

ATSI Integration FAQs

Frequently Asked Questions

7/9/2010

Please refer to the FRR Integration Auction FAQs for all questions related to the capacity market transition: <http://www.pjm.com/markets-and-operations/atsi-integration/~media/markets-ops/atsi-integration/frr-integration-auctions-faqs.ashx>

1) What does ATSI stand for?

Answer: ATSI stands for American Transmission Systems, Incorporated. FirstEnergy Corporation transferred ownership and control of the transmission system assets of its electric utility operating companies - The Toledo Edison Company (Toledo Edison), The Cleveland Electric Illuminating Company (The Illuminating Company), Ohio Edison Company (Ohio Edison), and Pennsylvania Power Company (Penn Power) - to ATSI, a wholly owned subsidiary of FirstEnergy. Since ATSI's transmission assets are being integrated into the PJM footprint and the new zone will be named the ATSI zone, the FirstEnergy integration is also often referred to as the ATSI integration.

2) What is PJM's plan for the transition of point-to-point transmission reservations from PJM to the MISO border that are used to serve load in ATSI?

Answer: These PTP transmission service reservations may be converted to Network Integration Transmission Service to the extent they are utilized to serve load that will be inside PJM following the ATSI integration.

- a. Does PJM intend to continue to treat these reservations as through and out service to MISO or does PJM intend to allow the transmission service customer to combine them into the Network Integration Transmission Service Agreement for the load?

Answer: See above. To the extent a NITS customer already has a NITSA with PJM, these additional delivery points may be added to the existing NITSA.

3) The FirstEnergy integration filing of August 17, 2009 states that loads will need to execute new transmission service and load interconnection agreements. What is PJM's intent with regards to FirstEnergy's statements?

Answer: Transmission customers in the ATSI zone taking transmission service under the MISO Tariff will need to execute the agreements required to take such service under the PJM Tariff, or add additional delivery points to the existing PJM agreements, upon integration of the ATSI zone into PJM. Additionally, participants in the ATSI zone that have not yet executed the PJM Operating Agreement or Reliability Assurance Agreement (as applicable) will be required to do so.

- 4) Does PJM intend to conduct new studies for existing load interconnections and transmission service agreements?

Answer: No.

- 5) Does PJM intend to include all existing resources that are used as capacity under the MISO capacity requirement in the deliverability assessments that will be conducted prior to the RPM auctions?

Answer: Generation deliverability will be assessed for resources internal to the ATSI zone. Resources physically located within the remainder of the current MISO footprint will require Firm PTP service out of MISO. It is PJM's expectation that MISO will convert the existing Network Integration Transmission Service utilized to deliver such resources directly into Firm PTP service out of MISO to PJM.

- 6) Does PJM intend to restudy any generation resource interconnection requests currently in the PJM queue for deliverability based on the addition of the ATSI zone?

Answer: No. Once an interconnection customer enters the queue the base system that is studied is locked. Interconnection customers are not responsible for network upgrades that are triggered by an event that occurs after they have entered the queue. In addition, there are processes in place where the cross-border impacts of queued generation between PJM and MISO are evaluated, so even if any projects were restudied, PJM would not expect to find any new issues.

- 7) What is the PJM list of facilities for which PJM will calculate LMPs in the ATSI footprint and how does the list of LMP points differ from the MISO LMP node list?

Answer: PJM cannot answer this question at this early stage. The list of ATSI zone transmission facilities that will be designated as those for which PJM will perform congestion management needs to be established, and PJM needs to complete any necessary network model enhancements prior to determining the set of pricing nodes that will be applicable to the ATSI zone. Both lists will be posted publicly once they are determined, but that is not likely to occur before late 2010 or early 2011.

- 8) What will PJM use as the historic resource set for the allocation of ARRs for the ATSI zone?

Answer: This is to be definitively determined, but it will most likely be the same set of Designated Network Resources that are currently in MISO for the ATSI zone.

- 9) When a TO zone in one RTO moves to the other RTO do PJM and MISO recalculate each RTO's available flow on the jointly coordinated flowgates?

Answer: The entitlements on reciprocal coordinated flowgates will be recalculated with PJM as the monitoring RTO for the flowgates in the ATSI zone.

- 10) How will PJM apply the criteria for PJM certifications for operators in the ATSI footprint, given that some entities in the ATSI footprint do not have a history with PJM?

