

# **Guideline: Generation Owner Periodic Tasks and Data Submittals**

**PJM Generation Department** September 24, 2025

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#### **Contents**

| Introduction   | 1  |
|--|----|
| Required Tasks                                       | 1  |
| Summer/Winter Net Capability Verification            | 1  |
| Black Start Testing                                  | 2  |
| Voltage Schedule Review                              | 3  |
| eDART Reactive Capability Review                     | 3  |
| Cold Weather Checklist Data Request                  | 4  |
| Cold Weather Operating Limit (CWOL) Data Requests    | 4  |
| Seasonal Fuel and Emissions Data Request             |    |
| Periodic Data Requests                               | 5  |
| eDART GO Contact Data Request                        | 6  |
| NERC MOD-026/027 Data Submittals                     | 6  |
| Gen Model (MOD-032 for Generator Owners)             | 8  |
| Resource Tracker Verification                        | 8  |
| Reactive Capability Testing                          | 9  |
| Capacity Modification Transaction                    | 10 |
| Restoration Drills                                   | 10 |
| Variable Operating and Maintenance Cost (VOM) Review |    |
| Fuel Cost Policy Review                              | 11 |
| Emissions Data Submittal                             | 12 |
| Black Start Cost Submittal                           | 12 |
| Black Start Calculator Data Request/Validation       |    |
| Optional Tasks                                       | 13 |
| Annual Grid Security Drill/GridEx                    | 13 |
| Regulation Testing                                   | 14 |
| RTO Wide and Incremental Black Start RFPs            | 14 |
| Unit-Specific Parameter Adjustment                   | 15 |
| Period/Persistent Parameter Limits Exceptions        |    |
| Temporary Parameter Limits Exceptions                |    |
| Fast-Start Capable Request                           |    |
| Cold Weather Advisory Drill                          |    |
| Attachment A – Task Summary                          | 19 |
| Attachment B – Optional Task Summary                 | 20 |
| Revision History                                     | 21 |





#### Introduction

In order\_Tto assist PJM Generation Owners (GOs) with managing the various tasks, testing and data submittals required by PJM under the PJM Governing Agreements and Manuals, PJM has created this guideline. This guideline is not an all-inclusive list of items required of GOs by PJM's Manuals and Governing Documents and does not address other Member requirements. It also does not address other external third party, regulatory or legal compliance requirements including but not limited to NERC Reliability Standards applicable to NERC-registered entities and FERC's regulations. The liability of PJM, its Board, officers, employees and agents is governed by the applicable provisions of the PJM Tariff and Operating Agreement. To the extent there is any conflict between PJM's Governing Agreements and other applicable legal and regulatory requirements and this guideline document, PJM's Governing Agreements and other applicable legal and regulatory requirements control.

This document is broken into two sections: Required Tasks and Optional Tasks.

### **Required Tasks**

#### Summer/Winter Net Capability Verification

#### Description

- Capability Verification testing is required of all generators that participate in the PJM Reliability Pricing Model (RPM) Capacity Markets, have a commitment in those markets, and for units maintaining firm external commitments.
- Summer Net Capability must meet or exceed the rated Installed Capacity (ICAP) and the claimed ICAP
  in PJM eGADS; Winter Net Capability must meet or exceed the rated ICAP and the claimed ICAP in
  PJM eGADS.

#### Responsible PJM Department(s)

Resource Adequacy Planning

Email Distribution List gadssupport@pjm.com

#### Driver/Requirement

- PJM Manual 21, Rules and Procedures for Determination of Generating Capability
- PJM Manual 18, PJM Capacity Market

Periodicity: Semiannual\* Summer: June 1 - Aug. 31 Winter: Dec. 1 - Feb. 28–29

System Used To Collect Data

Required or Optional?

<u>eGADS</u>

Required

<sup>\*</sup> Winter verification tests can be summer tests corrected to winter conditions. Hydro units test only in the summer; no winter verification test is required for hydro units.



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#### **Black Start Testing**

#### Description

Black Start units test their ability to start without outside power and remain in a stable operating state while running at minimum generation levels. Tests are conducted at plant by GO and sent to PJM for review, pass/fail determination and record keeping.

#### Driver/Requirement

Black Start Units Compensated by PJM

- OATT Schedule 6A, Section 12: To verify that they can be started and operated without being connected to the Transmission System, Black Start Units designated as critical shall be tested annually in accordance with the PJM manuals. The Black Start Unit owner shall determine the time of the annual test.
- OATT Schedule 6A, Section 14: To receive Black Start Service revenues, a Black Start Unit must have a successful annual test on record with the Transmission Provider within the preceding 13 months.
- PJM Manual 12, Section 4.6.14: To collect monthly Black Start revenues, a unit must have a successful Black Start test on record with PJM within the last 13 months. Once a generator is qualified, they have until the end of the 13th month following the last successful Black Start test date to submit documentation of the next successful annual test to PJM.
- If a unit fails a Black Start test, the unit is given a 10-day grace period within which it may retest without financial penalty if within the 13-month testing period.
- If the unit does not successfully pass a Black Start test
  within the 10-day grace period immediately following
  notification to PJM of a failed test, monthly Black Start
  revenues will be forfeited from the time of the first day of the
  month in which the unsuccessful test occurred until the first
  day of the first month after the unit successfully passes a
  Black Start test.

