

Definitions

Agreements: An agreement is defined as a contract or other document delineating an arrangement that expresses assent by two or more parties to the same object. This arrangement determines a course of action to be followed by all parties involved in the situation. The key components of the agreement must identify the ability, intent, and authority of the parties. The requirement for these agreements can be satisfied in a variety of ways, including but not limited to: contracts, designation of authority documents, policies, procedures.

Balancing Authority Integrated Operations Plan (IOP) Elements: The NERC Functional Model includes the responsibility for development of a Balancing Authority Area Integrated Operations Plan (IOP). This plan is to be provided to the Reliability Authority for reliability evaluation and should incorporate the plans of Load Serving Entities and Generator Operators within the Balancing Authority area boundaries. The elements of the plan are defined as:

1. Forecast Load
 - a. An aggregate load forecast that includes all of the load obligations within the balancing area.
 - b. This forecast must include the loads of all load serving entities within the area and identify the extent, if any, that loads are available as balancing resources (interruptible loads).
 - c. The forecast time resolution should be at least hourly.
 - d. The forecast must be of sufficient duration to match both the Balancing Authority and Reliability Authority's operational planning needs.
2. Generation and Demand Balancing Interconnected Operation Service Requirements
 - a. The Balancing Authority's required Interconnected Operation Service must be identified. These requirements are based on the Balancing Authority's assessment of its needs, as it deems appropriate to meet NERC standards.
3. Planned Interchange
 - a. The Integrated Operations Plan shall include all Balancing Authority area interchange transactions that will be effective within the Integrated Operations Plan duration.
4. Generating Resources
 - a. The Integrated Operations Plan shall include planned and expected operation of all generation resources within the Balancing Authority area.
 - b. Availability and capability of generating resources
5. Time Period
 - a. Uniform time interval for all information

1400 Balancing Authority Certification

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1. Purpose: To ensure that each entity that wants to be recognized as a Balancing Authority has the capability of performing the responsibilities assigned to the Balancing Authority function.
2. Effective Date: This standard will become effective three months after the date the NERC Board of Trustees votes to adopt this standard.
3. Applicability: These requirements apply to each entity that wants to be recognized as a Balancing Authority for performing the responsibilities assigned to the Balancing Authority function as defined in the Functional Model.

In this standard, the terms Balancing Authority, Generator Operator, Generator Owner, Interchange Authority, Load-serving Entity, Reliability Authority, Planning Authority, Transmission Planner, Transmission Operator, and Transmission Owner refer to the entities performing these functions as defined in the Functional Model.

1401 Certification by Region

(a) Requirements

- (1) The entity applying for certification to operate as a Balancing Authority shall follow all steps in the Balancing Authority Certification Process assigned to the “Applicant”.
- (2) The Compliance Monitor identified, as the Lead Compliance Monitor shall follow all steps in the Balancing Authority Certification Process assigned to the “Lead Compliance Monitor.”

Balancing Authority Certification Process

- (i) Applicant Intending to Operate in a Single NERC Region:

An entity seeking certification as a Balancing Authority (the “Applicant”) shall initiate the certification process by submitting a Balancing Authority Certification Application to the Regional Manager of the NERC Region in which the Applicant plans to operate a Balancing Area. The Applicant shall send a copy of the request to the NERC Director-Compliance.

The Compliance Monitor for the Region in which the Applicant plans to operate shall conduct the formal review process and award certification.

Applicant Intending to Operate in Multiple NERC Regions.

An entity seeking certification as a Balancing Authority (the “Applicant”) in multiple NERC Regions shall initiate the certification process by submitting a Balancing Authority Certification Application to the Regional Manager of one of the Regions in which the Applicant plans to operate. The Applicant shall send a copy of its request to the Regional Manager of each Region in which the Applicant plans to operate. The Applicant shall also send a copy of the request to the NERC Director-Compliance.

The affected Regions shall identify one of the affected Compliance Monitors as the Lead Compliance Monitor, but all affected Compliance Monitors shall participate in the certification process. The Lead Compliance Monitor shall coordinate the formal review process and award certification in concurrence with all other affected Compliance Monitors.

- (ii) The Applicant and the Regional or Lead Compliance Monitor shall agree to a timeline, including specific milestones for the certification process. The NERC Balancing Authority Certification Process and certification recommendation shall be completed within nine months of the date that the initial request is received by a Regional Manager.
- (iii) The Compliance Monitor or Lead Compliance Monitor shall notify all appropriate parties and provide each with the necessary information regarding the Applicant’s request for certification, the certification process, and the duties expected from each entity. The Compliance Monitor or Lead Compliance Monitor shall provide all participants with a copy of expectations and standards regarding confidentiality and retention of all data reporting, completed questionnaires and forms, reports and recommendations associated with the documentation it provides and receives.