Answer: PJM recently revised its certification process to align the PJM Certification to the NERC TOP and BI Certification programs. As of June 1, 2011, all transmission operators must be PJM certified prior to operating on the PJM system. All generation operators have a maximum of 12 months to become certified after they begin operating on the PJM RTO systems. During this 12 month period, if the operator is operating on the system and not PJM-certified, they must work under direct supervision of a PJM Certified operator, either in person or via an on-call arrangement.

PJM recognizes that not all entities have experience with PJM and appreciates the effort those entities will need to put forth to meet these certification requirements. In consideration of that effort, PJM will be offering sessions of both the Market Operations Center and Local Control Center training programs in Ohio. These programs were created to help newly integrating operators prepare for the generation operator and transmission operator PJM certification exams. In addition, the Interconnection Training Program (ITP) is offered each fall and winter. While this course is only available around PJM's campus due to its length and nature, employees from integrating companies are welcome to attend these sessions as well.

A proposal regarding the exemption of small generation plant operators from the PJM generation operator certification requirement was recently approved at the 9/15/2009 Operating Committee meeting. This exempts small generation plants that have total generation of 75 MW or less and do not participate in ancillary services from the generation operator certification requirement. It should be noted that this exemption applies only to certification and the PJM training requirements for such plants are still applicable. More information on the exact exemption criteria is available in Manual 40: Certification and Training Requirements.

<http://www.pjm.com/documents/~media/documents/manuals/m40.ashx>

- 11) Will PJM hold operations and markets courses in the ATSI footprint prior to the integration and grant ATSI entities priority access to the courses?

Answer: Yes, PJM will hold a series of training classes aimed at preparing entities for participation in PJM. These courses will be held in Ohio and include the comprehensive RPM, Load Serving Entity, Market Operations and Local Control Center training programs, among others. Additional sessions of these training courses will also be held elsewhere in the PJM footprint. Entities integrating into PJM will be given priority registration for these training sessions. Once finalized, a link to these courses will be posted on the ATSI integration web page: <http://www.pjm.com/markets-and-operations/atsi-integration.aspx>

- 12) If a market participant has reserved off-peak daily transmission for Wednesday, but ramp room is not available at 07:00 or 23:00, what are the options?

Answer: 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

- 13) If a market participant has reserved on-peak weekly transmission and 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, what are the options?

Answer: 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.

- 14) Does PJM have any concerns over the fact that the ATSI integration is bringing more load than generation into the PJM footprint?

Answer: No. PJM will operate the entire system, including ATSI as a single control area. The fact that the ATSI zone has more load than generation does not make the system unreliable. There are several existing transmission zones within PJM where the load exceeds the generation and this has not presented reliability issues. The load, generation and transmission system need to be evaluated together and will be done so as part of the analyses being conducted as part of this integration.

- 15) When will the generation and load deliverability studies for the 2011/12, 2012/13 and 2013/14 delivery years be complete and posted?

Answer: The generation deliverability study is complete and has been posted to the following location: <http://www.pjm.com/planning/rtep-development/~media/planning/rtep-dev/baseline-reports/atsi-baseline-integration-rtep-report.ashx>. The load deliverability study for 2013/14 will be conducted in January 2010. The results of the analysis will be posted with the rest of the RPM Planning Parameters in February. Deliverability for the 2011/12 and 2012/13 delivery years will be studied as part of the 2010 RTEP. The ATSI zone will be included in that analysis along with all other PJM zones.

- 16) What will happen if a unit that currently serves load in the ATSI zone is found to not be deliverable for the full output of its generation as part of the generation deliverability analysis?

Answer: When PJM executes the generation deliverability analysis for existing generators in the ATSI zone, any upgrades that are found to be required will NOT be directly assignable to any specific generator. Rather, the costs of such upgrades will be allocated as would baseline reliability upgrades. Further, no generators will be

considered “undeliverable” until such time as the upgrades are completed. Existing generation will all be deliverable, and any required upgrades will be assigned to the Transmission Owner for completion as soon as practicable.

- 17)** How will the administrative costs (Schedule 9 charges) assessed to PJM members be impacted by the ATSI integration?

Answer: The additional MWh of load being added as part of the ATSI integration represents an approximate 10% increase in load in the PJM footprint. This increases the MWh over which administrative costs are spread, lowering the administrative costs per MWh. However, this will be partially offset by the associated increase in operating costs. As a result of past integrations, administrative costs have been reduced by about three times as much as the operating budget increased. PJM expects the reduction to be on par with that or greater as a result of this integration.

- 18)** What is the definition of fleet in the context of ancillary services markets?

Answer: A fleet consists of all the generators in the ATSI zone owned by a particular generation owner. The fleet signal that is provided for regulation will apply to all units committed for regulation in the generation owner’s entire fleet.