Black Start Units Not Compensated by PJM

- NERC Standard EOP-005, System
  Restoration from Blackstart Resources, R7:
  Each Transmission Operator shall have
  Blackstart Resource testing requirements to
  verify that each Blackstart Resource is
  capable of meeting the requirements of its
  restoration plan. These Blackstart Resource
  testing requirements shall include:
- R7.1: The frequency of testing such that each Blackstart Resource is tested at least once every three calendar years.
- R7.2: A list of required tests including:
  - R7.2.1: The ability to start the unit when isolated with no support from the BES or when designed to remain energized without connection to the remainder of the System
  - R7.2.2: The ability to energize a bus. If it is not possible to energize a bus during the test, the testing entity must affirm that the unit has the capability to energize a bus such as verifying that the breaker close coil relay can be energized with the voltage and frequency monitor controls disconnected from the synchronizing circuits.

| Responsible PJM Department(s) Performance Compliance |  | Email Distribution List Blackstart@pjm.com |                                     |  |
|--|--|--|-------------------------------------|--|
| Periodicity  | Testing periodicity of Critical Black S Review, pass/fail determination and it |  |                                     |  |
| Start Date:  | Varies depending on in-service date  | End Date:                                  | Varies depending on in-service date |  |
| System Used To Collect Data                          |  | Required or Optional?                      |                                     |  |
| eDART   Microsoft Excel   Microsoft Access           |  | Critical Black Start Units: Required       |                                     |  |
|  |  | Noncritical Black Start Units: Optional    |                                     |  |



#### Voltage Schedule Review

#### Description

Annual review of PJM maintained voltage schedules assigned by the TO, acknowledged by the GO and approved by PJM. The annual review consists of two parts:

- TOs review and update voltage schedules.
- GOs review and acknowledge voltage schedules.

| ;) |
|----|
|    |

Generation

#### Driver/Requirement

- NERC Standard VAR-001, Voltage and Reactive Control
- PJM Manual 3, Transmission Operations, Section 3.11

#### **Email Distribution List**

voltageschedules@pjm.com

Periodicity Annual; Requires one month each to complete review by TO and GO

Start Date: April 1 End Date: May 31

System Used To Collect Data: eDART Required or Optional? Required

#### eDART Reactive Capability Review

#### Description

To ensure accuracy of generator reactive capabilities that may result from planned unit modifications, a critical input to PJM and TO security analysis packages, PJM requires that each GO review and confirm their unit reactive capability data via eDART on a biannual basis. PJM and the TOs should then verify accuracy of unit reactive capabilities modeled in their respective EMS systems.

#### Responsible PJM Department(s)

Generation

#### Driver/Requirement

PJM Manual 14-D, Generator Operational Requirements, Section 7.3.4, Generating Unit Reactive Capability Reporting

#### **Email Distribution List**

GenOutageSupport@pjm.com

| Periodicity | Semiannual: | Generation Owners: | April & October | Trans | smission Owners: May & November |
|-------------|-------------|--------------------|-----------------|-------|---------------------------------|
|             |             |                    |                 |       | ~4                              |

• April 1 & May 1 • Oct. 1 & Nov. 1

• April 30 & May 31 • Oct. 31 & Nov. 30

System Used To Collect Data: eDART Required or Optional? Required



#### **Cold Weather Checklist Data Request**

#### Description

PJM expects all generation resources to use a cold weather preparation checklist prior to the National Oceanic and Atmospheric Administration (NOAA) first frost date to prepare for cold weather operations to promote reliability.

To verify and document the practice, generation resources are required to complete the Cold Weather Checklist Data Request issued by PJM.

| Responsible PJM Department(s) Generation      | PJM Manual 14-D, Generator Operational Requirements, Section 7.5.2     Generation Resource Cold Weather Checklist     NERC Reliability Guideline: Generating Unit Winter Weather Readiness – Current Industry Practices |                   |  |
|---|---|-------------------|--|
| Email Distribution List edartgosurvey@pjm.com |   |                   |  |
| Periodicity: Annual                           | Start Date: Nov. 1  | End Date: Dec. 15 |  |
| System Used To Collect Data eDART             | Required or Optional? Required  |                   |  |

#### Cold Weather Operating Limit (CWOL) Data Requests

#### Description

A Cold Weather Operating Limit (CWOL) is a specific operating parameter that defines the minimum temperature at which a generating unit can reliably operate based on engineering analysis or historical operating data. Additionally, PJM collects minimum startup temperature based on the same criteria. PJM uses CWOLs, along with other measures, to ensure grid reliability during extreme cold weather events.