- (iv) The Applicant shall register in the NERC Master Registry. Registration stays on 'hold' until certification is granted or denied.
- (v) NERC/Regional Staff will begin the process of making any necessary modeling/software changes. The Applicant and Region will supply necessary information to NERC.
- (vi) The Compliance Monitor or Lead Compliance Monitor shall provide questionnaires and the certification package that will be used by all entities involved in the certification process to those entities that must complete these documents. These questionnaires and the certification package address the Applicant's capabilities and actions as they relate to established Balancing Authority functions and tasks. The Compliance Monitor shall distribute questionnaires and the certification package to the following entities:
 - Applicant (i.e. entity seeking Balancing Authority certification)
 - Applicant's Reliability Authority and Interchange Authority(ies)
 - Generators and Load Serving Entities within the Applicant's Balancing Area
 - Balancing Authorities adjacent to the Applicant

NOTE: Comments from entities failing to respond prior to the identified deadline will not be considered.

- (vii) The Compliance Monitor or Lead Compliance Monitor shall assemble a Certification Review Team charged with the responsibility of determining if the Applicant meets NERC's Balancing Authority Criteria. The Compliance Monitor or Lead Compliance Monitor and the Applicant shall agree on the Review Team members before the commencement of the review process. The Review Team members shall subject themselves to confidentiality agreements for any data or information made available to them through the certification review process.
- (viii) The Review Team shall consist of a minimum of three individuals. The selected individuals shall represent at least three of the categories listed below:
 - Interchange Authority
 - Balancing Authority
 - Reliability Authority
 - Transmission Operator
 - Generator
 - Load Serving Entity
 - Regional Staff member
 - Regional Compliance Committee member
 - Regional Operating Committee member
 - Representative from NERC Staff
 - Representative from another NERC Region
 - Representative from an RTO, when applicable

Review team members shall not be employees of or have direct financial interest in the Applicant or any of its affiliates.

Review processes that involve an entity that is performing a function across Regional boundaries shall have a review team that consists of at least one member from each of the affected Regions. Each individual Region, not the Lead Compliance Monitor, shall select its representative to the team. Review team members shall represent at least two of the remaining categories.

In the alternative, the Compliance Monitor may elect, with Applicant agreement, to engage a completely independent review team.

- (ix) The Review Team will report its initial findings to the Applicant and to the Region's(s') Compliance Monitor(s) based on the information obtained through the initial application and questionnaires. The review Team shall inform the applicant in advance of the on-site visit of any documentation that is necessary to support the questionnaire. In as much as the Applicant may delegate tasks, but retains responsibilities, the applicant shall identify to the review team prior to the on-site visit, any task that has been delegated to be performed by another entity.
- (x) The Review Team shall conduct at least one on-site visit to the Applicant's control center facility. During the visit, the Review Team will:
 - Review with the Applicant the data collected through the questionnaires
 - Interview the Applicant's operations and management personnel
 - Inspect the Applicant's facilities and equipment
 - Request a demonstration of all tools identified elsewhere in this standard
 - Review all necessary documents and data including all agreements, processes, and procedures identified elsewhere in this standard
 - Review system operator certification documents and projected work schedules
 - Review any additional documentation that is needed to support the completed questionnaire or inquiries arising during the site-visit
- (ix) The Review Team shall identify any deficiencies (to both the Applicant and to the Region's(s') Compliance Monitor) that must be resolved prior to the Review Team making its final recommendation. The Review Team shall review any follow-up work required by the Applicant until a certification recommendation is made.
- (xii) The Review Team shall formulate a certification recommendation based on:
 - Data collected and validated from the questionnaires
 - Data collected during demonstrations of tools and review of documents observed during on-site visit(s) to the Applicant's facility
 - Information, demonstrations and reviews provided as part of a follow-up to correct identified deficiencies

(xiii) The Review Team shall support its recommendation through the production of an evaluation review template and a formal report. All members of the review team shall have an equal voice in the certification recommendation.

(xiv) The Applicant Intending to Operate in a Single NERC Region.

The Review Team shall make a certification recommendation that is presented to the appropriate Regional committee(s). The Regional committee(s) shall approve or disapprove the certification.

The Applicant Intending to Operate in Multiple NERC Regions

The Review Team shall make a certification recommendation that is presented to the appropriate Regional Committee(s) of all affected Regions. All affected Regions shall approve or disapprove the certification.

