



Guideline: Generation Owner Periodic Tasks and Data Submittals

PJM Generation Department

September 24, 2025

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Introduction

~~In order to~~ 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)	Driver/Requirement
Resource Adequacy Planning	<ul style="list-style-type: none"> • PJM Manual 21, Rules and Procedures for Determination of Generating Capability
Email Distribution List	<ul style="list-style-type: none"> • PJM Manual 18, PJM Capacity Market
gadssupport@pjm.com	
Periodicity: Semiannual*	Summer: June 1 - Aug. 31 Winter: Dec. 1 - Feb. 28–29
System Used To Collect Data	Required or Optional?
eGADS	Required

* 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.

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 Start Units*: 1–3 months
- *Review, pass/fail determination and record keeping*: monthly

Start Date: Varies depending on in-service date

End Date: Varies depending on in-service date

System Used To Collect Data

[eDART](#) | Microsoft Excel | Microsoft Access

Required or Optional?

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.

Responsible PJM Department(s)

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 | Transmission Owners: May & November*

Start Date:

- April 1 & May 1
- Oct. 1 & Nov. 1

End Date:

- 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	Driver/Requirement <ul style="list-style-type: none">• 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 baseline point 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 <ul style="list-style-type: none">• NERC EOP – 011• NERC EOP – 012
Email Distribution List edartgosurvey@pjm.com	
Periodicity: Annual	<div><div><div>Start Date (baseline <u>initial</u> data request): <u>Early October</u> Oct. 15</div><div>Start Date (<u>winter</u>open data request): Dec. 1</div></div><div><div>End Date (initial<u>baseline</u> data request): <u>Mid-November</u> Nov. 15</div><div>End Date: (<u>open</u>winter data request): Mar. 31</div></div></div>

System Used To Collect Data eDART	Required or Optional? Required
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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) Generation	Email Distribution List edartgosurvey@pjm.com
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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
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System Used To Collect Data eDART	Required or Optional? Required
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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) Generation	Email Distribution List edartgosurvey@pjm.com
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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)

- Generation
- Member Relations

Email Distribution List

edartgosurvey@pjm.com

Driver/Requirement

PJM Manual M-14D, Generator Operational 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: [eDART](#)

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

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

Email Distribution List

NERC.Transmission.Planner@pjm.com

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 basis~~ annual 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 to 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 non-capacity generators with nameplate rating ≥ 20 MW

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

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.

Email Distribution List

ResourceTrackerSupport@pjm.com

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 inverter-based 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

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

Email Distribution List

ReactiveTesting@pjm.com
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

[eDART](#)

Required or Optional?

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

Driver/Requirement

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

Email Distribution List

RPM_Hotline@pjm.com

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

Start Date: N/A

End Date: N/A

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

Driver/Requirement

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

Email Distribution List

TrainingSupport@pjm.com

Periodicity Varies, at least once annually

Start Date: Varies, subject to scheduling constraints; 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 PJM Department(s) Performance Compliance Department	Email Distribution List FuelCostPolicyAnalysis@pjm.com	Driver/Requirement Operating Agreement Schedule 2 Section 4
Periodicity	Annual	
Start Date:	June 15 (as early as Jan. 1), or as needed	End 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 FuelCostPolicyAnalysis@pjm.com	Driver/Requirement Operating Agreement Schedule 2, Section 2
Periodicity	Periodic review currently occurs every three years	
Start Date:	Jan. 1 on year of expiration, or whenever new policy is submitted	End Date: Nov. 1 on year of expiration, or 30 business days after new policy is submitted
System Used To Collect Data	Required or Optional? Required for any unit submitting a non-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)	Email Distribution List	Driver/Requirement
Performance Compliance Department	FuelCostPolicyAnalysis@pjm.com	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	Required or Optional?	
<ul style="list-style-type: none"> EPA Monitoring Analytics' MIRA tool Cost Offer Assumptions (COA) module 	Required for any unit that specifies in their Fuel Cost Policy that they use non-zero Emissions 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)	Email Distribution List	Driver/Requirement
Performance Compliance Department	blackstart@pjm.com	OATT Schedule 6A, Section 17 A
Periodicity	Annual	
Start Date:	May 3	End Date: May 27
System Used To Collect Data	Required or Optional?	
<ul style="list-style-type: none"> Monitoring Analytics' MIRA tool eDART 	Required for all Black Start Units	