- 19)** Will there be a minimum regulation requirement for each fleet in the ATSI zone after the integration is complete?

Answer: Participation in the regulation market is voluntary for all generators.

- 20)** Does PJM have a single ramp rate?

Answer: Yes, PJM currently has a single ramp rate. However, PJM will be supporting separate ramp up and ramp down rates in the fall of 2010, following the implementation of the Advanced Second Control Center program.

- 21)** Are generation dispatch economic basepoints provided on a 5 minute frequency?

Answer: Economic basepoints are provided generally on 5 minute intervals and then integrated for each hour for settlement purposes.

- 22)** Is there a process for truing up imbalances that occur as a result of hourly integration of LMPs?

Answer: There is no true up process or make whole payment for imbalances that occur within an hour.

23) When is a generator considered to be following dispatch?

Answer: Generally, if a generator is operating within 10% of its basepoint, the generator is considered to be following dispatch

24) What historic period of outage data will generation owners need to upload into the PJM system and when is that data due?

Answer: PJM requests that 5 years of generator outage history be uploaded to the eGADS system (2004-present) by Dec. 15, 2009. PJM class average data will be substituted for any missing data.

25) When will Market Trials take place?

Answer: Market trials are tentatively scheduled to take place April 1, 2011 through May 15, 2011.

26) How many days will be cleared during Market Trials? What data will be used to clear the market?

Answer: At least two days will be cleared as part of the ATSI Market Trials. For each market day, the bidding window will be open for one week and the market will be cleared the day after the bidding window closes.

Prior to the bidding window opening, PJM will import production data for the given dates into the market trials system (the sandbox environment). Participants in the existing PJM footprint can then choose to overwrite that data prior to the market being cleared and ATSI zone participants can submit their bids and offers.

27) During market trials, can participants perform the following functions?

- a. Submit DA unit offers and demand bids to PJM server

yes

- b. Download DA awards and prices from PJM server

yes

- c. Submit A/S offers (reg & synch)

yes

- d. Receive 5-min dispatch instructions

No. The market trials system does not calculate economic dispatch. However, at the beginning of 2011, PJM will run tests on telemetry and control signals for each generator in the ATSI zone.

e. Download and review PJM settlement charges

No. Settlements results would only be available on a very limited basis, if at all. Given that economic dispatch is not included in Market Trials, very little RT information for ATSI zone load and generation units will be available during market trials. As most settlements reports depend on both DA and RT data, there would be a very limited number of reports that could be produced. This will be further evaluated as Market Trials approach.

28) How often will RT LMPs be posted during Market Trials?

Answer: Starting about 60 days prior to integration, PJM will post RT LMPs for the ATSI zone 2 – 3 times per week. Starting about 30 days prior to integration, PJM will post RT LMPs for each day until integration. However, it should be noted that LMPs will not be posted on a daily basis. Several days of LMPs will be posted at one time, rather than posting LMPs each day.

29) Is the regulation signal ramp rate limited?

Answer: No. The regulation signal is not ramp rate limited.

30) Is there a penalty for not following the regulation signal?

Answer: There is no explicit penalty but units that do not follow the regulation signal will not be paid for their regulation commitment. They are also subject to impromptu tests if they consistently do not provide adequate regulation.

31) When are regulation lost opportunity cost credits provided?

Answer: Regulation LOC credits are provided for pool scheduled regulation resources up to the RT LMP when their cost to provide regulation exceeds their Regulation Market Clearing Price credit. This LOC covers any exposure to RT LMP if a resource was committed in the DA market and did not meet its DA schedule because it provided regulation.

32) How far in advance can DA offers be submitted in eMKT?

Answer: Offers can be submitted 7 days in advance, but they are not financially binding in advance. Unit commitments are only made a day in advance through market clearing, but PJM operators can call the units on in advance if there are crew scheduling constraints. In that situation, market operators would then ensure the commitment is reflected in the market clearing results. If a unit has a long lead time and is committed more than 1 day in advance by PJM operators, its energy offer is locked for the operating day at the value that was submitted when it was committed.

- 33)** Is there a document or filing that outlines the calculation that the ATSI Utilities will use to set each individual customer's Peak Load Contributions (PLC) once ATSI transitions to PJM?

Answer: The documents that the ATSI Utilities will use to calculate the PLC obligations of customers are located here:

http://www.firstenergycorp.com/supplierservices/files/Supplier_Registration/2009_PJM_Capacity_Website_Document_09-09-08.pdf