The Lead Compliance Monitor shall verify that all Regions have approved certification prior to awarding certification.

(xv) The Compliance Monitor or Lead Compliance Monitor shall notify the Applicant of the certification decision. The Compliance Monitor or Lead Compliance Monitor (in consultation with the affected Regions' Compliance Monitor) shall award or deny the Applicant's certification as a Balancing Authority. As an alternative, the Compliance Monitor or Lead Compliance Monitor (in consultation with the affected Regions' Compliance Monitors) may grant 'pending certification' to the applicant. The pending certification shall not exceed 180 days from the date of the Pending Certification notification. Pending certification, does not grant the entity the authority to operate as a Balancing Authority. If the Applicant fails to meet the conditions set by the Compliance Monitor(s), within the granted timeframe, the Applicant's certification will be denied. If the Applicant meets the conditions set by the Compliance Monitor(s), within the granted timeframe, the Compliance Monitor or Lead Compliance Monitor (in consultation with the affected Regions' Compliance Monitors) shall respond to the Applicant's notification of completion of requirements within 30 days.

(xvi) After the Compliance Monitor or Lead Compliance Monitor has approved the Applicant as a Balancing Authority, the Compliance Monitor or Lead Compliance Monitor shall notify NERC Staff. NERC Staff shall notify all of the appropriate entities as to the date that the Applicant may begin its Balancing Authority operation. Balancing Authority operation shall not begin before the agreed upon date and must commence operation within 12 months of certification. Failure to begin operation within the 12-month period shall require the Applicant to re-apply for certification.

(xvii) If the Compliance Monitor or Lead Compliance Monitor denies certification, it shall provide the Applicant with a written report containing specific reasons for the denial. If the Applicant disagrees with the decision, the Applicant can initiate the Regional Alternate Dispute Resolution process within 60 days of the date of the written denial. If the Applicant fails to initiate the Alternate Dispute Resolution process within this 60-day time limit, the Applicant may re-apply for certification 90 days after the date of written denial.

De-certification Process

This section describes the process that will be used for the de-certification of a Balancing Authority when the entity does not wish to continue performing the Balancing Authority function and has arranged for a replacement entity to assume its Balancing Authority responsibilities.

- (i) The Balancing Authority requesting de-certification notifies the Region(s) it operates in that it wishes to be decertified and names the Balancing Authority(ies) that will be assuming its Balancing Authority responsibilities. If the Balancing Authority(ies) assuming the responsibilities is in a different Region, then a Lead Region Compliance Monitor will be designated and all Regions will be involved in the process.
- (ii) The Region or Lead Region Compliance Monitor contacts the Balancing Authority(ies) that is to assume the additional Balancing Authority responsibilities to begin the certification process.
- (iii) After the Region or Lead Region Compliance Monitor has certified the Balancing Authority(ies) assuming additional responsibilities, the Region or Lead Region Compliance Monitor will notify the Balancing Authority desiring de-certification and NERC staff of the date the Balancing Authority will cease operation. NERC will notify the appropriate entities of this date.

(b) Measures

None identified

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

None

(e) Levels of Noncompliance

None

(f) Sanctions

None

1402 Agreements

(a) Requirements

- (1) The Applicant shall have an agreement in place that defines the responsibilities and authority of that Applicant with respect to its Reliability Authority, Interchange Authorities, Transmission Operators, Transmission Owners, Transmission Service Providers, Generators, Load Serving Entities and adjacent Balancing Authorities.

(b) Measures

- (1) The Applicant shall have agreement(s) with each of the Load Serving Entities with which the Applicant intends to operate. The agreement(s) shall include the following:
 - (i) The Load Serving Entities' commitment to provide the Applicant with load forecasts
 - (ii) The Load Serving Entities' commitment to take action when directed by Applicant to ensure balance in real-time
 - (iii) The Applicant's commitment to implement those arranged for generator commitment and dispatch schedules within the Balancing Authority Area
 - (iv) The Applicant's commitment to coordinate its use of controllable loads with Load Serving Entities
- (2) The Applicant shall have agreement(s) with each of the Generator Operators in its Balancing Authority Area. The agreement(s) shall address the following:
 - (i) The Generator Operator's commitment to provide the Applicant with operational plans and commitments
 - (ii) The Generator Operator's commitment to provide the Applicant with operating information
 - (iii) The Generator Operator's commitment to take action when directed by the Applicant to ensure balance in real-time
 - (iv) The Generator Operator's commitment to implement re-dispatch and interchange schedules as directed by the Applicant
 - (v) The Applicant's commitment to implement those arranged-for Generator Operator commitments and dispatch schedules within the Balancing area
- (3) The Applicant shall have agreement(s) with the Reliability Authority with which the Applicant intends to operate. The agreement(s) shall include the Applicant's commitment to provide its Reliability Authority with the following:
 - (i) Identification of its Balancing Area's metered boundaries
 - (ii) Integrated operational plans
 - (iii) Balancing information for real-time monitoring
 - (iv) Generator commitment and dispatch schedules
 - (v) Real-time operational information for Reliability Authority monitoring
 - (vi) Compliance with Reliability Authority directives under both normal and emergency conditions
 - (vii) Notice of Interchange Schedule interruptions within its Balancing Area
 - (viii) Notice of the implementation of its own emergency procedures

