubs (Eastern Hub, Western Hub, and Western Interface Hub “West Int Hub”) are defined as reference points at which standard energy products are traded. Hubs act as a common point, or reference price, for commercial trading. The PJM Trading Hubs are fixed weighted averages of the Locational Marginal Prices (“LMP”) at a set of representative busses for the designated region. Hub prices are representative of the PJM market, are relatively stable under various system conditions, and

are not distorted by local transmission limits or system topology changes. FTRs may be acquired both to and from the PJM Trading Hubs. The Western and Eastern Hubs consist of over 100 buses in the western and eastern regions of PJM, respectively.

- For more details regarding buses and hubs, please see LMP Model Information at: <http://www.pjm.com/markets-and-operations/energy/lmp-model-info.aspx>
- For more details about OASIS source and sink combinations and Pricing Nodes (“PNODE”), please see the OASIS reference page at: <http://www.pjm.com/markets-and-operations/etools/oasis/oasis-reference.aspx>

All transmission customers may request firm or non-firm service from PJM, or view Total Transfer Capability, however all Network path service requests must be submitted on the PJM OASIS by the Load Serving Entity (“LSE”) responsible for serving their 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 Non-Firm and Network-External-Non-Designated Transmission Service requests is automated by the PJM OASIS.

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

Long term firm point-to-point transmission service requests (a period of one year or longer as defined in section 13.1 of the PJM tariff) will be granted on a first-come, first-served basis as outlined in section 13.2 of the tariff. Transmission customers must submit their request on the PJM OASIS and in writing 60 days in advance of the calendar month in which the service is to commence. PJM will respond to the transmission customer within 30 days of receipt of the completed application with either an acceptance or will tender an initial study agreement. Customers must then confirm or withdraw their request, by the 30th day after receiving PJM's response; otherwise, the request will be deemed withdrawn.

Firm Point-to-Point Transmission Service Customers are eligible to receive Auction Revenue Rights (ARRs) up to the MW level of the transmission reservation. The ARR is defined from the source to the sink specified in the request. To request ARRs associated with Firm Point-to-Point Transmission Service, the customer must specify the desired ARR MW amount in the 'ARR/FTR Up To:' field (see section 1.17).

Rollover Rights

Transmission service customers with existing long-term firm service have the right to rollover/renew that service prior to the end of service.

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 in order for a customer to be eligible for a rollover right

- At the end of its initial five-year contract term, a transmission customer must, within the one-year notice period, agree to another five-year contract term or match any longer-term competing request in order to be eligible for a subsequent rollover.

Right of first refusal

If a new “competing request” for long-term service (that starts after the existing service end date) is received that cannot be accommodated (without completing a system impact study), the customer with existing service must (a) renew their service or (b) forfeit their rollover rights. The existing customer’s rollover must at least match the duration and price of the competing request for new service (the new request for service is not required to be essentially the same as the existing request).

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

Clarification of OASIS Reservation Queue for ATC:

Notwithstanding right of first refusal, new long-term requests for service compete based on queue position, not duration. New long-term (1 year or more) requests for service are reviewed based on their queue position. In an example where a second queued reservation is longer than the first, the request that was queued first would get existing ATC first.

A new long-term request for service may bump an existing long-term reservation’s rollover rights. The existing reservation has right of first refusal. If the existing reservation customer is notified of a competing request and that existing customer does not execute their rollover rights, then the new customer’s request can be granted.

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

The duration of short-term firm point-to-point transmission service shall be one day, one week, or one month as defined in section 13.1 of the PJM tariff. All requests for Short-Term Firm service submitted during the initial window will be deemed to have been queued simultaneously as defined in section 1.11 of this document.

NOTE: Requests for long-term transmission service will bump shorter-term Firm service on a last-in/first-out basis if necessary (see reservation priorities in section 1.7).

Request deadlines for short-term Transmission Service can be found in the table in [Section 1.6](#).

Firm Point-to-Point Transmission Service Customers are eligible to receive Auction Revenue Rights (ARRs) up to the MW level of the transmission reservation. The ARR is defined from the source to the sink specified in the request. To request ARRs associated with Firm Point-to-Point Transmission Service, the customer must specify the desired ARR MW amount in the 'ARR/FTR Up To:' field (see section 1.17).

Granting Partial Service for Firm Transmission Service Requests - Counteroffers

If a Firm transmission service request exceeds the available Firm ATC for a path, PJM will contact the customer to offer partial service for the remaining available Firm ATC, and will place the reservation in a COUNTEROFFER status.

Modifications to Receipt and Delivery Points for Firm Service - Redirects

Section 22 of the PJM Open Access Transmission Tariff (“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 capacity reservation does not exceed the amount reserved in the existing OASIS reservation.

(1) Non-firm Redirect

A firm point-to-point customer may request a non-firm redirect (different POR and/or POD) in amounts not to exceed its firm capacity reservation, without incurring an additional non-firm point-to-point service charge.

A customer requesting a modification of the Points of Receipt and Delivery of a Firm service request on a Non-Firm basis must adhere to the following:

- The customer must have CONFIRMED Firm transmission service.
- The customer must submit a day, week, or month SECONDARY_NON_FIRM request on the OASIS.
- The new request(s) must be PRECONFIRMED.
- The customer must enter the Firm OASIS Number in the „Related Ref“ field on the new request.

(2) Firm Redirect

A firm point-to-point customer may request a firm redirect (different POR and/or POD) in amounts not to exceed its firm capacity reservation, without incurring an additional non-firm point-to-point service charge 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 new rollover request, (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 (or after) the end date of the existing reservation.

A customer requesting a modification of the Points of Receipt and Delivery on a Firm basis must adhere to the following:

- The customer must have CONFIRMED Firm transmission service.
- The customer must submit a day, week, month, or year Firm request on the OASIS.
- The request(s) must be PRECONFIRMED.

(3) Auction Revenue Rights

- Upon requesting a redirect of firm transmission service, the participant will have the option of requesting an ARR on the redirected path. If no such request is made, the participant will retain any existing ARR on the original path. If the participant does request an ARR on the redirected path, PJM will conduct a feasibility analysis on the request, the new ARR will be granted to the extent it is feasible for the length of the redirect and any ARR associated with the original reservation will be relinquished for the time period of the redirect. If no ARRs are available on the redirected path, the request will have the option of retaining the ARR on the original path.

(4) RTOR Elimination involving Redirects.

See Chapter 4 of these practices for the impact of redirection of service to Regional Through and Out Rate (“RTOR”) Elimination.

Note: Returning transmission service will increment ATC on that path and any related paths. If a path is over-subscribed due to parallel flows, there may not necessarily be enough ATC on the desired path even after a request on another path is returned. PJM will determine the effect of the returned transmission service on other related paths. In addition, if the participant takes an ARR on the redirected path (thereby relinquishing the ARR on the original path) and then terminates the redirect prior to the schedule date, the original ARR may no longer be feasible until the original term of the redirect has expired.

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

The option for NPC or WPC service can be chosen as a product.

Example Hour Non-Firm:

- hour-NON_FIRM_NPC
- hour-NON_FIRM_WPC

Under Locational Marginal Pricing, 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 20-25 minutes after the top of the hour. Before the scheduling horizon, Existing Transmission Commitments (“ETC”) used to decrement (reduce) ATC are calculated using transmission reservations and SPOT_IN reservations. After the schedule horizon, interchange schedules are used in place of reservations to calculate ETC. Currently the scheduling horizon is 10AM (EPT). If transmission service is not used, it will result in Non-Firm ATC being posted back to that path. More information on ATC calculations can be found in Attachment C of the tariff.

Customers not willing to pay congestion (NPC reservations with schedules) will be curtailed in the event of a constraint on the PJM System (Transmission or Capacity). 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 energy schedule.

All requests for Short-Term 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 short-term Transmission Service can be found in the table in [Section 1.6](#).

1.5 Network Transmission Service Requests

1.5.1 Network External Designated

This service is defined as network transmission use by PJM load serving entities to serve customer load from designated resources located outside the PJM control area. Each network transmission use delivering designated resources to serve PJM designated load must be requested on the PJM OASIS by the load serving company or a PJM Customer importing installed capacity resources into the PJM Control Area. When a customer requests a designated network resource they must demonstrate they own generation, or they must demonstrate they have an executed contract to purchase the generation, or they have a contract contingent upon receiving transmission service. (Reference PJM OATT Section 30.2)

Customers that intend to import external designated resources into PJM shall follow these conditions:

1. Refer to PJM Manual-18, PJM Capacity Market, Section 4, Existing Generation Resources-External when planning to import ICAP into PJM. Please direct any questions to RPM_Hotline@pjm.com.
2. Submit a network designated transmission request on the PJM OASIS indicating the designated unit in the "Comments Customer" field.

Network External Designated Service Customers are eligible to receive Auction Revenue Rights (ARRs) up to the installed capacity MW level of the designated resource.

Paragraph 1293 of FERC Order 890 states: "The Commission adopts the NOPR proposal and finds that network customers may not redirect network service in a manner comparable to the way customers redirect point-to-point service. Unlike point-to-point service, network service involves no identified contract path and thus is not a directable service. A network customer seeking to substitute one resource for another already has the ability under the pro forma OATT to terminate its existing designation and designate a new resource on an as-available basis. If necessary, the network customer may then request to redesignate its original network resource by making a request to designate a new network resource. Alternatively, the network customer could use secondary network service if it wants to substitute a non-designated network resource for a designated network resource on an as-available basis."

Customers that 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 load serving entities to serve customer load from non-designated resources located outside the PJM control area. Each network transmission customer delivering non-designated resources to serve PJM designated load must be requested on the PJM OASIS by the load serving company.

Customers should identify the desire to pay through congestion by choosing their product of NPC or WPC, see section 1.4 for an example. Network customers not willing to pay congestion (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.