There are two data requests associated with CWOL data. A CWOL data request will be issued prior to winter to establish a baselinepoint CWOL. A separate CWOL data request will be issued and remain open through the winter (December – March) to give GOs the ability to update their CWOL as needed Throughout the winter (December – March), another CWOL data request will be issued and will remain open to give GOs the ability to update their CWOL as needed.

| Responsible PJM Department(s) Generation      | Driver/Requirement • NERC EOP – 011  |   |
|---|--|---|
| Email Distribution List edartgosurvey@pjm.com | • NERC EOP – 012   |   |
|   | Start Date ( <u>baseline initial data</u> request): <u>Early October Oct. 15</u> | End Date (initialbaseline-data request): Mid-November Nov. 15 |
| Periodicity: Annual                           | Start Date ( <u>winteropen</u> -data request):                                   | End Date: (openwinter data request):                          |
|   | Dec. 1   | Mar. 31   |



System Used To Collect Data

Required or Optional?

**eDART** 

Required

#### Seasonal Fuel and Emissions Data Request

#### Description

The Seasonal Fuel and Emissions Data Request requires all generation resources to report fuel and emissions data so that in severe situations PJM has the situational awareness to make decisions to promote the reliable operation of the electric grid.

PJM needs data concerning unit fuel reserves and emissions limitations for it to reliably operate the PJM Balancing Authority and its associated markets. This is especially true during periods of severe weather and/or times when there are external fuel constraints.

Responsible PJM Department(s) Email Distribution List Generation edartgosurvey@pjm.com

#### Driver/Requirement

- PJM Manual 14-D, Generator Operational Requirements, Section 7.3.5 Fuel and Emissions Reporting
- PJM Operating Agreement Sections 11.3 Member Responsibilities, 11.3.1 General, and Definition of Emergency, "Emergency' shall mean: ... (ii) a fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel"
- NERC Reliability Standard, EOP-11, Emergency Operations

Periodicity: Annual Start Date: Approx. Oct. 1 End Date: Approx. Nov. 15

System Used To Collect Data

eDART Required

Required

#### Periodic Data Requests

#### Description

Depending on the severity of the weather forecasts, projected fuel availability, responses to the Seasonal Fuel and Emission Data Request, or other reasons, PJM may request on a periodic basis updated responses to the Seasonal Fuel and Emission Data Request questions for a subset of units. This information is intended to assist in the Operations Planning process.

| Responsible PJM Department(s) | Email Distribution List |
|-------------------------------|-------------------------|
| Generation                    | edartgosurvey@pjm.com   |



#### Driver/Requirement

- PJM Manual 14-D, Generator Operational Requirements, Section 7.3.5 Fuel and Emissions Reporting
- PJM Operating Agreement Sections 11.3 Member Responsibilities, 11.3.1 General, and definition of Emergency, "Emergency' shall mean: ... (ii) a fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel"
- NERC Reliability Standard, EOP-11, Emergency Operations

Periodicity: As required Start Date: As required End Date: As required

System Used To Collect Data: eDART Required or Optional? Required

#### eDART GO Contact Data Request

#### Description

"As soon as practicable, but no later than 3 business days following a generation transfer or a new generation resource being placed in commercial operation, the 'eDART Contact' responsible for tickets and data submittals in eDART must complete the eDART Contact Data Request – all fields are required. The Data Request is accessed by selecting the 'Gen. Tickets' menu item and the selecting GO Contact Data Request from the GO Data Request menu.

Name, Title, Role and Company of the primary and secondary individuals responsible for handling eDART functions. Email, Desk and Mobil Phone Numbers of the primary individual responsible for handling eDART functions. Name, phone number and Email of the primary individual or group that should be contacted for any operational issues and/or questions. This MUST be a group that can respond 24 hours a day, 7 days a week, 365 days a year. Name, phone number and Email of the secondary individual or group that should be contacted for any operational issues and/or questions. This MUST be a group that can respond 24 hours a day, 7 days a week, 365 days a year. Email Address of the group that should be contacted for any Voltage Schedule issues and/or questions."

| Responsible PJM Department(s)        | <b>Email Distribution List</b> | Driver/Requirement                      |
|--------------------------------------|--------------------------------|---|
| Generation                           | edartgosurvey@pjm.com          | PJM Manual M-14D, Generator Operational |
| <ul> <li>Member Relations</li> </ul> |                                | Requirements, Section 5.7.2.10          |

Periodicity Addition of information within three days of new unit addition or transfer.

Start Date: Varies End Date: Varies

System Used To Collect Data: <u>eDART</u> Required or Optional? Required

#### NERC MOD-026/027 Data Submittals

#### Description

In order to verify that the dynamic model and the model parameters used in dynamic simulations that assess Bulk Electric System (BES) reliability accurately represent generator unit real power response to system frequency variations, GOs submit a report providing model parameters and plots proving the simulated response matches a recorded response. PJM determines if the provided models are "usable" or "not usable" by verifying they can initialize and pass several simulation tests designed to ensure they will function in the interconnection-wide models, in addition to comparing PJM simulations to reported simulation results.



Once an updated dynamic model is found useable, it is included in all future planning dynamics case builds and is passed to Operations to update the real-time Transient Stability Analysis Tool (TSAT).