- (4) The Applicant shall have agreement(s) with each of the Interchange Authorities with which the Applicant intends to operate. The agreement(s) shall include the following:
 - (i) The Interchange Authority's commitment to provide approved, valid, and balanced Interchange Schedules
 - (ii) The Applicant's commitment to provide confirmation of interchange schedules
 - (iii) The Applicant's commitment to provide confirmation of ramping capabilities
 - (iv) The Applicant's commitment to provide notice of Interchange Schedule interruptions within its Balancing area
 - (v) The Applicant's commitment to provide notice of Interchange Schedules for after the hour for 'checkout'
- (5) The Applicant shall have agreement(s) with each of its adjacent Balancing Authorities. The agreement(s) shall address the following:
 - (i) Each Balancing Authority's commitment to confirm Actual Interchange after the hour for 'checkout'
 - (ii) Each Balancing Authority's commitment to model pseudo-ties that exist in another Balancing Area
 - (iii) Each Balancing Authority's commitment to identify the location of its Balancing Area's metered boundaries
- (6) The Applicant shall have agreement(s) with each of the Transmission Operator(s) with which the Applicant intends to operate. The agreement(s) shall include the following:
 - (i) The Transmission Operator's commitment to reduce voltage and shed load if needed to ensure balance in real time
- (7) The Applicant shall have agreement(s) with each of the Transmission Owner(s) with which the Applicant intends to operate. The agreement(s) shall include the following:
 - (i) The Transmission Owner's commitment to provide interconnection boundary metering

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting to the existence of agreements.
- (2) The Applicant shall support the questionnaire during the on-site review by showing the required agreements to the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Review Team shall not recommend certification until the Applicant meets this requirement.

1403 Personnel Certification

(a) Requirements

- (1) The Applicant shall demonstrate that it has NERC-certified system operators to perform each of the real-time Balancing Authority responsibilities 24 hours a day, 7 days a week. Each of these system operators shall have a current certification credential in Balancing/Interchange, Balancing/Interchange and Transmission, Reliability or their successor system operator credentials identified for the balancing function.

Tasks considered real-time balancing authority responsibilities include:

- Directs resources (Generator Operators and Load-Serving Entities) to take action to ensure balance in real time.
 - Directs Transmission Operator to reduce voltage or shed load if needed to ensure balance within its Balancing Authority Area.
 - Receives loss allocation from Transmission Service Providers (for repayment with in-kind losses).
 - Provides real-time operational information for Reliability Authority monitoring.
 - Complies with reliability requirements specified by Reliability Authority.
 - Informs Reliability Authority and Interchange Authorities of Interchange Schedule interruptions (e.g., due to generation or load interruptions) within its Balancing Authority Area.
 - Directs Generator Operators to implement redispatch for congestion management as directed by the Reliability Authority.
 - Requests operating information from Generator Operators.
 - Verifies implementation of emergency procedures to Reliability Authority.
 - Coordinates use of controllable loads with Load Serving Entities (i.e., interruptible load that has been bid in as Interconnected Operations Services).
 - Implements emergency procedures as directed by the Reliability Authority.
- (2) The Applicant shall demonstrate that it has provided its operating personnel with training that addresses all of the procedures, processes, and tools associated with meeting the criteria of this standard.

(b) Measures

- (1) The Applicant shall have position description(s) that identify which position is responsible for performing each of the real-time Balancing Authority tasks identified in requirement 1.1
- (2) The Applicant shall have an organization chart identifying the personnel assigned to each position that is responsible for performing each of the real-time Balancing Authority tasks identified in requirement 1.1.
- (3) The Applicant shall have a projected schedule for a period of 13 weeks for the personnel identified to perform the real-time Balancing Authority tasks identified in requirement 1.1 that displays coverage 24 hour a day, 7 days a week.