1.5.3 Spot Market Imports (SPOT_IN)

On the PJM OASIS, „hour-SPOT_IN“ is listed as a product. This “product” represents the reserved capability of a PJM member selling energy into the PJM spot market at the border. The SPOT_IN customer does not have possession of PJM transmission service. PJM delivers the spot transaction from the border to load on secondary network service (network non-designated) on behalf of the PJM Load Serving Entities (“LSEs”). The following principles apply to SPOT_IN customers:

1. SPOT_IN customers do not hold transmission service rights on the PJM Transmission System and are not necessarily PJM network service customers. The following principles apply.
 - a. SPOT_IN customers are not charged for transmission service.
 - b. SPOT_IN customers do not have any transmission service rights.
 - c. SPOT_IN customers may not exercise practices reserved for network customers such as changing their designation of network resources.
 - d. SPOT_IN customers may not exercise practices reserved for point-to-point customers, such as redirecting or reselling service.
 - e. The source and sink of SPOT_IN requests must be the PJM interface (because delivery is taken at the border).
 - f. The deadlines to request to hold and/or release interface capacity for SPOT_IN may vary from the deadlines that apply to transmission service customers.
2. PJM accepts offers from PJM members to provide sales to the PJM spot market at the border. This product then becomes a service to the PJM LSEs. The following principles apply.
 - a. Spot Market Import offers are accepted as price takers in the real-time market. The customer 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. Spot import transactions 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 by the network customers for Spot Market Imports.
 - a. In order to properly account for use of interface capability and to provide transparency, Spot Market Imports are listed on the OASIS.
 - b. Customers who wish to offer Spot Market Imports must first request that PJM hold interface capability based on ATC.
 - c. Spot Market Importers must request their intention to deliver to the border by making a request on the OASIS. PJM limits its ability to import spot market transactions on behalf of LSEs based on ATC on a first come-first served basis like any other customer taking network secondary service. These SPOT_IN reservations on the OASIS represent network service taken by the LSEs, not the Spot Market Import customer. (The SPOT_IN customer is listed as the customer on the OASIS due to limitations of the OASIS S&CP; SPOT_IN customers do not hold transmission service rights).

Retracting unused portion of Spot Import Reservations

PJM will evaluate Spot Import reservations to determine if they have been scheduled and will return the unused portion back as Non-Firm ATC for other participants to reserve. After they have been queued for 2 hours, reservations made for the next day will be evaluated. If they have been tagged, PJM will either (1) reduce the capacity granted value to match the profile of the tag, or (2) if not scheduled at all, will annul the reservation entirely. For reservations that are requested for the same day, customers have 30 minutes from the queued timestamp to schedule; then PJM will retract unscheduled capacity. PJM will reduce the capacity granted for partially scheduled reservations to the tag profile; PJM will annul transaction not scheduled at all.

Background on Spot Market Imports

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

1.5.4 Network Resources

The qualifications for Network Integration Transmission Service ("NITS", Firm Network), Reliability Pricing Model ("RPM") capacity resources, and Secondary Network service (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 LD does not qualify.
- **Secondary Network** – Any import to PJM by an LSE can be considered Secondary Network.

1.6 Table Summary: Transmission Service Submittals

The table below highlights the transmission service request timing information.
 All times listed in the chart below are **EPT** (Eastern Prevailing Time).
 OASIS Hotline: 610-666-8972 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 (see section 1.5.3)	Secondary Non-Firm Point to Point
Earliest Request <i>(amount of time prior to commencement of service)</i>	Monthly	12:00 a.m., 1st calendar day, 17 months before the date	12:00 a.m., 60 calendar days before the date	Not Available	14:00, 1st business day, 2 calendar months
	Weekly	12:00 a.m., 14 days before the date	12:00 a.m., 14 days before the date	Not Available	14:00, 1st bus. day, 2 weeks
	Daily	12:00 a.m., 7 days before the date	12:00 a.m., 3 business days before the date	Not Available	2 business days
	Hourly	Not Offered	08:00, day before the date	9:00 a.m., day before the date	N/A
Latest Request <i>(amount of time prior to commencement of service)</i>	Monthly	12:00 a.m., 14 days before the date	12:00 a.m., 2 business days before the date	Not Available	Noon, 4 days
	Weekly	12:00 a.m., 7 days before the date	30 hours before the date	Not Available	Noon, 2 days
	Daily	14:00, day before	14:00, day before	Not Available	N/A
	Hourly	Not Offered	0 minutes	0 minutes	N/A
Provider Response <i>(within this amount of time after receiving request)</i>	Monthly	7 business days	12 hours	N/A	2 days
	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	N/A
Customer Confirmation <i>(within this amount of time after response)</i>	Monthly	15 days after the accept or counteroffer date OR 12 noon EPT, 11am CPT, prior to the start of service after PJM accepts or counteroffer's the request. Whichever deadline is applicable based on start date of the request.	4 hours	N/A	4 hours
	Weekly		2 hours	N/A	2 hours
	Daily		30 minutes	N/A	30 minutes
	Hourly		15 minutes	N/A	N/A

Regional Transmission and Energy Scheduling Practices

Shotgun 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	N/A	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 of these Regional Practices)</i>					
	HOURLY (service reserved before the day of service)	N/A	N/A	2 hours after queued	N/A
	HOURLY (service reserved on the day of service)	N/A	N/A	30 minutes after queued date	N/A
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 of these Regional Practices)</i>	YEARLY THOROUGH DAILY	N/A	N/A	N/A	N/A
	HOURLY (service reserved before the day of service)	N/A	N/A * see footnote	Up to 2 hours after queued date	N/A
	HOURLY (service reserved on the day of service)	N/A	N/A * see footnote	Up to 30 minutes after queued date	N/A
Provider Response to Rebid <i>(effective 1/31/2009 11:59PM)</i>			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 minutes		
	HOURLY	N/A	10 minutes ***		

* Manual release of service does not apply to Network or Point-to-Point service. Point-to-Point service cannot be released. Network service 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 hours prior to start of service

*** 10 minutes OR 5 minutes if queued less than 24 hours prior to the start 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 granted to last granted.

A. Long-Term Firm Point-to-Point 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). Long-Term Firm Point-to-Point and Network External Designated service have the same priority as Network and Native Load customers. Long term service is defined as service of one year or more.

B. Short-term Firm Point-to-Point and Network External Designated Transmission Service is available on a first-come, first-served basis based on the durations defined in section 1.3 of this document.

C. Network External Non-Designated customers serving network load from non-designated resources have a higher priority than non-firm service requests. Network requests Willing-to-Pay-Congestion (“WPC”) will have priority over Network requests Not-Willing-to-Pay-Congestion (“NPC”).

D. Non-Firm Point-to-Point transmission service will be available in durations from one hour to two-one month requests. Higher priority is assigned to requests of longer duration. Non-Firm requests WPC will have priority over Non-Firm requests NPC.

Note: Pre-Confirmed Non-Firm Point-to-Point and short-term Firm Point-to-Point transmission service requests are given priority over ACCEPTED requests of equal duration that are not Pre-Confirmed. Requests WPC have priority over those that are NPC, regardless of whether the capacity type is NETWK_EXT_NON_DESIG or NON_FIRM.

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 until Monday hour 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 a daily off-peak request for one week day, that request would include hours 00:00-07:00 (24-hour clock).

1.10 Reserving but not Utilizing Transmission Service

PJM's external Market Monitoring Unit, Monitoring Analytics, will monitor and document the continued reservation but non-utilization and under-utilization of transmission service. After-the-Fact (older than 8 days) energy schedules associated with transmission service reservations can be found on the PJM OASIS under the Energy Scheduled option.

Manual Release of SPOT_IN

Customers who requested and were granted SPOT_IN but no longer expect to sell into the PJM spot market 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.

Automatic Release of SPOT_IN

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 zero 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 OASIS reservation. For reservations that have not been scheduled at all, the entire reservation will be annulled.

Currently available Spot Market Import product types are:

- hour_SPOT_IN

1.11 Allocation Process for Earliest Request Time

The allocation process pertains to all short term service with an 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 date defined in section 1.3-1.4, on a proportional basis, up to the amount of ATC available. For Firm Point-to-Point service requests, ARR adequacy will also be considered if ARRs are requested. For purposes of determining whether existing capability is adequate to accommodate a request for monthly transmission service, all requests for new transmission service received during the initial period as specified in table 1.6 will be deemed to have been queued simultaneously based on the following limitation:

Multiple requests for transmission services by a transmission customer (this includes any of the 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 INVALID status. PJM will respond to Firm and Network External Designated requests by placing them in STUDY or INVALID status. Requests are INVALID if they do not comply with the requirements set forth in this document. 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 satisfy transmission service requests in full, PJM will manually change the requested capacity to the allocated amount by updating the status to COUNTEROFFER. The original timestamp and capacity requested will be saved in the audit records.

Customers may include, in the comments field, minimum amount(s) of capacity, in blocks or ranges, that they would be willing to accept for daily, weekly, and monthly firm service as well as for weekly and monthly non-firm requests (during allocation times only). For example, a customer may submit a request for 400MW with a minimum defined as 25, 50, 100, 200 or 400 MW. If the ATC is:

- 24MW the customer receives 0MW
- 81MW the customer receives 50 MW
- 197MW the customer receives 100MW
- 257MW the customer receives 257MW

If no range is specified (i.e. 200, 400 rather than 200 to 400 in the above example) the customer would receive only the specified minimum amount explicitly or the full amount of the request. If only one minimum is defined in the comments field and partial ATC is available (less than the full amount of the request but greater than the minimum amount), PJM will accept the request (if valid) and change the capacity value to the minimum amount specified. **If no minimum is defined, a customer will receive the allocated amount.**

Example #1 (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 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 INVALID. Since customer A will accept any allocated amount, and since the minimum amount defined for customer B is less than the allocation, their requests will be reviewed. The process of determining the ATC allocation is done again, this time with only the remaining valid 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 remain posted.

1.12 Posting Transactions for Resale

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 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. Resale requests must be made in a full hour increments. Any ancillary charges will be passed proportionately to the resale transaction from the original.