#### Responsible PJM Department(s)

**Generation Modeling and Dynamic Studies** System Planning Modeling and Support

#### **Email Distribution List**

NERC.Transmission.Planner@pjm.com

#### Driver/Requirement

- NERC Standard MOD-026 Verification of Models and Data for Generator Excitation Control System or Plant Volt/Var Control **Functions**
- NERC Standard MOD-027-1 Verification of Models and Data for Turbine/Governor and Load Control or Active Power/Frequency Control Functions

#### **Additional Guidance**

PJM Compliance Bulletin CB016

PJM Guidance for NERC MOD-026-027 Generator Owner Preparation & Submittal

#### Periodicity

- Within 365 days of going in-service or making an equipment change
- Subsequent verification on or before the 10-year anniversary of the last transmittal

Start Date: Varies

End Date: Varies

#### System Used To **Collect Data**

**PJM Planning** Community

#### Required or Optional?

- Required for applicable generators (Individual generating unit greater than 100 MVA (gross nameplate rating) or individual generating plant consisting of multiple generating units that are directly connected at a common BES bus with total generation greater than 100 MVA (gross aggregate nameplate rating)).
- Optional for generators not meeting the applicability criteria in the standard.



#### Gen Model (MOD-032 for Generator Owners)

#### Description

What is the data? Generator data needed for load flow, short circuit, and dynamics modeling. Complete set of data requirements available on PJM Planning Center website.

Why is it needed? To verify and update planning models.

How is it used? On an ad-hoc basisannual basis (working toward adding more regularity and structure to this), PJM Planning modeling data are uploaded into Gen Model data is compared for with existing modeling data, and if discrepancies are identified, they are confirmed with the GOs to certify. If a GO is unable to certify, then the (or (GO corrects invalid data) per appropriate PJM processes (e.g. MOD-026/027 for dynamics, necessary studies for all other) prior teto the data being transferred to PJM implementing to update the model(s).

# Responsible PJM Department(s)

Generation Modeling and Dynamic Studies System Planning Modeling and Support

#### Email Distribution List

MOD-032@pjm.com

#### Driver/Requirement

- NERC Standard MOD-032 Data for Power System Modeling and Analysis
- · PJM requirements:
- https://pjm.com/planning/services-requests/planning-modeling-submission-mod-032.aspx
- MOD-032 Steady State, Dynamics and Short Circuit Modeling Data Requirements and Procedures
- PJM Planning Center: Gen Model User Guide

#### **Additional Guidance**

PJM Compliance Bulletin CB022 – MOD-032-1 Data for Power Systems Modeling & Analysis

Periodicity: Annual Start Date: May 1 End Date: June 15

# System Used To Collect Data

PJM Gen Model Portal

#### Required or Optional?

- · Required by NERC Standard for all NERC-registered generators
- Required by PJM for non-NERC generators that participate in the capacity market or noncapacity generators with nameplate rating >=20MW

#### Resource Tracker Verification

#### Description

PJM requires a GO to have a single point of contact for real-time and near real-time operations. That single point of contact has to communicate and coordinate with the appropriate PJM member corporate entity to fulfill the assigned responsibilities.

#### Responsible PJM Department(s)

Member Relations

# Email Distribution List ResourceTrackerSupport@pim.com

#### Driver/Requirement

PJM Manual 14-D, Generator Operational Requirements, Section 5.3.7 Resource Tracker supports the maintenance of ownership information and provides the user the ability to review all sources of ownership information. GO, or designated agent, is required to confirm the resource ownership information.

Periodicity Annual, and if a generator is transferred to another entity (two business days after transfer)



Start Date: Oct. 1 or upon generation transfer End Date: Nov. 1 or upon generation transfer

System Used To Collect Data: Resource Tracker Required or Optional? Required

#### Reactive Capability Testing

#### Description

"PJM requires testing to be coordinated between PJM, the testing facility and the local Transmission Owner's (TO) to ensure that the impact on system operations is minimized. Testing is intended to demonstrate reactive capability for those conditions where reactive reserves or voltage control would be required.

The testing covered in Attachment E is designed to demonstrate useable reactive capability and, unlike real power (MW) capacity testing, not a maximum capability test. It is the intent of these procedures to align with NERC Reliability Standard MOD-025 so separate tests to meet the NERC requirements and the PJM requirements are not needed.

The following facilities are required to perform reactive capability testing:

- Individual generating units and inverter-based Energy Storage Resources with a gross nameplate rating greater than 20 MVA and directly connected to the Bulk Electric System.
- Generating plants/facilities with a gross aggregate nameplate rating greater than 75 MVA including inverterbased Energy Storage Resources, and variable resources such as wind, solar, run of river hydro, etc.
- Synchronous condensers with a gross nameplate rating greater than 20 MVA and directly connected to the Bulk Electric System
- All generating units providing PJM Black Start Service"

#### Responsible PJM Department(s)

Performance Compliance

#### **Email Distribution List** ReactiveTesting@pjm.com

#### Driver/Requirement

- NERC Standard MOD-025 Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive Power Capability
- PJM Manual 14-D Generator Operational Requirements, Attachment E

| Periodicity | Minimum of five every years |
|-------------|-----------------------------|
|-------------|-----------------------------|

Start Date: Varies based on previous test date End Date: Varies based on previous test date

#### System Used To Collect Data

Required or Optional?