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	Driver/Requirement Manual 14D, Generator Operational Requirements, Section 10
Periodicity	Every five years or upon request 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) <ul style="list-style-type: none">• System Operator Training• State and Member Training• Business Continuity Planning	Driver/Requirement <ul style="list-style-type: none">• PJM Manual 40, Training and Certification Requirements, Section 3.2.2 Market Operation Center Generation Dispatchers Certification Requirements• NERC Standard PER-005-2, Operations Personnel Training• NERC Standard EOP-011-1, Emergency Operations
Email Distribution List bc_planning@pjm.com	
Periodicity Biannually	
Start Date: During the month of November	End Date: During the month of November
System Used To Collect Data Participation forms	Required or Optional? 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

Driver/Requirement

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

Driver/Requirement

- PJM Manual 14D, Section 10 Black Start Generation Procurement
- PJM Manual 36, Attachment A, Minimum Critical Black Start Requirement

Email Distribution List

blackstart@pjm.com

Periodicity RTO Wide – Every five years, with awarded Black Start Resources entering service within 24 months of award; Incremental, as needed

Start Date:

- Initiated RTO-Wide RFP 2018 to have new Black Start resources available in 2020
- Process repeats every five years

End Date: Refer to PJM Manual 14-D, Generator Operational Requirements, Section 10 for Black Start procurement timelines

System Used to Collect Data

Email – Interested parties respond to RFP via email to blackstart@pjm.com

Required or Optional?

Optional

Unit-Specific Parameter Adjustment

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).

Responsible PJM Department(s)

Generation & Day-Ahead Market Operations

Driver/Requirement

- PJM Open Access Transmission Tariff (OATT), Attachment K, Section 6.6
- PJM Operating Agreement (OA) Schedule 1, Section 6.6
- PJM Manual 11, Energy & Ancillary Services Market Operations, Section 2.3.4.2

Email Distribution List

unitspecificpls@pjm.com

Periodicity Annual

Annual Review Period:

Mar. 1 – Apr. 15

Annual 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

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 Annual. Request must be submitted by 2/28 for next Delivery Year

Annual Review Period

Mar. 1 – Apr. 15

Annual Deadline:

February 28

Effective: June 1

System Used To Collect Data

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

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 \leq 1 hour and a Minimum Run Time \leq 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)

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

Driver/Requirement

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

Email Distribution List

FastStartCapable@pjm.com

Periodicity Annual

Annual Review Period:

Apr. 16 – May 31

Annual Deadline:

Requests due by Apr. 15

Effective: June 1

System Used To Collect Data

Excel spreadsheet sent to FastStartCapable@pjm.com

Required or Optional?

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.

[Generations Owners are expected to perform a tabletop exercise for member actions in Manual 13 Section 3.3.1 which includes reviewing and if necessary, updating the Cold Weather Operating Limit \(CWOL\) winter data request in eDART. This applies to all resource types.](#)

Responsible PJM Department(s)	Driver/Requirement
Dispatch, System Operator Training and Generation	<ul style="list-style-type: none"> PJM Winter Preparedness