The following transmission services are 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 Imports
- Network

OFF-OASIS Resale

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

1. A-1 Agreement received by PJM
2. Reseller posts the transaction on OASIS
3. Buyer may schedule the service

Buyers and Resellers should be aware of the risk and consequences of OFF-OASIS transactions. If an executed A-1 agreement between two parties exists, then any amount of service can be posted on the OASIS and resold unilaterally by the Reseller, without the Buyer's confirmation of the transaction, which leaves the Buyer financially liable for the resale purchase. If an executed A-1 agreement between the two parties does not exist, then an OFF-OASIS agreement will be rejected when the Reseller attempts to post it to OASIS.

If a Reseller posts more capacity for resale than they have, PJM shall bill the Reseller for after-the-fact service. If the Reseller oversells habitually (three or more occurrences), PJM shall charge the Reseller the overuse penalty.

ON-OASIS Resale

The assignee is required to initiate the resale transaction on the OASIS. Resales that are conducted through the 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 OASIS so that they make it known 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 seller.

Negotiating ON-OASIS Resales

The Reseller and Customer may negotiate the transaction details on the OASIS, and each are required to respond at the appropriate stages, by the deadlines set forth in Table 1.6. If the reseller agrees with the request as is, (1) they change the status to “ACCEPTED” or (2) they update the relevant fields and set the request to “COUNTEROFFER”. If accepted, the assignee can then decide to set their 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 seller or customer didn’t follow basic guidelines in regard to the primary provider’s business or 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.

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. PJM shall bill the Reseller in full for the original transaction at the PJM Tariff rate. PJM shall bill the Buyer at the rate agreed upon with the Reseller and PJM shall credit the Reseller at that same rate.

In the event that energy 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.

Examples:

1) Company A purchased 100 MW from PJM

Company A sold Company B 50 MW and scheduled energy on the remaining 50 MW

Company B scheduled 50 MW -- this was not curtailed or was curtailed by someone other than PJM

Company A is charged for 100 MW @ PJM tariff rate

Company A is credited for 50 MW resold at rate agreed between Seller and Buyer

Company B is charged for 50 MW at the rate agreed between Seller and Buyer

2) Company A purchased 100 MW from PJM

Company A sold Company B 50 MW and scheduled energy on the remaining 50 MW

Company B scheduled 50 MW -- this was all curtailed by PJM

Company A is charged for 50MW @ PJM tariff rate

Company A receives no credit from the resale

Company B receives no charge

3) Company A purchased 100 MW from PJM

Company A sold Company B 50 MW and scheduled energy on the remaining 50 MW

Company B scheduled 50 MW -- 25 curtailed by PJM

Company A is charged for 75 MW @ PJM tariff rate

Company A is credited for 25 MW resold at the rate agreed between Seller and Buyer

Company B is charged for 25MW at the rate agreed between Seller and Buyer

Capacity-Based Ancillary Charges (Reactive and Blackstart) shall be assessed based on the amount of capacity retained.

Examples:

1) Company A purchased 100 MW from PJM

Company A sold Company B 50 MW and scheduled energy on the remaining 50 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 charges for the 50MW retained

Company B is charged for capacity-based ancillary charges for the 50MW

2) Company A purchased 100 MW from PJM

Company A sold Company B 50 MW and scheduled energy on the remaining 50 MW

Company B scheduled 50 MW -- 25 MW was curtailed by PJM

Company A is charged capacity-based ancillary charges for the 50MW retained

Company B is charged capacity-based ancillary charges for the 25MW of non-curtailed capacity

PJM shall bill, as appropriate, for resales that have no corresponding original transmission reservation.

PJM shall either 1) create an after-the-fact reservation that corresponds to the resale, and charge the

Reseller at the PJM Tariff rate or 2) apply a penalty, for overuse, if applicable.

Special Considerations

Only when the offer and bid prices match may a seller accept a request, and likewise, only when offer and bid prices match may an assignee confirm an accepted request. An offer capacity of zero is implied to match the bid capacity. A seller may post a resale offer on the 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, start time, stop time, and seller. 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 buyer of a resale Ancillary Services charges. The reseller will not be charged unless the buyer 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 Tariff, the Reseller shall pay the higher of the congestion or transmission service charge. This discount shall not apply to resale transactions. Resale customers shall pay the full amount of the congestion charge and the resale rate.

The Reseller retains any existing Auction Revenue Rights (AARs).

Transfers

The Transmission Customer wanting to transfer all rights and obligations associated with their confirmed monthly or yearly reservation, including renewal and/or revenue rights, may request a full transfer of service by indicating such in the Customer Comments section of the OASIS reservation. A Transmission Service Agreement must be executed by both the Reseller and the Assignee before PJM confirms the transfer of service. (per NAESB WEQ 001-12 TRANSFERS)

Additional information may be obtained from the NAESB OASIS SC&P Implementation Guide (www.naesb.org) reference WEQ013-2.6.7, FERC: Major Orders & Regulations (www.ferc.gov/legal/maj-ord-reg.asp) reference Order 890, Paragraphs 808-825, or by contacting the PJM OASIS Hotline at 610-666-8972 (email: oasisadmin@pjm.com).

1.13 Submitting Request for Renewal

A transmission customer has the option to renew Firm Long-Term service as stated in section 2.2 of the PJM tariff. A customer requesting a renewal of a Firm Long-Term (Point-to-Point or Network Designated) reservation must adhere to the following:

- The customer must have CONFIRMED Firm transmission service.
- The customer must submit a new request on the OASIS that has a request type of Renewal.
- The request(s) must be PRECONFIRMED.
- The customer must enter the Firm OASIS Number in the „Related Ref“ field on the new request.

Acceptance of Firm Long-Term Service Without Renewal Rights

PJM will limit approvals of requests for transmission service, including roll-over 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 Joint Operating Agreement (“JOA”), provided that firm transmission service 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 long-term firm service if there is not enough Available Flowgate Capability (“AFC”) to accommodate rollover rights beyond the initial term (Midwest ISO/PJM Joint Operating Agreement, section 5.1.7.c).

1.14 PJM Non-Firm Pricing and Discounting Policy

Replaced by [Section 1.19](#)

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

The charges for Long-term/Short-term Firm Transmission Service are listed in SCHEDULE 7 in the OATT posted on the PJM OASIS.

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 post April 1, 1998. All transmission service customers have the option to select WPC for congestion.

1.17 Financial Transmission Rights (FTRs)/Auction Revenue Rights (ARRs)

All firm transmission customers are eligible to receive Auction Revenue Rights (ARRs) subject to the results of a simultaneous feasibility test. ARR, financial entitlements to rebates of congestion charges, are defined from the source to the sink specified by the customer. All ARR requests must pass a simultaneous feasibility test conducted by PJM. More information regarding ARRs can be found in the PJM Manual for Financial Transmission Rights. (<http://www.pjm.com/documents/manuals.aspx>)

Requests for ARRs associated with long-term point-to-point service must be made during the Annual ARR Allocation process which is conducted prior to the start of the next planning period. To be eligible to request ARRs during this process, the request must be associated with point-to-point service which spans the entire next planning period, either by its term or by renewal, and is confirmed by the opening of the annual ARR nomination period. ARRs approved during this process will be in effect for the entire next planning period only.

Requests for ARRs associated with shorter term service or any other requests made outside of the annual allocation process will be made via OASIS when the request for service is made. Firm point-to-point transmission service customers must enter the amount of ARRs they desire in the "ARR/FTR Up To:" field on the Buy page. This value will be considered an "up to" amount. Therefore, a customer should enter the maximum amount of ARRs that they require, not to exceed the capacity value of the transaction. A customer requesting Firm point-to-point transmission service that does not want ARRs should enter "0" in the "ARR/FTR Up To:" field. The amount of ARRs awarded is dependent on the results of a simultaneous feasibility study conducted by PJM. Prior to placing the transaction in ACCEPTED or COUNTEROFFER status, PJM will enter the amount of ARRs awarded in the "FTRs Awarded" field.

1.18 Transmission Loading Relief Buy Through (TLR_BUY_THRU) Capacity Type

The TLR Buy Thru option enables non-PJM transmission energy transactions the ability to pay through congestion during a PJM declared TLR event. In order to request a TLR BUY THRU path on the PJM OASIS, the market participant must first provide the PJM Customer Relations and Training Department an abbreviated Transmission Service Agreement. This abbreviated Transmission Service Agreement is only needed for those entities that are not already a PJM Transmission Customers. For more information on the necessary forms required, please contact the CR&T Hotline at (610) 666-8980.

The following procedures outline how market participants may utilize the TLR_BUY_THRU capacity type offered on the PJM OASIS.

1. Prior to requesting a TLR_BUY_THRU path on the PJM OASIS, the market participant should set up their energy transaction with the external control areas as normal.
2. Once the energy transaction is set up, the market participant can choose to purchase a TLR_BUY_THRU path for the capacity of the off-system transaction on the PJM OASIS.
3. The market participant will choose the path of "PJM_TLR", and the product of "day-TLR_BUY_THRU" on the PJM OASIS.
4. The only choice that the market participant can make for Source and Sink is "PJM". The actual source and sink where the congestion charge will be applied will be dependant on system topology at the time a PJM TLR is called for excessive circulation.
5. The capacity of the external reservation should be entered in the capacity requested field of the TLR_BUY_THRU reservation.
6. The NERC Tag ID of the off-system transaction must be entered in the "customer comments" field of the request.
7. On submittal, the OASIS automation will accept any request made by a valid customer.
8. The customer must then contact the PJM Transaction Coordinator (610) 666-4510 to provide them with the NERC Tag ID and the energy profile of the off-system transaction, and inform them that they have submitted a TLR_BUY_THRU request. The TLR_BUY_THRU path is a daily product only, and must be reserved and coordinated with PJM, by 1200 noon EPT, the day prior to the energy flow.