**eDART** Required for generators specified above



#### **Capacity Modification Transaction**

#### Description

CAP MODs are a type of Capacity Exchange transaction used by GOs to request the addition of a new unit or the removal of an existing unit from their resource portfolio in Capacity Exchange, or to request a MW increase or decrease in the summer or winter installed capacity rating of an existing unit.

#### Responsible PJM Department(s)

#### **Capacity Market Operations**

**Email Distribution List** RPM\_Hotline@pim.com

#### Driver/Requirement

- PJM Open Access Transmission Tariff (OATT), Attachment DD, Section 5.6.6
- PJM Manual 18, PJM Capacity Market, Section 4.2.6

When permanent changes to the installed capacity value of a generation unit are necessary Periodicity

Start Date: End Date:

System Used To Collect Data

**Capacity Exchange** 

Required or Optional?

Required

#### **Restoration Drills**

#### Description

All generation facilities identified in PJM TO Restoration Plans that are invited to participate in restoration drill are required to participate.

#### Responsible PJM Department(s)

System Operator Training State and Member Training

#### **Email Distribution List**

TrainingSupport@pjm.com

#### Driver/Requirement

- NERC Standard EOP-005, System Restoration Plans
- NERC Standard EOP-006, System Restoration Coordination
- PJM Manual 36, System Restoration, Attachment D

Periodicity Varies, at least once annually

Varies, subject to scheduling constraints; Start Date: commonly during spring

End Date: Varies, similar to the start date

#### System Used To Collect Data

- Resource Tracker used to track company contacts
- . PJM Learning Management System (LMS) is used to document drill participation

#### Required or Optional?

Required (if invited to participate) - NERC Compliance



#### Variable Operating and Maintenance Cost (VOM) Review

#### Description

Maintenance expenses are associated with the repair or replacement of equipment due to wear and tear from electric production. Operating costs are expenses related to consumable materials used during unit operation. Maintenance expenses and operating costs are recoverable through the energy market. Only expenses/costs incurred as a result of electric production based on operating hours, starts or a combination of operating hours and starts qualify for inclusion. Fixed costs cannot be included.

In order to utilize a VOM adder with a cost-based offer, the maintenance expenses and operating costs must be submitted to PJM and the Market Monitoring Unit (MMU) for review annually. Maintenance and operating cost adders must be approved before they can be included in the Market Seller's cost-based offer. Approved VOM adders expire Dec. 31 of the year following acceptance.

| Responsible<br>Performance<br>Department                 | e PJM Department(s)<br>Compliance | Email Distribution List FuelCostPolicyAnalysis@pjm.com   | Driver/Requirement Operating Agreement Schedule 2 Section 4 |
|--|-----------------------------------|--|---|
| Periodicity  | Annual                            |  |   |
| Start Date:  | June 15 (as early as Ja           | an. 1), or as needed Er                                  | nd Date: Dec. 31  |
| System Used To Collect Data connect.pjm.com – SharePoint |                                   | Required or Optional? Required for any unit submitting a | VOM adder on their cost-based offer                         |

#### Fuel Cost Policy Review

#### Description

Market Sellers that offer a generation resource, including external capacity and energy-only resources, and submit a non-zero cost-based offer (including negative offers) in the PJM Interchange Energy Market must have a PJM-approved Fuel Cost Policy consistent with each fuel type on which the resource can operate. Regulation-only resources do not require a Fuel Cost Policy.

Prior to expiration of a Fuel Cost Policy, all Market Sellers will be required to either submit to PJM and the Market Monitoring Unit an updated Fuel Cost Policy that complies with this Operating Agreement, Schedule 2, and PJM Manual 15, or confirm that their expiring Fuel Cost Policy remains compliant.

| Responsible PJM Department(s) Performance Compliance Department |   |                             | Email Distribution List<br>FuelCostPolicyAnalysis@pjm.com |         | <b>Driver/Requirement</b> Operating Agreement Schedule 2, Section 2   |  |
|---|---|-----------------------------|---|---------|---|--|
| Periodicity   | Periodic review currer                          | ntly occurs every           | three years   |         |   |  |
| Start Date:   | Jan.1 on year of expir<br>whenever new policy i |                             |   |         | 1 on year of expiration, or 30 business after new policy is submitted |  |
| •   |   | Required or<br>Required for | •   | ng a no | on-zero cost-based offer  |  |



Monitoring Analytics' Member Information Reporting Application (MIRA) tool

#### **Emissions Data Submittal**

#### Description

Market Sellers may elect, but are not required, to include emissions adders in their cost-based energy offer. Market Sellers must indicate, in their unit's Fuel Cost Policy, if they are including emissions adders in their cost offers. Emissions rates must be submitted to PJM, via COA, and be approved before they can be included in the Market Seller's cost-based offer.