Email Distribution List

EPDrill@pjm.com

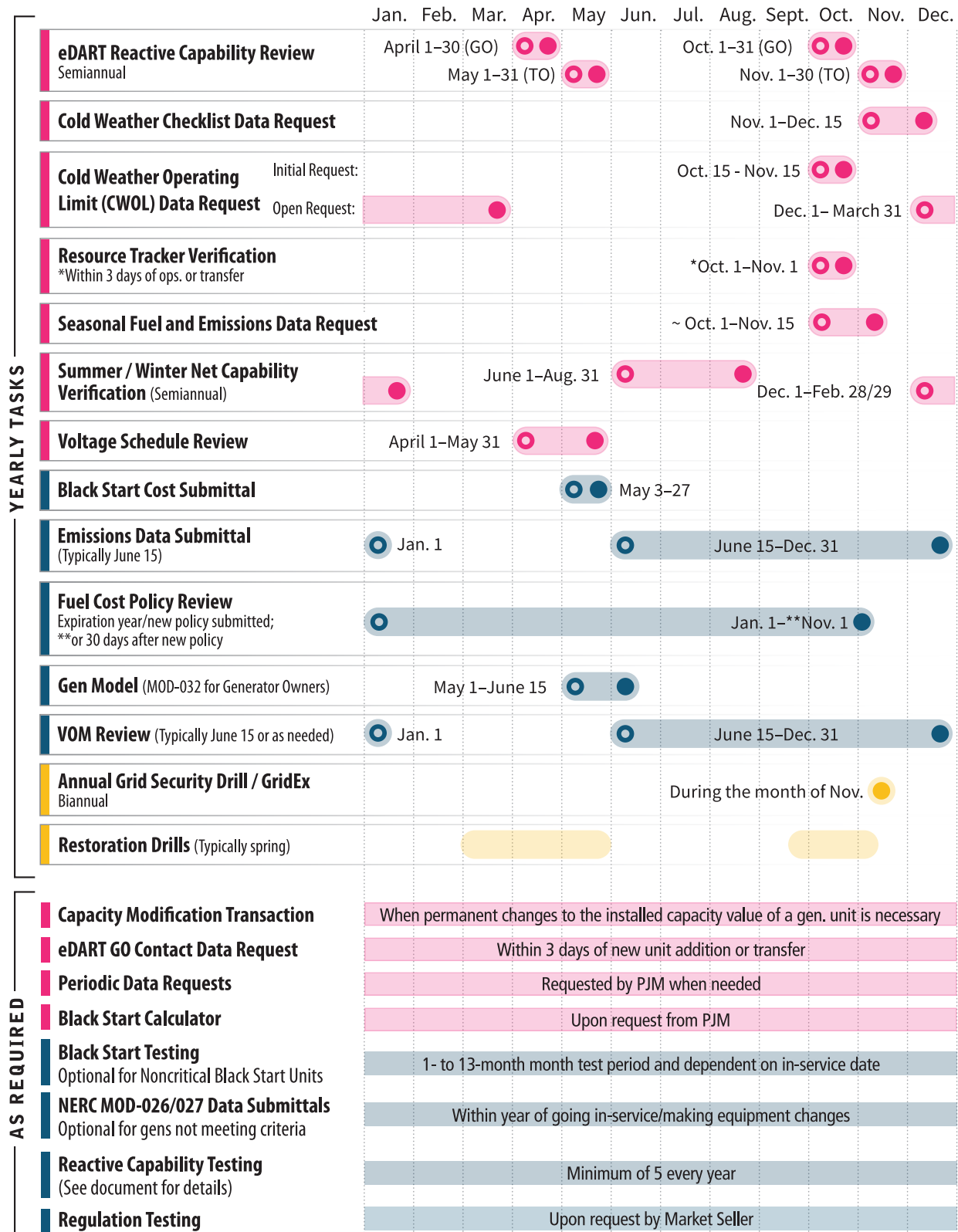
Periodicity	Annual
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Start Date:	End Date:
The Monday prior to Emergency Procedure Drill	N/A

System Used To Collect Data	Required or Optional?
eDART	Optional

Attachment A – Task Summary

Color Key: ■ Required Tasks ■ Required for Specific Gens. ■ Required if Invited ■ Optional ● Start Date ● End Date



Updated August 2025

Attachment B – Optional Task Summary

Color Key: ■ Optional ● Start Date ● End Date

YEARLY TASKS	
Cold Weather Advisory Drill	●
Period/Persistent Parameter Limits Exceptions (As needed)	● Request must be submitted by Feb. 28 for next Delivery Year
RTO Wide Black Start RFPs (Every 5 years)	Every 5 years
Unit Specific Parameter Adjustment	Requests due annually by February 28
AS REQUIRED	
Fast Start Capability Request	Requests due annually by April 15
Incremental Black Start RFPs	Black Start Service provided within 24 months of award
Temporary Parameter Limits Exceptions	Up to 30 days from requested start date

Updated August 2025

Revision History

Revision 0 Effective October 31, 2021

Review / Revise By: December 4XX8, 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