1.19 Policy for Rebating Transmission Service and Forgiveness of Congestion Charges

PJM's policy related to rebating transmission 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.
 - If a Customer was unable to schedule due to a PJM instituted curtailment (i.e. TLR, thermal limit), PJM will consider rebating this request after first confirming the final curtailment status with Operations, Dispatch, and Settlements.
2. PJM will consider rebating transmission service due to legitimate customer errors or application variances. PJM first verifies a corresponding correct OASIS 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 PJM initiated energy curtailments or due to off-setting explicit congestion charges.

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

1. PJM does not charge (or credit) congestion of not-willing-to-pay-congestion transactions, even if those transactions were loaded during constrained periods.

1.20 Early Termination or Annulment of Service

Point-to-Point transmission service customers may not request early termination or annulment of service. FERC Order 890 (Paragraph 1403 uses the term „invalidate“) denies the ability of a customer even to withdraw a pre-confirmed request.

Requests made in „inadvertent“ error but reported promptly will be addressed on a case by case basis. Requests must be made to oasisadmin@pjm.com or the recorded OASIS Hotline (610) 666-8972. When emailing or calling you must include the OASIS reservation number you are requesting to be annulled, the replacement OASIS number (if applicable), and the reason for annulment.

1.21 Interface Pricing

A customer may only select the interface pricing point as the source for an import, the sink for an export, and the source and sink for a wheel. The source and sink pricing points are determined and set on the OASIS reservation based on the assumption that the energy transaction will source or sink in the POR or POD selected. When used on a NERC Tag, the transaction may in fact sink in another area. Energy Transaction pricing points may therefore differ from the source and sink selected on the OASIS reservation. The following guidelines apply for billing purposes.

1. Each NERC Control Area (“CA”) is mapped to one interface pricing point for PJM.
2. Interface Pricing points are assigned based on the Generation Control Area (“GCA”) and Load Control Area (“LCA”) of the NERC Tag for the energy transaction per the mapping described in "1" above.

Mapping of External Control Areas to Interface Pricing Point

A table of external control area mappings to interface pricing points is posted on the eSuite EES homepage. (Follow the EES link from <http://www.pjm.com/markets-and-operations/etools.aspx>)

A calculator where a customer can enter the GCA and LCA and return the interface pricing points is posted on the OASIS. (Follow the OASIS link from <http://www.pjm.com/markets-and-operations/etools.aspx> and then select the „Pricing Information“ link.).

All external control areas in a group are mapped to one pricing point relative to the PJM CA.

Standard Interface Determination. The interface is determined from the GCA and LCA listed on the NERC Tags

- Note. The GCA/LCA of Midwest ISO (“MISO”) for tags sourcing/sinking in MISO is generally entered as MISO on NERC Tags. In the case where MISO is the GCA or LCA on a NERC Tag, the interface assignment will be MISO.
- Example Export, PJM-CIN reservation is tagged with MISO as the LCA. The interface pricing point assignment for the SINK will be MISO.
- Example Import, FE-PJM reservation is tagged with MISO as the GCA. The interface pricing point assignment for the SOURCE will be MISO.
- Example Wheel, NYIS-PJM-CIN reservation is tagged with NYIS as the GCA and MISO as the LCA. The interface pricing point assignment for the SOURCE will be NYIS, while the interface pricing point assignment for the SINK will be MISO.

Non-Standard Interface Determination In some scenarios, the interface is not determined from the NERC tag. For example, the interface for grandfathered service (service predating Order 888) is listed on the OASIS reservation. Grandfathered transactions, reserve sharing, dynamic schedules and other non-standard transactions require discussion with PJM. If you have questions please contact the Settlements Hotline, (610) 666-8825.

CHAPTER 2: Energy Scheduling and Interchange Curtailment Order

Attachment A: Interchange Energy Schedule Curtailment Order

Curtailment of Transmission or Recall of Energy:

The following is the curtailment order used by PJM for curtailing due to system constraints, Maximum 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. The *(italicized)* text below represents likely system events as they would occur during a transmission constraint.

(Constrained System)

Non-Firm over Secondary Points not willing to pay congestion charges

Firm transmission used for a path other than the OASIS POR/POD. (NERC Transmission Bucket 1)
Curtail by energy timestamp (LIFO).

Non-Firm not willing to pay congestion charges (NF-NPC)

Curtail descending by transmission time block (hour - NERC Transmission Bucket 2, day - NERC Transmission Bucket 3, week - NERC Transmission Bucket 4, and then month - NERC Transmission Bucket 5)

- Within a time block, curtail on/off-peak before curtailing all day reservations.
- Within the above categories curtail lower priced transmission first.
- Within the above categories curtail by transmission timestamp (LIFO).

Network Import not willing to pay congestion charges (Net-NPC)

(NERC Transmission Bucket 6) Curtail by energy timestamp (LIFO).

(Redispatch System)

Spot Market Imports (SPOT_IN)

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

(Zero Dispatch Rate if applicable)

Unload spot market imports with zero dispatch rates

(Declare Emergency if applicable)

Must-take spot market import schedules are to be curtailed after non-firm not willing to pay congestion (NPC) but before non-firm willing to pay congestion (WPC).

Non-Firm over Secondary Points willing to pay congestion charges

Firm transmission used for a path other than the OASIS POR/POD. (NERC Transmission Bucket 1)
Curtailed by energy timestamp (LIFO).

Non-Firm willing to pay congestion charges (NF-WPC)

Curtailed descending by transmission time block (hour – NERC Transmission Bucket 2, day – NERC Transmission Bucket 3, week – NERC Transmission Bucket 4, and then month – NERC Transmission Bucket 5).

- Within a time block, curtail on/off-peak before curtailing all day reservations.
- Within the above categories curtail lower priced transmission first.
- Within the above categories curtail by transmission timestamp (LIFO).

Network Import willing to pay congestion charges (Net-WPC)

(NERC Transmission Bucket 6) Curtailed by energy timestamp (LIFO).

Firm

Curtailed schedules that effectively relieve the constraint, proportionally among Native Load customers, Network customers and customers taking Firm Point-to-Point transmission service. (NERC Transmission Bucket 7)

Example of Recall of Energy

An example of curtailment of capacity is curtailment of interchange energy schedules due to a maximum generation emergency. After schedules using non-firm energy (which effectively relieves the constraint) are curtailed in the order specified above, schedules using firm transmission would be curtailed. Note: the transmission is not curtailed; the energy is curtailed.

Based on the PJM Transmission Tariff, PJM formed the following wording, which describes the method for curtailing energy using a firm transmission reservation.

Firm

Curtailed schedules that effectively relieve the constraint, proportionally among Native Load customers, Network customers and customers taking Firm Point-to-Point transmission service. (NERC Transmission Bucket 7)

Exports would be curtailed for maximum generation emergency; Native Load, 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 energy schedules using firm transmission.

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 reservations (non-firm) are curtailed. Then recallable energy using firm transmission service is curtailed. The energy 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 the any given companies 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 customers, each with only one schedule in that block, the last customers to submit their energy schedules will be curtailed first. Similarly, a transmission customer's schedules will be curtailed in descending timestamp order.

Curtailment of Capacity Backed Resources

Capacity Backed Exports are those transactions sourced from generators or portions of generators on the PJM system that are not designated as PJM installed capacity.

At Maximum Emergency, PJM will not recall any energy from a resource that is not included in PJM Installed Capacity. If a resource has been de-rated from summer peak capacity, any export that exceeds the pro-rated capacity not attributed to PJM will be reduced to that pro-rated level.

Example: Unit A has a summer rated capacity of 80 MW, where 60 MW is designated as installed capacity and 20 MW is not. A 20 MW export is scheduled from PJM. There is no outage on the unit. The full 20 MW export will be scheduled.

Example: Unit A has a summer rated capacity of 80 MW, where 60 MW is designated as installed capacity and 20 MW is not. If there is a 40 MW partial outage of the unit, 3/4 (or 60/80) of the remaining capacity is considered installed. 1/4, or 20/80, of the remaining capacity is available as non-installed capacity and will not be curtailed during a PJM Maximum Emergency. In this example 30 MW remains as PJM installed capacity and 10 MW remains available for capacity backed exports. If the owner of Unit A scheduled a 20 MW export, 10 MW could be recalled during PJM Maximum Emergency. At the conclusion of Maximum Emergency or at the conclusion of the outage, the export would be restored to the full 20 MW.

External Transaction Scheduling

In this section you will find the following information:

- An overview description of External Transaction Scheduling in PJM (see *Overview of External Transaction Scheduling*).
- A list of the PJM External Transaction Scheduling Business Rules (see *External Transaction Scheduling Business Rules*).

Overview of External Transaction Scheduling

Market participants that wish to transact energy in-to, out-of or through the PJM RTO are required to make their requests to PJM via the NERC E-Tagging software. This software interfaces with PJM's Enhanced Energy Scheduler (EES) software to create an interface that both PJM Market Participants as well as PJM Transaction Coordinators can use to evaluate and manage external transactions that affect the PJM RTO.

Based on market participant feedback, PJM has enhanced the EES tool to utilize NERC tags as the source for its external scheduling data. This change was done primarily to ease the amount of data entry required to submit external schedules in PJM as well as conform to general industry trends toward the use of the NERC tag as a schedule. This enhancement aids PJM in handling the increased number of external transactions presented by integration of other control areas in the PJM RTO. Market participants are no longer required to enter schedule data in both the EES system and on a NERC tag as the NERC tag data is utilized by EES as the schedule.

This change highlights an issue of data responsibility because of the nature of E-tagging and the fact that PJM now uses information entered on an E-tag as a schedule. Market participants scheduling in PJM are responsible for ensuring that data on PJM's EES is consistent with that which they desire to be their energy schedule. The continuity of the tagging process dictates that PJM receives its tag data in completed form from its tag authority, as it was entered by market participants. In order to ensure this delivery of data is complete and accurate, the market participants are responsible for confirming the data in PJM's EES to ensure it is consistent with that which they desired for their energy schedule. This confirmation can take place by simply looking at the tag data through the EES user interface, or by viewing customer reports which are made available through EES.