- (4) The Applicant shall have a valid NERC issued certification number or certificate for each system operator identified on the shift schedule to perform any one of the real-time Balancing Authority tasks identified in requirement 1.1.
- (5) The Applicant shall have training records identifying when the training occurred, who attended the training, and the material that was covered to address the procedures, processes, and tools associated with meeting the criteria of this standard.

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting that it has NERC-certified system operators to perform the real-time Balancing Authority responsibilities 24 hours a day, 7 days a week.
- (2) The Applicant shall support the questionnaire on the on-site visit by showing the following documentation to the Review Team:
 - Position descriptions
 - Organization chart
 - Shift schedules
 - System Operator Certification numbers or certificates

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Review Team shall not recommend certification until the Applicant meets this requirement.

1404 Resource/Demand Balancing

(a) Requirements

- (1) The Applicant shall have procedures, processes, and tools to balance resources and demand within its Balancing Area in compliance to NERC Standards.

(b) Measures

- (1) The Applicant shall have procedure or process for developing a day-ahead integrated operational plan for its Balancing Authority Area.
- (2) The Applicant shall have procedures or processes to determine the requirements and amounts for, and the deployment of, generation and demand balance Interconnected Operation Services.
- (3) The Applicant shall have a procedure or process to implement the Integrated Operational Plan including modification to reflect changes.
- (4) The Applicant shall demonstrate that it can follow its procedure or process and use its tool for monitoring resource availabilities and capabilities in real-time.
- (5) The Applicant shall demonstrate its tools to calculate and monitor its Balancing Authority Area's Area Control Error.
- (6) The Applicant shall demonstrate its tools to monitor its metered boundaries in real-time.
- (7) The Applicant shall demonstrate its tools to monitor real-time status and output of resources used for Interconnected Operation Services.
- (8) The Applicant shall have procedures or processes and demonstrate its tools to direct actions of its resources.
- (9) The Applicant shall have procedures or processes and demonstrate its tools to obtain and implement interchange schedules from the Interchange Authority.
- (10) The Applicant shall have procedures, process, or tool to validate the accuracy of Area Control Error components and implement corrective actions.

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting that it has procedure and tools in place to ensure resources/demand balance in compliance to NERC Standards.
- (2) The Applicant shall support the questionnaire during the on-site review by showing its procedures and processes and by demonstrating its tools as requested by the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Applicant shall not be certified until it has met this requirement.

1405 Frequency Control

(a) Requirements

- (1) The Applicant shall have procedures and processes for contributing to frequency control.

(b) Measures

- (1) The Applicant shall have a procedure or process for determining the frequency response and frequency bias of its Balancing Authority Area.
- (2) The Applicant shall have a procedure or process for defining the requirements for resource governor response.

NOTE: Additional items related to frequency and interchange data are covered in the Area Control Error requirements identified in Section 4.1 of this standard.

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting that it has procedures and processes for frequency control.
- (2) The Applicant shall support the questionnaire during the on-site review by providing its procedures or processes as requested by the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Applicant shall not be certified until it has met this requirement.

1406 Interchange Approval and Implementation

(a) Requirements

- (1) The Applicant shall have procedures or processes and tools for interchange approval and implementation.

(b) Measures

- (1) The Applicant shall have a procedure or process and demonstrate the tool for the interchange approval process that includes the determination that the resource ramp capability meets the projected interchange ramp.
- (2) The Applicant shall have a procedure or process and demonstrate the tool for implementing interchange.

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting it has procedures, processes, and tools for interchange approval and implementation.
- (2) The Applicant shall support the questionnaire during the on-site review by providing its procedures or processes and by demonstrating its tools as requested by the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Applicant shall not be certified until it has met this requirement.

1407 Information Dissemination to Reliability Authority

(a) Requirements

- (1) The Applicant shall provide data to its Reliability Authority in accordance with the Reliability Authority's specifications.

(b) Measures

- (1) The Applicant shall have a procedure or process and demonstrate its tool to provide its Reliability Authority with the Interconnected Operation Plan in accordance with the Reliability Authority specifications.
- (2) The Applicant shall have a procedure or process and demonstrate its tool to provide its Reliability Authority with updates to the Interconnected Operation Plan in accordance with the Reliability Authority specifications.
- (3) The Applicant shall have a procedure or process and demonstrate its tool to provide its Reliability Authority with the real-time operational information and data in accordance with the Reliability Authority specifications.
- (4) The Applicant shall have a procedure or process and demonstrate its tool to provide its Reliability Authority with the interchange schedule interruptions in accordance with the Reliability Authority specifications.