| Responsible PJM Department(s) Performance Compliance Department                                    | Email Distribution List FuelCostPolicyAnalysis@pjm.com | <b>Driver/Requirement</b> Operating Agreement Schedule 2, Section 3         |
|--|--|---|
| Periodicity Annual   |  |   |
| Start Date: June 15 (Data may be   | submitted as early as Jan. 1)                          | End Date: Dec. 31   |
| System Used To Collect Data  EPA  Monitoring Analytics' MIRA tool  Cost Offer Assumptions (COA) mo | they use non-zero Emissio                              | specifies in their Fuel Cost Policy that<br>ins adders in their cost offers |

#### **Black Start Cost Submittal**

#### Description

On an annual basis, Black Start generators must submit data for their annual revenue calculation, which consists of fixed Black Start Service costs (capital), variable Black Start Service costs (VOM) and fuel storage costs related to providing Black Start Service.

| Responsible PJM Department(s) Performance Compliance Department                | Email Distribution List blackstart@pjm.com           | <b>Driver/Requirement</b> OATT Schedule 6A, Section 17 A |
|--|--|--|
| Periodicity Annual   |  |  |
| Start Date: May 3  | End Date: May 27                                     |  |
| System Used To Collect Data  • Monitoring Analytics' MIRA tool  • <u>eDART</u> | Required or Optional? Required for all Black Start U | Inits  |



#### Black Start Calculator Data Request/Validation

#### Description

PJM is obligated under NERC Standard EOP-005 to perform black start studies every five years. The study is typically aligned with PJM's RTO-Wide Black Start RFP process that occurs every five years. Generation Owners shall provide generator information for the study using PJM's eDART Black Start Calculator tool.

| Responsible PJM Department(s) Generation Department |                             | Email Distribution List generation@pjm.com   | <b>Driver/Requirement</b> Manual 14D, Generator Operational Requirements, Section 10 |  |
|---|-----------------------------|--|--|--|
| Periodicity   | Every five years or upon re | equest from PJM  |  |  |
| Start Date:   | Prior to RTO Wide RFP       | End Date: Three months after Start Date  |  |  |
| System Used To Collect Data  • eDART                |                             | Required or Optional?  Required for all generators requested to provide data via eDART's Black Start Calculator tool |  |  |

## **Optional Tasks**

#### Annual Grid Security Drill/GridEx

#### Description

Grid security drills test the reliability and resilience of PJM and member company procedures, practices, technology and logistical support to events that affect the bulk electric system.

| Responsible PJM Department(s)               | Driver/Requirement  |  |  |  |
|---|---|--|--|--|
| System Operator Training                    | <ul> <li>PJM Manual 40, Training and Certification Requirements,<br/>Section 3.2.2 Market Operation Center Generation Dispatchers<br/>Certification Requirements</li> </ul> |  |  |  |
| State and Member Training                   |   |  |  |  |
| Business Continuity Planning                | NERC Standard PER-005-2, Operations Personnel Training  |  |  |  |
| Email Distribution List bc_planning@pjm.com | NERC Standard EOP-011-1, Emergency Operations   |  |  |  |
| Periodicity Biannually                      |   |  |  |  |
| Start Date: During the month of November    | End Date: During the month of November  |  |  |  |
| System Used To Collect Data                 | Required or Optional?   |  |  |  |
| Participation forms                         | Optional  |  |  |  |



#### **Regulation Testing**

#### Description

If units elect to participate in the regulation market, they will need to pass a series of tests in order to qualify. All testing requirements are identified in PJM Manual 12, Balancing Operations, Section 4.5, as well as links that need to be created in Manual 12, Section 4.4. Other reasons that units may need to test are identified in the manual as well. This includes change of ownership and change to signal paths.

| Responsible PJM Department(s) Performance Compliance                                      | <b>Driver/Requirement</b> Manual 12, Balancing Operations, Section 4.4, 4.5 |  |  |
|---|---|--|--|
| Email Distribution List RegulationTesting@pjm.com   |   |  |  |
| Periodicity Upon request by Market Seller   |   |  |  |
| Start Date: N/A   | End Date: N/A   |  |  |
| System Used To Collect Data  Email (test scheduling and follow-up)  PI (for scoring test) | Required or Optional? Optional  |  |  |

#### RTO Wide and Incremental Black Start RFPs

#### Description

PJM issues an RTO-Wide Black Start RFP every five years to identify new or replacement Black Start to enhance overall restoration reliability and efficiency. PJM may issue Incremental Black Start RFPs due to unit retirements, Black Start Service terminations or critical loads additions/removals. PJM's Black Start RFP process is used to meet minimum Black Start requirements defined in PJM Manual 36 System Restoration, Attachment A.

| Responsible PJM Department(s) Generation  Email Distribution List blackstart@pjm.com     |  | •  | <ul><li>Driver/Requirement</li><li>PJM Manual 14D, Section 10 Black Start Generation Procurement</li></ul> |  |  |
|--|--|--|--|--|--|
|  |  | <ul> <li>PJM Manual 36<br/>Requirement</li> </ul>                        | PJM Manual 36, Attachment A, Minimum Critical Black Start<br>Requirement                                   |  |  |
| Periodicity  | dicity RTO Wide – Every five years, with awarded Black Start Resources entering service w of award; Incremental, as needed |  |  |  |  |
| Start Date:  |  | Wide RFP 2018 to have new sources available in 2020 ats every five years |  | Refer to PJM Manual 14-D, Generator<br>Operational Requirements, Section 10<br>for Black Start procurement timelines |  |
| System Used to Collect Data Email – Interested parties respond to RFP blackstart@pjm.com |  | FP via email to  | Required of Optional   | or Optional?   |  |