An important aspect of scheduling external transactions in PJM is finding a start and end time to transact energy while respecting the PJM ramp limits 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 completing their transactions via the EES application. This is an optional step in making external transaction requests, as the NERC E-Tag serves as the actual request for scheduling in PJM.

In cases where the NERC E-tag does not have the required fields to request a PJM market specific transaction (e.g. dispatchable, two-settlement etc.) the EES application will be used in concert with the NERC E-tag (see "Entering Dispatchable Schedules" and "Entering Two-settlement transactions" sections).

External Transaction Scheduling Business Rules

This section will outline the External Transaction Business Rules that are required by PJM. This section will include:

- PJM Contact Information
- External Transaction Timing Requirements
- General Information
- Data Requirements
- Ramp Limits
- OASIS Business Rules
- Entering Ramp Reservations
- Entering Schedules

- Entering Real-Time with Price Schedules
- Entering Two-Settlement Schedules
- Transaction Validations, Verification and Checkout

PJM Contact Information

The following numbers can be used to contact PJM regarding External Energy Transactions:

- Scheduling Fax number: 610-666-8877
- Day-Ahead Scheduling phone number: 610-666-4548, 610-666-8947, and 610-666-8949
- Hourly Scheduling phone number: 610-666-4510
- EES Hotline: 610-666-2270 (used to report issues, or to ask questions during normal business hours)
- PJM Helpdesk: 610-666-8886 (used to report technical issues during non-business hours)

External Transaction Timing Requirements

The following timing requirements are imposed by PJM for the submission of ramp reservations:

- Ramp reservations can be made up to 30 minutes prior to the scheduled start time for hourly transactions.
- Ramp reservations can be made up to 4 hours prior to start time for transactions that are more than 24 hours in duration.
- Ramp reservations utilizing the Real-Time with Price option must be made prior to 12:00 noon (EPT) one day prior to start time.

Ramp reservations expire if they are not used. The following timing requirements are imposed on ramp reservations that are not scheduled against:

For ramp reservations less than or equal to 24 hours in duration:

- If the reservation is submitted 1 hour prior to the start of the schedule or less, the reservation will be held in Pending Tag status for 10 minutes.
- If the reservation is submitted more than 1 hour, but less than 4 hours prior to the start of the schedule, the reservation will be held in Pending Tag status for 15 minutes.

Reservations that are less than 24 hours in duration and submitted 4 or more hours prior to the start of the schedule will be held in Pending Tag status for 90 minutes.

Reservations made on a day-ahead basis will expire at 14:30 EPT, one day prior to the start of the schedule. Note that a ramp reservation will not be “split” into separate days, so if a ramp reservation is

made for multiple days, and not scheduled against, and if the start time for the multi-day reservation is the next day, the entire reservation will expire.

The following timing requirements are imposed by PJM for the submission of Schedules. Schedules are submitted to PJM by submitting a valid NERC Tag. (The schedule is considered submitted when the NERC Tag is received by the PJM Tag Approval Service, not when it is submitted by the market participant's Tag Agent software):

- Schedules can be submitted up to 20 minutes prior to the scheduled start time for hourly transactions.
- Schedules can be submitted up to 4 hours prior to the scheduled start time for transactions that are more than 24 hours in duration.
- For a schedule to be included in PJM's Day-Ahead checkout process, they must be implemented by 14:00 (EPT) one day prior to start of schedule.
- Schedules utilizing the Real-Time with Price option must be submitted prior to 12:00 noon (EPT) day prior to start time.
- Schedules utilizing FIRM Point-To-Point transmission service must be submitted by 10:00 (EPT) one day prior to start of schedule. Transactions submitted after 10:00 (EPT) one day prior will be accommodated if practicable.

The following timing requirements are imposed by PJM for the submission of Two-Settlement Transactions:

- All Two-Settlement transactions must be submitted by 12:00 noon (EPT) one day prior to start time.

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 the transaction if submitted by a member company.
- Transmission reservations that are not used due to canceled spot market offers will be subject to transmission charges as appropriate.
- PJM does not accept bids where the PJM Interchange Market is identified as both the source (GCA) and sink (LCA).
- PJM does not accept offers for resources committed to supply operating reserves to another control area. 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 member is notified of the reason for rejection and the PJM member may then take action to submit a new offer.

Data Requirements

Market participants are expected to keep PJM informed of all external transactions that involve the operation of the PJM RTO. The following information is submitted to PJM via the market participants E-Tag agent service and/or EES:

- Valid NERC E-Tag
- Valid transaction path
- Start date before end date
- Start and end times in the future
- Requested MW profile
- Valid transmission
- Price associated with transaction (if utilizing the Real-Time with Price option)

Ramp Limits

PJM validates all external transaction requests against a net interchange ramp. The ramp limit is configurable by PJM dispatch based on operating conditions. There are two separate ramps that are evaluated, a PJM Net Interchange Ramp, and a NYISO Interchange Ramp.

- PJM Variable Ramp

At no time, can the difference in the net interchange be greater than the ramp designated by the PJM dispatch at any given 15-minute interval. Ramp room is allocated on a first come, first serve basis. Refer to Exhibit 17 for a ramp example to see how the ramp is calculated for any given 15 - minute interval.

- NYISO 1000 MW Ramp

PJM also monitors a ± 1000 MW ramp with the NY ISO. At no time can the difference in the interchange between NY and PJM be greater than ± 1000 MW at any 15-minute interval. Ramp room for NY transactions is allocated on a first come, first serve basis. NY transactions submitted to PJM will be evaluated against both the PJM ramp and the NY ISO ramp.

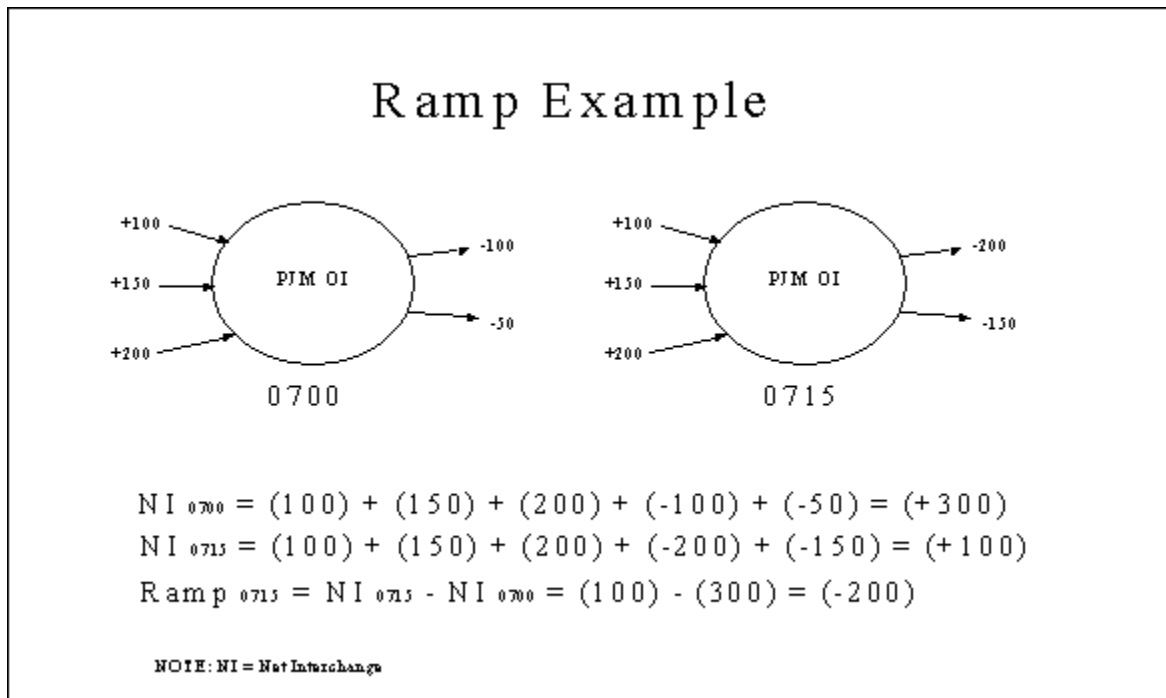


Exhibit 17: Example Ramp Calculation

OASIS Business Rules

All external transaction requests require a CONFIRMED transmission 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 network transmission. PJM also offers the opportunity to state whether or not the market participant is willing to pay congestion.

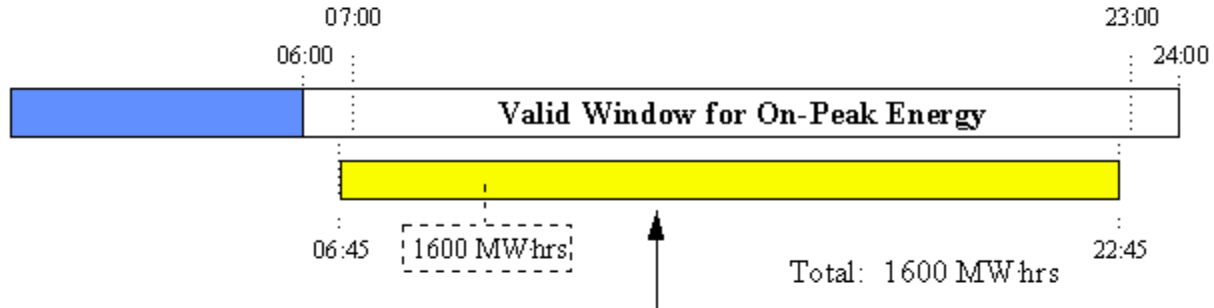
PJM will only accept a transaction if it is submitted by the company that made the transmission reservation on OASIS. In some cases, companies have multiple accounts. Transactions reserved by one account may be scheduled by another account of that company, provided those accounts are registered with 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 made the OASIS reservation.