(c) Regional Differences

None

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting that it has procedures, processes and tools to provide the defined data to its Reliability Authority in accordance with the Reliability Authority's specifications.
- (2) The Applicant shall support the questionnaire during the on-site review by showing its procedures and processes and demonstrating its tools as requested by the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Applicant shall not be certified until it has met this requirement.

1408 Resources and Demand Data Acquisition

(a) Requirements

- (1) The Applicant shall have a data acquisition process to ensure its compliance to NERC Standards.

(b) Measures

- (1) The Applicant shall demonstrate that it can follow its process or procedure and use its data acquisition system to collect the following for data acquisition data from Load Serving Entity(ies) within the its Balancing Authority Area to ensure resources/demand balance in compliance to NERC Standards.
 - (i) Load Serving Entity load forecast
 - (ii) Load Serving Entity controllable load, if applicable
 - (iii) Load Serving Entity dispatch plan, if applicable
- (2) The Applicant shall demonstrate that it can follow its process or procedure and use its data acquisition system to collect the following data from Generator Operator(s) within its Balancing Authority Area:
 - (i) Generator operational plans and commitments
 - (ii) Generator maintenance plans
 - (iii) Real-time generator operational information
 - (iv) Interconnected Operations Services
- (3) The Applicant shall demonstrate that it can follow its process or procedure and use its data acquisition system to collect the following information from its Reliability Authority
 - (i) Dispatch adjustments for congestion management
 - (ii) Emergency procedures
 - (iii) Assignment of designated Interconnected Operation Services, if applicable
 - (iv) Reliability Analyses
 - (v) Load Shedding
 - (vi) Reliability alerts
- (4) The Applicant shall demonstrate that it can follow its process or procedure and use its data acquisition system to collect the following information from Interchange Authority(ies)
 - (i) Interchange schedule requests
 - (ii) Approved Interchange schedules
- (5) The Applicant shall demonstrate that it can follow its process or procedure and use its data acquisition system to collect data from each Transmission Service Provider within its Balancing Authority Area
 - (i) Loss allocation

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting that it has process or procedures in place for data acquisition to ensure resources/demand balance in compliance to NERC Standards.
- (2) The Applicant shall support the questionnaire during the on-site review by providing its procedures and processes and by demonstrating its tools as requested by the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Applicant shall not be certified until it has met this requirement.

1409 Interconnected Operating Services Data Acquisition and Analysis

(a) Requirements

- (1) The Applicant shall determine the need for Interconnection Operation Services.
- (2) The Applicant shall deploy Interconnection Operation Services, including regulation, load following, frequency response, and contingency reserves.

(b) Measures

- (1) The Applicant shall demonstrate that it can follow its process or procedure, and use its data acquisition system to collect the following information relative to Interconnected Operations Services for Regulation, Load Following, Frequency Response, and Contingency Reserves.

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting that it has processes, procedures, and tools to collect data related to regulation, load-following, frequency response, and contingency reserves.
- (2) The Applicant shall support the questionnaire during the on-site review by providing its procedures or processes and by demonstrating its tools as requested by the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Applicant shall not be certified until it has met this requirement.

1410 Reporting Requirements of Standards

(a) Requirements

- (1) The Applicant shall have procedures, processes or tools for calculating, reporting, and archiving data necessary to support Balancing Authority reporting requirements of NERC standards.

(b) Measures

- (1) The Applicant shall have a process or procedure and tools to calculate and report in accordance with NERC Standards applicable to the Balancing Authority function.
- (2) The Applicant shall have a procedure, process and tool for data retention that supports the reporting requirements of NERC standards.

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting that it has process, procedure, or tools for calculating, reporting, and data retention to support Balancing Authority reporting criteria.
- (2) The Applicant shall support the questionnaire during the on-site review by providing its processes or procedures and demonstration of tools as requested by the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Applicant shall not be certified until it has met this requirement.

1411 Emergency Operations

(a) Requirements

- (1) The Applicant shall have procedures or processes that define its responsibilities, authority, and actions taken in responding, communicating status, and coordinating with its Reliability Authority, Interchange Authority(ies), Generator Operator(s), Transmission Operator(s), Load Serving Entity(ies) and Adjacent Balancing Authority(ies), under anticipated or actual emergency conditions.

