

Generator Onboarding FAQ

Version: 1.0

- Q1 Do I need to bid into Markets Gateway to reflect my generator's test schedule?
- A1 No. The generator will not be visible in Markets Gateway at this point. At least 2 business days prior to synchronizing, please send your IC Project Manager a test energy schedule. This should consist of expected hours of operation, and estimated output as seen to the transmission system, including maximum MW output expected for each day. PJM will use this to begin notifying internal parties that you will be coming on-line, and appropriate preparation steps can be made.
- Q2 What steps occur after my generator has synchronized to the Transmission System and started the test energy phase?
- Acouple hours after the generator has generated output MW in PJM's State Estimator, the project will need to send an email with your hourly integrated output (revenue data) to Market Settlement Operations (mrkt settlement ops@pjm.com). This is to verify revenue data and link the telemetry to your billing account. Once Market Settlements has verified revenue data, the generator will be activated in the Power Meter tool in production environment. All Power Meter users will receive notification when this occurs. After the unit is activated in Power Meter, it is activated in Markets Gateway and eDART in production environment.
- Q3 When is a Generator considered Partially In-Service?
- We consider a facility as Partially In-Service, once it achieves Stage II Energization which we also associate with test energy. This is the initial synchronization of the generating facility to the transmission system, and injection of power begins, and makes its first commercial sale (to settle test energy). We flag the facility as "UC-ISP" (Under Construction In Service Partial) at this point, and it remains so until full generation capability is achieved, and declares commercial operation, at which point it is flagged as fully "In-Service".
- Q4 What is Resource Tracker and how do I update?
- Resource Tracker supports the maintenance of ownership information and provides the user the ability to review all sources of ownership information. Generation Owner, or designated agent, is required to confirm the resource ownership information by November 1 annually. The window to start the process will open October 1 annually. During a Generation Transfer, Section 5.7 of the



Manual 14-D, the Generation Owner, or designated agent, is required to confirm the ownership information in Resource Tracker within two (2) business days after receiving an automated email from the Resource Tracker System alerting them of the transfer.

https://pjm.com/-/media/etools/resource-tracker/resource-tracker-user-guide.ashx

- Q5 What are my options if I do not wish to become a PJM member?
- A generator that has gone through the PJM Planning Queue received either an Interconnection Service Agreement (ISA) or Wholesale Market Participation Agreement (WMPA) is eligible to participate in PJM's markets. PJM market participation requires the interconnection customer become a PJM member or enter into an agreement with a PJM member to have that member represent the generator in the market. This is because PJM can only issue payments to PJM members. If the interconnection customer (generator) makes an agreement with another PJM member they will be required to sign a Declaration of Authority Agreement (DOA) indicating that the interconnection customer has delegated responsibility for market participation to the other member company. PJM Client Management will work with the interconnection customer on the required DOA and appropriate markets set up.
- Q6 Why is my resource not visible in the eDART tool?
- A6 There could be a few reasons why the unit is not visible in eDART:
 - Confirm that the subaccount you are looking under is the subaccount the resource was requested to be modeled under.
 - Confirm with your company CAM that the account under which the generator is modeled has been granted eDART Generation access
 - Confirm with your company CAM that you have been granted eDART Generator R/W or Generator Read Only access
 - If the steps above are complete, please email Accountmanager@pim.com for assistance.
- Q7 Where can I learn more about tasks that generators must perform periodically?
- A7 PJM Manual 14-D, Generator Operational Requirements, Section 7.3.6 Generation Owner Periodic Tasks and Data Submittals provides guidance. The guideline is posted at https://www.pjm.com/~/media/documents/manuals/manual-links/m14d/go-periodic-tasks.ashx



- Q8 Is there a specific naming convention for a Generating Facility that must be followed for new generators?
- **A8** PJM Manual 14-D, Generator Operational Requirements, Section 1.2, Generator Commercial Naming Convention contains naming conventions.
- Q9 What are the training and certification requirements required to interact with PJM dispatch in real time operations?
- A9 PJM Manual 40, Training and Certification Requirements contains the requirements that need to be met by both large and small generators. Questions can be sent to PJM State and Member Training Department at TrainingSupport@PJM.com.
- Q10 What is the difference between being a cost-based and price-based resource?
- A10 Generator cost-based schedules are schedules that can only include costs specified in PJM Manual 15, Cost Development Guidelines and Manual 11, Energy & Ancillary Services Market Operations, Section 2.3.4, Generator Schedules. Generators are operated on the lower of its price or cost based schedule when operating for reliability reason and not passing the Three-Pivotal Supplier (TPS) test described in M-11, Section 2.3.6.1 Market Power Mitigation, and not economics. The maximum offer cannot exceed \$2000/MWh.

Generator price-based schedules, also known as market-based schedules, are developed based on PJM Market Participant offer strategy, and are not subject to the stringent parameters specified in PJM Manual 15, Cost Development Guidelines. They are still subject to the requirements specified in Manual 11, Energy & Ancillary Services Market Operations, Section 2.3.4, Generator Schedules. A generator is operated on its price-based schedule when it is running economically, and not for reliability reasons. The maximum offer cannot exceed \$2000/MWh.

- Q11 What steps do I need to take to participate in the upcoming Capacity Market Auction?
- A11 In order for a resource to participate in PJM's Capacity Market, it must be modeled in an account of a full, active PJM Member authorized as a Market Participant in the Capacity Market. Once your respective account(s) receive the necessary Market Participant status, you will need to send an email with your Notice of Intent (NOI) to the rpm_hotline@pjm.com for the resources that have obtained the necessary studies as outlined in Section 4.2.3 of Manual 18. Please include the following information when you submit your NOI:
 - 1) Resource Name
 - 2) PJM Planning Queue Number
 - 3) Capacity Market Seller's account shortname that the resource will be modeled and marketed in.



4) For battery resources, please designate if the resource should be modeled as a standalone, co-located, or hybrid resource.

Please note that the account shortname should be provided upon becoming a Market Participant and receiving Capacity Exchange read/write access. The RPM (Capacity Market) team will then review and verify your resource and model it in the appropriate account.

- Q12 Where can I learn about all the types of analog/digital telemetry that can be exchanged between PJM and a Member?
- A12 Refer to the Generation Telemetry List which contains the list of all analog/digital telemetry points.
- Q13 Where can I learn about regulation control and the telemetry associated with it?
- A13 Refer to the <u>Regulation Control</u> document which provides an overview of regulation control and the telemetry associated with it.
- Q14 Where can I learn about all the Generator On Reasons (GENRUNR) telemetry mappings?
- **A14** Refer to the <u>Generator Run Reason</u> document which provides a list of all Generator On Reasons.
- Q15 Where can I find a learn more about generator voltage control?
- A15 Refer to the Generator Voltage Schedule document which provides guidance on generator voltage control.