- Registration process: Written notice indicating that one or more accounts in a single company are related shall be sent to PJM via e-mail to resales@pjm.com. Please allow up to three (3) business days in advance to allow for verification and processing. The following information shall be included:
 - Account Name
 - Organization ID
 - DUNS #
 - Contact Name
 - Contact Phone #
 - Contact Address
 - Related Account Name(s)
 - Related Account DUNS #
 - Related Account Organization ID(s)

PJM shall verify that the relationship between accounts is valid and shall notify the requestor whether the relationship is allowable.

On some occasions, due to PJM ramp rules, market participants are required to shift their energy requests. If the market participant shifts their energy up to one hour in either direction, they are not required to purchase additional transmission. Likewise, if the market participant chooses to fix their ramp violation by extending the duration of the transaction, they do not have to purchase additional transmission if the total MWh capacity of the transmission request is not exceeded. For graphical representations of these scenarios, refer to Exhibit 18 through Exhibit 21.

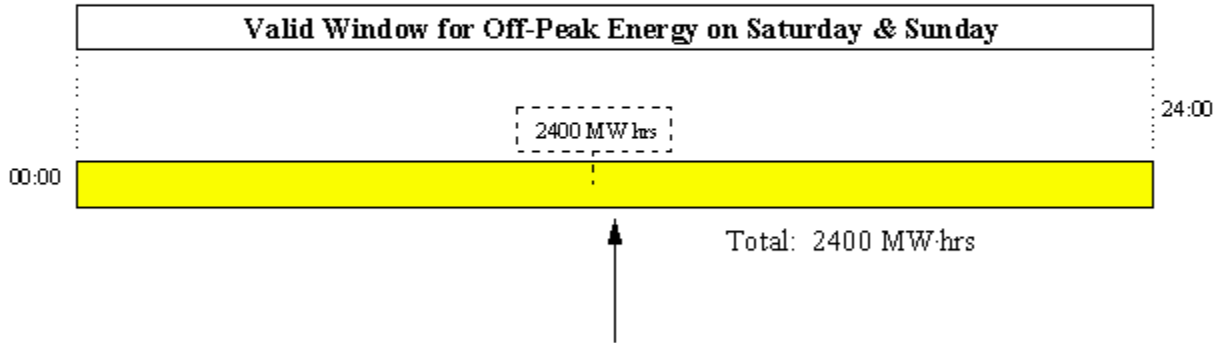
On-Peak Monday-Friday



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

Exhibit 18: On-Peak Transmission Service Over 16 Hour Period Example

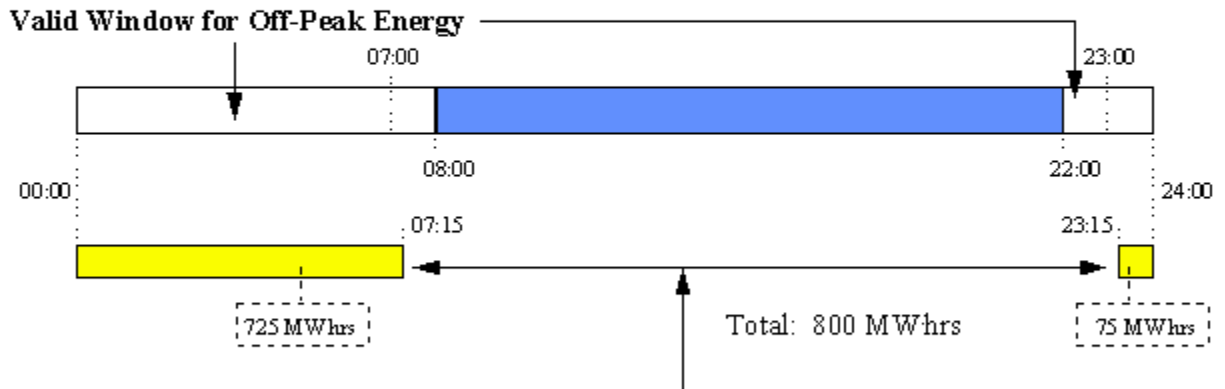
Off-Peak Saturday & Sunday



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

Exhibit 19: On-Peak Transmission Service Over 18 Hour Period Example

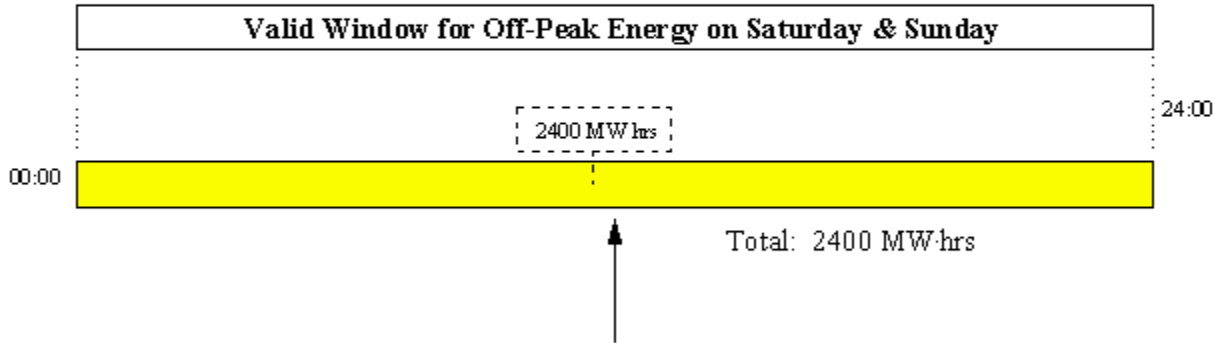
Off-Peak Monday-Friday



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

Exhibit 20: 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 21: 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 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. 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.

Entering Ramp Reservations

Each PJM Member Company that is authorized to do business in PJM's energy market is given an EES account. It is in the EES application that ramp reservations are made.

Ramp reservations are an optional step in scheduling transactions in PJM. A ramp reservation can be made to "hold" ramp room while market participants complete their scheduling responsibilities. Ramp reservations are then associated on the NERC Tag when the market participant wishes to submit the schedule. The ramp reservation is validated against the submitted NERC Tag to ensure the energy

profile and path matches. Ramp reservations are generally used to ensure the ability to schedule prior to purchasing transmission or making other potentially cost affecting decisions.

To make a ramp reservation, the market participant enters the EES application, and navigates to the “Ramp Reservation” screen. On this screen, the market participant enters the path for which they are interested in transacting energy, their energy profile and any other unique information that may apply to a schedule (i.e. special exceptions, notes, outside ID's, internal naming conventions etc.). Upon submission of a ramp reservation, PJM validates the information against ramp availability. If it passes the current ramp limits, the ramp reservation will pass, and will move into a status of “pending tag”. At this point, the market participant is holding a valid reservation that can then be associated on a NERC Tag for scheduling.

Entering Schedules

Market participants enter schedules in PJM by submitting a valid NERC Tag. As noted in the previous section, if the market participant holds a ramp reservation in the status of “Pending Tag”, they can associate the ramp reservation on the NERC Tag. This is done by placing the ramp reservation in the “miscellaneous” column on the PJM Transmission Provider line, of the “physical segment” portion of the NERC Tag.

If no ramp reservation was made prior to scheduling, a NERC Tag can be submitted without a reservation. NERC Tags that are submitted without a ramp reservation will automatically have a ramp reservation created that matches the energy profile and path of the NERC Tag. This newly created reservation will be evaluated against ramp, and an approval or denial will be made based on the validation. If there is enough ramp room, PJM will continue with other validations (See “Transaction Verification and Checkout”). If all validations pass, an approval message will be sent to the NERC Tag, and upon IMPLEMENTATION of the NERC Tag, the transaction will be scheduled by PJM.

Because of the nature of NERC tagging, it is possible for the market participant who enters a NERC tag to not be consistent with the market participants listed for each TP segment on a particular tag. In this instance, the financially responsible party (FRP) entering the tag is effectively acting on behalf of other market participants that are listed. Because PJM will now be identifying a NERC tag as a market participant’s schedule, it will be necessary for those market participants who have had a tag entered on their behalf to acknowledge this tag through the EES.

Entering Real-Time with Price Schedules

Real-Time with Price schedules differ from other schedules in that an action **must** be made in EES in addition to the submission of a NERC Tag. To enter a Real-Time with Price schedule, the market participant must first make a ramp reservation in EES using the “Real-Time with Price” tab in the notebook section of the ramp reservation screen. In addition to the information entered for a Real-Time schedule, market participants are also required to enter a price associated with each energy block. Upon submission, the Real-Time with Price request will automatically move to the “Pending Tag” status, as Real-Time with Price schedules do not hold ramp.

Once the information is entered in EES, a NERC Tag must be submitted with the ramp reservation associated on the NERC Tag. This is done by placing the ramp reservation in the “miscellaneous” column on the PJM Transmission Provider line, of the “physical segment” portion of the NERC Tag.

For Real-Time with Price schedules, the NERC Tag energy profile must match exactly for the tag to be approved.

Entering Two-Settlement Schedules

Market participants can submit two settlement schedules to the eMarket application through EES. These schedules do not require a NERC tag, as they are only financial obligations, and are not considered physical schedules for actual flow. Two settlement schedules are submitted using the “Two Settlement” tag in the notepad section of the ramp reservation screen.

Two settlement schedules require an OASIS number to be associated upon submission. A PJM RTO control area must be selected as well as the interface where the two settlement request is to be evaluated. The market participant must then choose a pricing point or points for which they wish their bid to be evaluated (import pricing point for an import, export pricing point for an export or both import and export pricing points for wheels). If an actual OASIS reservation is being used, the selection of PJM RTO and interface is not required, as the path will be identified on the actual OASIS reservation.

In addition to the selection of OASIS and pricing points, the market participant must enter their energy profile. The option to choose fixed, dispatchable and up-to are also displayed in the notepad section. The type “fixed” acts as a price taker, “dispatchable” sets a floor or ceiling price criteria for acceptance and “up-to” sets the maximum amount of congestion the market participant is willing to pay for acceptance in the two settlement market. Graphing energy is done the same way as a Real-Time or Real-Time with Price request.