(b) Measures

- (1) The Applicant shall have procedures or processes that define its responsibilities, authority, and actions in responding, communicating status, and coordinating with its Reliability Authority, Interchange Authority(ies), Generator Operator(s), Transmission Operator(s), Load Serving Entity(ies) and Adjacent Balancing Authority(ies), under the following anticipated or actual emergency conditions:
 - (i) When the Balancing Authority is unable to meet its resource or load requirements
 - (ii) When the Balancing Authority is unable to meet its Interconnected Operation Services requirements
 - (iii) When the Balancing Authority has experienced an actual or suspected act of sabotage that affects a physical or cyber asset
 - (iv) When the Balancing Authority has been directed by its Reliability Authority to take actions to maintain the reliability of the interconnection
- (2) The Applicant shall have procedures or processes that define its responsibilities, authority, and actions in responding, communicating status, and coordinating with its Reliability Authority, Interchange Authority(ies), Generator Operator(s), Transmission Operator(s), Load Serving Entity(ies) and Adjacent Balancing Authority(ies), following a partial or total system shutdown.

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting that it has procedures or processes that define its responsibilities, authority, and actions taken in responding, communicating status, and coordinating with its Reliability Authority, Interchange Authority(ies), Generator Operator(s), Transmission Operator(s), Load Serving Entity(ies) and Adjacent Balancing Authority(ies), under anticipated or actual emergency conditions.
- (2) The Applicant shall support the questionnaire during the on-site review by providing its procedures or processes as requested by the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Applicant shall not be certified until it has met this requirement.

1412 Emergency Operations — Loss of Facilities

(a) Requirements

- (1) The Applicant shall have procedures, processes, or facilities such that it can continue to maintain resource-demand balance in accordance with NERC standards for its Balancing Authority Area. The Applicant shall identify how it can continue to meet NERC standards under each of the following conditions:
 - (i) Evacuation of Control Center Building
 - (ii) Loss of Communications
 - (iii) Loss of Energy/Generation Management System critical functionality
 - (iv) Loss of critical Supervisory Control and Data Acquisition system data
 - (v) Loss of Control Center support functions, i.e. air conditioning, power, water

(b) Measures

- (1) The Applicant shall have procedures or processes and demonstrate its tool(s) to maintain resource-demand balance within its Balancing Area for the Evacuation of their Control Center that addresses:
 - (i) Developing a day-ahead integrated operational plan for its Balancing Authority Area
 - (ii) Determining the requirements and amounts for, and the deployment of, generation and demand balance Interconnected Operation Services
 - (iii) Implementing the Integrated Operational Plan including modification to reflect changes
 - (iv) Monitoring resource availabilities and capabilities in real-time
 - (v) Calculating and monitoring its Balancing Authority Area's Area Control Error
 - (vi) Monitoring its metered boundaries in real-time
 - (vii) Monitoring real-time status and output of resources used for Interconnected Operation Services
 - (viii) Directing actions of its resources
 - (ix) Obtaining and implementing interchange schedules from the Interchange Authority
 - (x) Validating the accuracy of Area Control Error components and implement corrective actions
 - (xi) The interchange approval process that includes the determination that the resource ramp capability meets the projected interchange ramp.
 - (xii) Implementing interchange
 - (xiii) Providing its Reliability Authority with the Integrated Operational Plan in accordance with the Reliability Authority specifications
 - (xiv) Providing its Reliability Authority with updates to the Integrated Operational Plan in accordance with the Reliability Authority specifications

- (xv) Providing its Reliability Authority with the real-time operational information and data in accordance with the Reliability Authority specifications
 - (xvi) Providing its Reliability Authority with the interchange schedule interruptions in accordance with the Reliability Authority specifications
 - (xvii) Calculating and reporting in accordance with NERC Standards applicable to the Balancing Authority function
 - (xviii) Data retention that supports the reporting requirements of NERC standards
 - (xix) When the Balancing Authority has experienced an actual or suspected act of sabotage that affects a physical or cyber asset
 - (xx) When the Balancing Authority has been directed by its Reliability Authority to take actions to maintain the reliability of the interconnection
 - (xxi) Its responsibilities, authority, and actions in responding, communicating status, and coordinating with its Reliability Authority, Interchange Authority(ies), Generator Operator(s), Transmission Operator(s), Load Serving Entity(ies) and Adjacent Balancing Authority(ies), following a partial or total system shutdown
- (2) The Applicant shall have procedures or processes and demonstrate its tool(s) to maintain resource-demand balance within its Balancing Area for the Loss of Communications that addresses:
- (i) Developing a day-ahead integrated operational plan for its Balancing Authority Area
 - (ii) Determining the requirements and amounts for, and the deployment of, generation and demand balance Interconnected Operation Services
 - (iii) Implementing the Integrated Operational Plan including modification to reflect changes
 - (iv) Monitoring resource availabilities and capabilities in real-time
 - (v) Calculating and monitoring its Balancing Authority Area's Area Control Error
 - (vi) Monitoring its metered boundaries in real-time
 - (vii) Monitoring real-time status and output of resources used for Interconnected Operation Services
 - (viii) Directing actions of its resources
 - (ix) Obtaining and implementing interchange schedules from the Interchange Authority
 - (x) Validating the accuracy of Area Control Error components and implement corrective actions
 - (xi) The interchange approval process that includes the determination that the resource ramp capability meets the projected interchange ramp
 - (xii) Implementing interchange