#### **Unit-Specific Parameter Adjustment**

Responsible PJM Department(s) Driver/Requirement

#### Description

Market Sellers that do not believe their individual resources can meet the unit-specific parameter limits determined by PJM due to actual operating constraints can request that PJM establish adjusted unit-specific parameter limits for those resources on their price-based Parameter Limited Schedule (PLS and cost-based schedules).

| Operations   |                  |   | PJM Open Access Transmission Tariff (OATT), Attachment K, Section 6.6 PJM Operating Agreement (OA) Schedule 1, Section 6.6 |         |                        |  |
|--|------------------|---|--|---------|------------------------|--|
| Email Distribution List unitspecificpls@pjm.com  |                  | <ul> <li>PJM Manual 11, Energy &amp; Ancillary Services Market Operations, Section<br/>2.3.4.2</li> </ul> |  |         |                        |  |
| Periodicity  | Annual           |   |  |         |                        |  |
| Annual<br>Review<br>Period:  | Mar. 1 – Apr. 15 |   | Annual<br>Deadline:  | Feb. 28 | Effective Date: June 1 |  |
| System Used To Collect Data Unit Specific Parameter Adjustment Process SharePoint site (PJM Connect) |                  | Required or Optional? Optional  |  |         |                        |  |

#### Period/Persistent Parameter Limits Exceptions

#### Description

If a generating unit is or will become unable to achieve the proxy or unit-specific values determined by the Office of the Interconnection due to actual operating constraints affecting the unit, the Capacity Market Seller of that unit may submit a written request for an exception to the application of those values. Period exception lasts at least 31 days and no more than one year. Persistent exception lasts for at least one year.

| Responsible PJM Department(s)  • Day-Ahead Market Operations Department  Email Distribution List  Parameters.Exceptions@pim.com |                                      | <b>Driver/Requirement</b> OATT Attachment K Section 6.6 (i), OA Schedule 1 Section 6.6 (i), and PJM Manual 11 Section 2.3.4.3 |  |  |  |
|---|--------------------------------------|---|--|--|--|
| Periodicity   | Annual. Request must be submitted by | 2/28 for next Delivery Year   |  |  |  |
| Annual<br>Review<br>Period  | Mar. 1 – Apr.15                      | Annual February 28 Effective: June 1  |  |  |  |
| System Used To Collect Data<br>Email  |                                      | Required or Optional? Optional  |  |  |  |



## **Temporary Parameter Limits Exceptions**

#### Description

If a generating unit is or will become unable to achieve the proxy or unit-specific values determined by the Office of the Interconnection due to actual operating constraints affecting the unit, the Capacity Market Seller of that unit may submit a written-request within Markets Gateway for an exception to the application of those values. Temporary exception lasts 30 days or less and can be submitted prior to and during the operating day.

| Responsible PJM Department(s)  Day-Ahead Market Operations Department | Driver/Requirement OATT Attachment K Section 6.6 (i), OA Schedule 1 Section 6.6 (i), and PJM Manual 11 Section 2.3.4.3 |  |  |
|---|--|--|--|
| Email Distribution List Parameters.Exceptions@pjm.com                 | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  |  |  |
| Periodicity Up to 30 days from requested start date                   |  |  |  |
| Start Date: As needed   | End Date: As needed  |  |  |
| System Used To Collect Data<br>Markets Gateway                        | Required or Optional? Optional   |  |  |



#### Fast-Start Capable Request

#### Description

Units must first be deemed Fast-Start (FS) capable in order to qualify for FS Pricing. A FS Resource is defined as having a Notification Time + Start-Up Time <= 1 hour and a Minimum Run Time <= 1 hour. There are Generator technology types that are FS capable by default including: All CTs, Hydro, Solar, Landfill, Diesels, Battery, Wind, and All Economic Load Response. Resources that are not predefined as FS capable and believe they meet the requirements to be a FS resource, can request to be designated as FS capable. If any resource that is designated as FS capable and cannot meet their bid in parameters, may lose its FS capable designation. To be reconsidered, the unit may submit supporting data during the annual review period. If a resource is designated as FS Capable, resource does not need to request to be FS Capable annually.

#### Responsible PJM Department(s)

#### Driver/Requirement

Generation, Day-Ahead Market Operations, & Real Time Market Operations

 PJM Manual 11, Energy & Ancillary Services Market Operations, Section 2.1.1 – 2.1.3

#### **Email Distribution List**

FastStartCapable@pjm.com

| Periodicity  | Annual             |                     |                            |                   |
|--|--------------------|---------------------|----------------------------|-------------------|
| Annual<br>Review<br>Period:                        | Apr. 16 – May 31   | Annual<br>Deadline: | Requests due by Apr.<br>15 | Effective: June 1 |
| System Us  | ed To Collect Data | Required o          | r Optional?                |                   |
| Excel spreadsheet sent to FastStartCapable@pim.com |                    | Optional            |                            |                   |



#### **Cold Weather Advisory Drill**

#### Description

The Cold Weather Advisory drill was added to the Winter Emergency Procedures drill script in 2023 to ensure it was included as a part of PJM's winter preparedness. This drill also helps the members review their data before we enter winter operations.