Transaction Validations, Verification and Checkout

Transactions must pass specific validations and evaluations prior to being scheduled. The following validations and evaluation and checkout procedures are done to ensure accurate information and reliable scheduling in PJM.

➤ Validations

On submission, the following validations are performed on ramp reservations:

- Path Identified
- Stop time after start time
- Energy Profile Identified
- Price associated with Energy Profile (only applicable for Real-Time with Price)
- Ramp Availability (not applicable for Real-Time with Price)
- Timing Requirements are met for submission deadlines

On submission, the following validations are performed on NERC Tags:

- Syntax validation (See NERC Tagging Policy for complete list of syntax validations for NERC Tags)
- Path on NERC Tag matches ramp reservation (if identified) and OASIS path
- Timing requirements are met for submission deadlines
- PJM Loss type must be financial (FIN)
- Ramp availability (if no ramp reservation is identified)
- OASIS validation for valid OASIS, valid path, instantaneous capacity, total capacity, date-time, priority and vertical stacking (not allowed)
- Token and Value fields (in miscellaneous column) have valid inputs
- FRP check

On submission, the following validations are performed for Two Settlement requests:

- Path identified
- Timing requirements are met for submission deadlines
- OASIS validation for valid OASIS, ensure that the reservation is willing to pay congestion, OASIS is valid for period covered by the two settlement contract and capacity checks
- Pricing point(s) have been identified
- Stop time is after start time
- Energy profile is identified
- Price is associated for energy profile (for dispatchable option only)
- Congestion amount is identified for energy profile (for up-to congestion option only)

➤ External Transaction Minimum Duration Requirement

All PJM interchange transactions are required to be at least 45 minutes in duration. Market participants may not submit transactions that do not meet this minimum duration requirement, nor may they adjust an implemented schedule's end time below this minimum threshold. Additionally, each non-zero interval of the scheduled energy profile (i.e., each MW value) must remain constant for 45 minutes. However, via the use of reliability adjustments, PJM system operators may make adjustments that cause a transaction or interval(s) of the transaction to violate this minimum duration.

➤ Real-Time Evaluation and Checkout

If all validations pass on a Real-Time schedule, PJM will approve the tag. Once the tag is approved by all parties associated on the tag and the status of the tag becomes “IMPLEMENTED”, the schedule will be ready for the Control Area to Control Area Checkout. If during the Control Area to Control Area checkout, both parties agree to the interchange on the NERC Tag, the schedule will flow.

➤ Real-Time with Price Evaluation and Checkout

Real-Time with Price schedules are verified differently than Real-Time schedules. Real-Time with Price schedules are evaluated hourly to determine if they will be loaded or not for the upcoming hour. This evaluation is done by the PJM Generation Dispatcher. If the dispatcher feels that the economics for the schedule warrant the transaction to be loaded or unloaded, they will inform the transaction coordinator to load or unload the contract. This evaluation is based on a very conservative approach, and works similar to the way the generation dispatcher would call on or off generation. In addition to the economics of the transaction, the generation dispatcher may also take into consideration the ramp availability for the loading or unloading of the schedule. Since Real-Time with Price schedules do not hold ramp room, there may be times where the economics warrant a schedule to be loaded, but due to security issues related to ramp, the schedule will not be called on to flow. Once a Real-Time with Price schedule has been called on to flow, a reload request will be issued by the PJM Transaction Coordinator. If all external parties approve the reload request, and it passes the Control Area to Control Area checkout process, the schedule will flow.

➤ Two Settlement Evaluation and Checkout

For Two Settlement scheduling, EES serves only as an interface to the eMarket application. Two Settlement transactions are evaluated by the PJM Markets Department, and the results are fed back to EES to allow market participants to view the results. There is no Checkout performed on two-settlement schedules, as they are considered financially binding transactions, not physical schedules.

2.1 NERC Tagging - Priority Codes

Product Code	Product Description
G - F	Generator, Firm
G - NF	Generator - Non-firm
L	Load
1 - NS	Non-Firm Secondary
2 - NH	Non-Firm Hourly
3 - ND	Non-Firm Daily

Regional Transmission and Energy Scheduling Practices

4 - NW	Non-Firm Weekly
5 - NM	Non-Firm Monthly
6 - NN	Non-Firm Network
7 - F	Firm
G - FC	WSCC Unit Contingent Firm energy and capacity
G - F1	WSCC Firm energy and capacity recallable within 1 hour
G - F2	WSCC Firm energy and capacity recallable within 2 hours
G - FX	WSCC Firm energy and capacity recallable within 'X' hours
G - FS	WSCC Firm energy and capacity non-recallable
G - EX	WSCC 'Exchange' or 'displacement' energy delivered from a resource remote from the control area
F	WSCC Firm Transmission
NF	WSCC Non-firm Transmission
N	WSCC Schedule node used primarily to schedule on the Mead/Phoenix transmission system
0 - NX	Next hour at market

NERC Transmission Priority	Product
7	year - FIRM
7	year - GRANDFATHERED
7	year - NETWK_EXT_DESIGNATED
7	month - FIRM
7	month - GRANDFATHERED
7	month - NETWK_EXT_DESIGNATED
7	week - FIRM
7	week - NETWK_EXT_DESIGNATED
7	day - FIRM
7	day - NETWK_EXT_DESIGNATED
6	month - NETWK_EXT_NON_DESIG
6	month - NETWK_EXT_NON_DESIG_OFF_PEAK
6	month - NETWK_EXT_NON_DESIG_ON_PEAK
6	week - NETWK_EXT_NON_DESIG
6	week - NETWK_EXT_NON_DESIG_OFF_PEAK
6	week - NETWK_EXT_NON_DESIG_ON_PEAK
6	day - NETWK_EXT_NON_DESIG
6	day - NETWK_EXT_NON_DESIG_OFF_PEAK

6	day - NETWK_EXT_NON_DESIG_ON_PEAK
6	hour - NETWK_EXT_NON_DESIG
6	hour - NETWK_EXT_NON_DESIG_OFF_PEAK
6	hour - NETWK_EXT_NON_DESIG_ON_PEAK
5	month - NON_FIRM
5	month - NON_FIRM_OFF_PEAK
5	month - NON_FIRM_ON_PEAK
4	week - NON_FIRM
4	week - NON_FIRM_OFF_PEAK
4	week - NON_FIRM_ON_PEAK
3	day - NON_FIRM
3	day - NON_FIRM_OFF_PEAK
3	day - NON_FIRM_ON_PEAK
2	hour - NON_FIRM
1	day - SECONDARY_NON_FIRM
1	month - SECONDARY_NON_FIRM
1	week - SECONDARY_NON_FIRM

Note: For an updated list of these codes from the TSIN registry, go to:
http://www.nerc.net/tsin/registry/Active/Product_Registry.csv

2.2 Ramp Information

<i>Ramp Reservations Expiration Time Frames</i>		
Pending Tag Reservations		
Submission Time	Status	Length of time to hold reservation
Before 14:30 EPT One Day Prior to Start of Schedule	Reservation held in Pending Tag Status	Until 14:30 EPT One Day Prior to the Start of the Schedule
Reservation submitted 1 hour prior to the start of the schedule or less	Reservation held in Pending Tag Status	10 minutes
Reservation submitted more than 1 hour prior, but less than 4 hours to the start of the schedule	Reservation held in Pending Tag Status	15 minutes

Regional Transmission and Energy Scheduling Practices

Reservation submitted more than 24 hours and submitted 4 hours or more to the start of the schedule	Reservation held in Pending Tag Status	90 minutes
In-Queue Reservations		
Reservation Duration	Time Before Start of Reservation Submitted	Length of time to hold reservation
<= 24 hours	Any time	Until 30 minutes prior to the start of the reservation
> 24 hours	Any time	Until 5 hours prior to the start of the reservation

Duration Tags are held in study				
Transaction Duration	PSE Submission Deadline	Actual Tag Submission	Provider Assessment Time	Time Held in Study
Less than 24 hours	20 Minutes Prior to Start	≤1 hour prior to start	≤10 Minutes from tag receipt	5 Minutes from receipt
		>1 to <4 hours prior to start	≤20 Minutes from tag receipt	10 Minutes from receipt
		>1 to <4 hours prior to start	≤2 hours from tag receipt	90 Minutes from receipt
24 Hours or Longer	2 hours prior to start	Any	≤2 hours from tag receipt	90 Minutes from receipt

CHAPTER 3: Ancillary Services

Detailed information regarding Ancillary Services are located in the Open Access Transmission Tariff Accounting Manual. Additional detailed operating procedures are located in the PJM manuals. (<http://www.pjm.com/documents/manuals.aspx>)

This section has been replaced by the Customer Guide to PJM Billing located on the Market Settlements website at <http://www.pjm.com/markets-and-operations/market-settlements/~media/markets-ops/settlements/custgd.ashx>

CHAPTER 4: RTOR Elimination

RTOR elimination is the elimination of charges for transmission service reservations with a Point of Delivery (“POD”) in the Combined Region. Charges to reservations with a POD other than MISO will not be impacted by RTOR elimination. (FERC Docket No. EL02-111-004)

Service not charged, reservations sinking in the combined region:

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

Service charged:

Any reservation with a POD other than MISO will be charged that doesn't meet the above date criteria

Firm Service:

Long-term firm service included in RTOR elimination

All firm service, including long-term firm is included in the RTOR elimination.

Redirects:

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.

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.

Temporary Redirects on a firm basis:

a) For a firm redirect from a pancaked path (e.g., POD = NYIS) to a depancaked 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 depancaked (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/home/index.shtml>)

Market Monitoring will be reviewing all reservations that are associated with the RTOR Elimination.

APPENDIX A: Regional Practices Update Log

Amendments to the Regional Practices will follow the rules defined in the Regional Practices Amendment Process document located on this page: <http://www.pjm.com/etools/oasis.html>

09/04/97 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.