Within eDART, Generation Owners will need to update CWOL values. This applies to all resource types.

Responsible PJM Department(s)

Driver/Requirement

Dispatch, System Operator Training and Generation

PJM Winter Preparedness

**Email Distribution List** 

EPDrill@pjm.com

Periodicity Annual

Start Date: The

Monday prior to End Date: Emergency Procedure N/A

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System Used To Collect Data

Required or Optional?

eDART Optional

Commented [RL1]: I'm not sure what happens with cold weather advisory drill. Do we only do the CWOL update or are there other tasks? At a minimum we should add more context to whats expected of GOs from

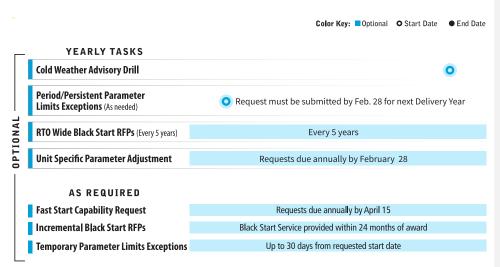
Updated August 2025



#### Attachment A - Task Summary Color Key: ■ Required Tasks ■ Required for Specific Gens. ■ Required if Invited ■ Optional • Start Date • End Date Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sept. Oct. Nov. Dec. April 1-30 (GO) Oct. 1-31 (GO) eDART Reactive Capability Review Semiannual May 1-31 (TO) 🔘 🛑 Nov. 1-30 (TO) O **Cold Weather Checklist Data Request** Nov. 1–Dec. 15 O Initial Request: Oct. 15 - Nov. 15 O **Cold Weather Operating** Limit (CWOL) Data Request Open Request: Dec. 1– March 31 **Resource Tracker Verification** \*Oct. 1–Nov. 1 🔘 🔵 \*Within 3 days of ops. or transfer ~ Oct. 1–Nov. 15 **Seasonal Fuel and Emissions Data Request Summer / Winter Net Capability** YEARLY TASKS June 1–Aug. 31 🔘 Dec. 1–Feb. 28/29 Verification (Semiannual) **Voltage Schedule Review** April 1-May 31 **Black Start Cost Submittal** O May 3-27 **Emissions Data Submittal** O Jan. 1 0 June 15-Dec. 31 (Typically June 15) Fuel Cost Policy Review Expiration year/new policy submitted; \*\*or 30 days after new policy Jan. 1-\*\*Nov. 1 Gen Model (MOD-032 for Generator Owners) May 1–June 15 O **VOM Review** (Typically June 15 or as needed) O Jan. 1 June 15-Dec. 31 Annual Grid Security Drill / GridEx During the month of Nov. **Restoration Drills** (Typically spring) Capacity Modification Transaction When permanent changes to the installed capacity value of a gen. unit is necessary ■ eDART GO Contact Data Request Within 3 days of new unit addition or transfer Periodic Data Requests Requested by PJM when needed Black Start Calculator Upon request from PJM **Black Start Testing** 1- to 13-month month test period and dependent on in-service date Optional for Noncritical Black Start Units NERC MOD-026/027 Data Submittals Within year of going in-service/making equipment changes Optional for gens not meeting criteria **Reactive Capability Testing** Minimum of 5 every year (See document for details) **Regulation Testing** Upon request by Market Seller



## **Attachment B – Optional Task Summary**



Updated August 2025



## **Revision History**

Revision 0 Effective October 31, 2021

Review / Revise By: December 1XX8, 2025

Document Created

Revision 1 Effective March 16, 2022

• Added additional guidance to NERC MOD-026/027 Data Submittals

Revision 2 Effective June 20, 2023

- Summer/Winter Net Capability Verification requirements updated for units with external commitments
- · Added new section under Optional Tasks for Fast Start Capability Request
- · Clarified timelines associated with Unit-Specific Parameter Adjustments
- Updated email addresses and contact throughout

Revision 3 Effective December 18, 2024

- Added task to provide data in support of Black Start RFP
- Removed the task covering Real Time Values no longer applicable
- Updated Temporary Parameter Limits Exceptions to align with current business rules in PJM manuals

Revision 4 Effective September 24, 2025

- Updated responsible PJM department for NERC MOD-026/027 Data Submittals
- Updated responsible PJM department for Gen Model (MOD-032 for Generator Owners)
- Updated the description of how the data for Gen Model (MOD-032 for Generator Owners) is to be used
- · Added new section for the Cold Weather Operating Limit (CWOL) Data Requests
- Added new section for the Cold Weather Advisory Drill
- Updated Attachment A and Attachment B to incorporate Cold Weather Operating Limit (CWOL) Data Requests and Cold Weather Advisory Drill