09/15/97 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.

09/15/97 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.

12/12/97 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.

1/28/98 Section 1.1: Automated request review process implemented February 2, 1998.

1/28/98 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.

1/28/98 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.

1/28/98 Section 1.5: The option to pay for congestion for Network Import service will be implemented for transmission service beginning April 1, 1998.

1/28/98 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)

1/28/98 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).

1/28/98 Section 1.10: Allocation process is modified for requests beginning April 1, 1998.

1/28/98 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.

1/28/98 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

1/28/98 Section 1.14 The Bidding process applies only to Non-Firm point to point transactions electing not to pay for congestion.

3/11/98 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) 3/18/98 Section 1.16 Added a section explaining Fixed Transmission Rights (FTRs).

3/20/98 Section 1.13 Added a section for Long-term/Short-term Firm Pricing Policy effective for service post April 1, 1998.

Regional Transmission and Energy Scheduling Practices

4/7/98 Section 1.14 (Previously) Removed bidding section.

7/8/98 Section 1.3 Added a comment to clarify multiple weekly firm request submittals.

7/10/98 Section 1.3 Added Practice for extending weekly and daily FIRM transmission service requests.

7/10/98 Section 1.3 Added comment on Granting Partial Service for FIRM Transmission Service Requests.

8/05/98 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.

8/07/98 Section 1.3 Paragraph added on the modification of POR/POD for firm transmission requests.

9/23/98 Section 1.10 Fifteen minute allocation window extended to FIRM service.

9/23/98 Section 1.3 Eliminated practice of extending weekly and daily FIRM service. Modified monthly firm service earliest request criteria.

9/23/98 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.

10/27/98 Section 1.1 Added HQ (western HQ deliveries/receipts at Chateaugay) as a sink/source for NYPP-W.

11/02/98 Section 1.1 Added definition of PJM Hubs.

01/09/98 Section 1.14 Changed FIRM Zonal Prices.

02/17/99 Section 1.3 Firm monthly earliest request time changed to 14:00, 1st business day, seventeen months.

02/17/99 Section 1.4 Non-Firm/Network hourly latest request time changed to 45 minutes.

02/17/99 Section 1.6 Table Summary for transmission submittals updated to reflect the above two changes.

02/17/99 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.

02/17/99 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.

02/17/99 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.

03/08/99 Section 1.1 CEI was changed to FE as a valid POR/POD.

03/08/99 Section 1.3 Status type ANNULLED was added and defined as a transaction that removed by mutual agreement of PJM and the customer.

03/08/99 Section 1.11 Status type ANNULLED was added and defined as a transaction that removed by mutual agreement of PJM and the customer.

03/08/99 Section 1.5 Update to add product types Network Extended Designated and non-Designated.

03/08/99 Section 1.7 Update to add product types Network Extended Designated and non-Designated.

Regional Transmission and Energy Scheduling Practices

03/08/99 Section 1.9 Update to switch to wall-clock time convention.

3/12/99 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.

4/9/99 Section 1.1,1.16 Spelling errors corrected.

4/9/99 Section 1.8 Replaced "hour ending" with "real time or clock time" to reflect original change on 3/8/99 Sect. 1.9.

4/9/99 Section 1.1 Updated to add capacity types TLR Buy Thru.

4/14/99 Section 1.3 Updated to include day-Secondary service type.

4/14/99 Section 1.16 Numeric values are now entered into FTR fields, no longer a YES, NO, Partial drop-down selection.

4/14/99 Section 1.17 Added to discuss TLR product type.

4/25/99 Section 1.16 Updated - Network Ext Designated request ARR's via eCapacity tool.

05/01/00 Section 1.3 Corrected the definition of weekly transmission service from Monday 0000 - Sunday 0000 with Monday 0000 - Monday 0000.

05/31/00 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.

05/31/00 Section 1.14 Changed the prices for Firm Point-to-Point Transmission Service

06/26/00 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.

07/07/00 Section 1.1 Removed language describing NYPPE and NYPPW valid sink and sources. This paragraph has been removed because it is no longer applicable.

07/07/00 Chapter 2 Energy Scheduling has been removed and replaced by an updated version from the scheduling manual

07/07/00 Chapter 3 Ancillary Services section has been added

07/07/00 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.

09/08/00 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

09/20/00 Section 1.2 Removed Entergy ruling paragraph and replaced this with a paragraph describing PJM's Tariff change that reflects the Entergy original ruling

09/20/00 Section 1.7 Paragraph one was modified to include the PJM tariff change reflected in the Entergy ruling.

12/28/00 Section 1.6 Updated latest request time for hourly transmission from 30 minutes to 20 minutes 12/28/00 at 0900

01/29/01 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. Section 1.9 has also been modified to remove references to hourly on and off peak transmission respectively.

Regional Transmission and Energy Scheduling Practices

- 01/31/01 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.
- 03/01/01 Network Service Language has been modified to include customers that import installed capacity backed resources from outside the PJM Control Area
- 04/26/01 Modified Section 1.14 prices from Kilowatt per dollar to Megawatt per dollar.
- 05/24/01 Modified Section 1.14 prices changed to reflect new Firm Pt to Pt Transmission rate increase.
- 06/08/01 Modified Section 1.6 the latest request time for Daily Firm transmission per EMC ruling on 06/07/01 .
- 07/03/01 Modified Section 1.5 to include clarify conditions needed for ICAP into PJM
- 09/24/01 Modified Section 1.1 to include new paths for PJM West implementation.
- 11/20/01 Modified Section 1.17 to clarify Buy-thru-TLR procedures
- 11/30/01 Modified Section 1.14 prices changed to reflect new Firm Pt to Pt Transmission rate decrease effective 01/01/2002
- 2/05/02 Modified Section 1.14 to reflect old Firm Pt to Pt prices due to PJM West delay.
- 3/01/02 Modified Section 1.14 to include new Firm Pt to Pt prices due to additional Rockland Load.
- 04/25/02 Modified section 1.1 Removed pre-PJM West paths
- 05/09/02 Modified section 1.17 Clarified use of TLR_Buy_Thru Product
- 11/06/02 Modified section 1.6 to add new Secondary Products and deadlines
- 12/13/02 Modified Chapter 2 Clarification of Curtailment Order and Recall of Energy. Example of Recall of Energy added.
- 02/14/02 Modified section 1.17 to include TLR_Buy_Thru Product procedures
- 3/13/03 Added Section 1.18 Rebating Transmission Service Policy
- 9/17/03 Modified Section 1.5 to clarify Network Designated Service
- 11/20/03 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> .
- 2/13/04 Modified Redirect Section to describe updated process
- 3/08/04 Added new CE Paths and Prices
- 3/15/04 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.
- 3/31/04 Updated to Correct CE Prices
- 4/8/04 Removed References to DELI, RIVER and ALEC in the path list

Regional Transmission and Energy Scheduling Practices

4/26/04 Added Section 1.19 Pathway Allocation Process

6/18/04 Update path list for AEP and DPL

6/18/04 Fixed all dead links to point to the correct documentation

6/18/04 Clarified customer confirmation deadlines for firm service

9/24/04 Added Zone prices for AEP and DPL

11/24/04 Added RTOR Chapter

12/03/04 Updated RTOR Information based on FERC Dec 18th ruling

12/21/2004 Updated Path List

2/25/2005 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

2/28/2005 Update Path List

3/08/05 Added Ramp Information Section and Loss Section to Ancillary Service Chapter

04/13/06 Update Language in Section 1.2. Updated Information in Section 1.4. Update Timing Language in Section 1.9. 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.

05/02/06 Added row to table in section 1.6 for requests for annulment. Update to Language in Sections 1.17, 1.19 and 1.20. 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.

11/02/06 Section 1.1 added SPOT_IN capacity type. Section 1.3 moved timings to table in Section 1.6. Added example in Section 1.4 for the new products added that end with NPC and WPC. Section 1.5 changed because the WPC box has been removed and necessary for selection of WPC and NPC products. Section 1.6 reformatted Table and change of times.

3/1/07 Section 1.1 updated PATH list and POR/POD list. Section 1.19 updated rebate information.

3/30/07 Section 1.6 updated times as per Tariff changes Section II. 17.8 and Section II 18.3.

4/4/07 Section 1.6 updated times as per Tariff changes Section II 17.9 and Section II 18.4.

4/5/07 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.

5/10/07 Update for SPOT keyword removal from EES, due to Business Practice change effective 5/10/2007 12:00

6/22/07 Updates for FERC 890 ATC/OASIS regulations.

7/1/07 Added reference to Amendment Process document.

8/6/07 Updated timing requirements.

10/6/07 Finalized Order 890 revisions.

12/28/07 Updated section 1.12 business practices for resales.

Regional Transmission and Energy Scheduling Practices

1/7/08 Updated section 1.12 business practices for resales.

3/12/08 Added section 1.5.3 Spot Market Imports (SPOT_IN), updated section 1.10 to reflect manual and automatic release of SPOT_IN, updated section 1.6 table for SPOT_IN timing requirements, clarified language in section 4 RTOR information.

4/1/08 Updated SPOT-IN rules per MIC meeting discussion.

4/11/08 Updated SPOT_IN rules per MIC recommendation. Changed early time to 9:00AM

10/17/2008 Minor updates to Table 1.6, added clarification of OASIS queue under section 1.2, added changes for resales under section 1.12 OASIS Postings, added rebid timings to table 1.6, added section 1.5.4 Network Resources, and updated other minor typographical errors.

5/8/09 Updated section 1.5.3 for Spot Imports based on MIC/MRC review and conference call. Updated section 1.10 for Spot Import releases. Updated table of contents.

5/14/09 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 Updated Section 1.1 paths and product lists. Added clarification for annulments in Section 1.20. Updated Chapter 3 to refer to the Guide to Billing document from Market Settlements. 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.

2/28/2012 Removed outdated language from Section 1.2 Rollover Rights