- (xiii) Providing its Reliability Authority with the Integrated Operational Plan in accordance with the Reliability Authority specifications
 - (xiv) Providing its Reliability Authority with updates to the Integrated Operational Plan in accordance with the Reliability Authority specifications
 - (xv) Providing its Reliability Authority with the real-time operational information and data in accordance with the Reliability Authority specifications
 - (xvi) Providing its Reliability Authority with the interchange schedule interruptions in accordance with the Reliability Authority specifications
 - (xvii) Calculating and reporting in accordance with NERC Standards applicable to the Balancing Authority function
 - (xviii) Data retention that supports the reporting requirements of NERC standards
 - (xix) When the Balancing Authority has experienced an actual or suspected act of sabotage that affects a physical or cyber asset
 - (xx) When the Balancing Authority has been directed by its Reliability Authority to take actions to maintain the reliability of the interconnection
 - (xxi) Its responsibilities, authority, and actions in responding, communicating status, and coordinating with its Reliability Authority, Interchange Authority(ies), Generator Operator(s), Transmission Operator(s), Load Serving Entity(ies) and Adjacent Balancing Authority(ies), following a partial or total system shutdown
- (3) The Applicant shall have procedures or processes and demonstrate its tool(s) to maintain resource-demand balance within its Balancing Area for the Loss of Energy/Generation Management System critical functionality that addresses:
- (i) Determining the requirements and amounts for, and the deployment of, generation and demand balance Interconnected Operation Services
 - (ii) Monitoring resource availabilities and capabilities in real-time
 - (iii) Calculating and monitoring its Balancing Authority Area's Area Control Error
 - (iv) Monitoring its metered boundaries in real-time
 - (v) Monitoring real-time status and output of resources used for Interconnected Operation Services
 - (vi) Directing actions of its resources
 - (vii) Obtaining and implementing interchange schedules from the Interchange Authority
 - (viii) Validating the accuracy of Area Control Error components and implement corrective actions
 - (ix) The interchange approval process that includes the determination that the resource ramp capability meets the projected interchange ramp.
 - (x) Implementing interchange
 - (xi) Providing its Reliability Authority with the Integrated Operational Plan in accordance with the Reliability Authority specifications

- (xii) Providing its Reliability Authority with updates to the Integrated Operational Plan in accordance with the Reliability Authority specifications
 - (xiii) Providing its Reliability Authority with the real-time operational information and data in accordance with the Reliability Authority specifications
 - (xiv) Calculating and reporting in accordance with NERC Standards applicable to the Balancing Authority function
 - (xv) Data retention that supports the reporting requirements of NERC standards.
 - (xvi) When the Balancing Authority has been directed by its Reliability Authority to take actions to maintain the reliability of the interconnection
 - (xvii) Its responsibilities, authority, and actions in responding, communicating status, and coordinating with its Reliability Authority, Interchange Authority(ies), Generator Operator(s), Transmission Operator(s), Load Serving Entity(ies) and Adjacent Balancing Authority(ies), following a partial or total system shutdown
- (4) The Applicant shall have procedures or processes and demonstrate its tool(s) to maintain resource-demand balance within its Balancing Area for the Loss of critical Supervisory Control and Data Acquisition system data that addresses:
- (i) Developing a day-ahead Integrated Operational Plan for its Balancing Authority Area
 - (ii) Determining the requirements and amounts for, and the deployment of, generation and demand balance Interconnected Operation Services
 - (iii) Implementing the Integrated Operational Plan including modification to reflect changes
 - (iv) Monitoring resource availabilities and capabilities in real-time
 - (v) Calculating and monitoring its Balancing Authority Area's Area Control Error
 - (vi) Monitoring its metered boundaries in real-time
 - (vii) Monitoring real-time status and output of resources used for Interconnected Operation Services
 - (viii) Directing actions of its resources
 - (ix) Obtaining and implementing interchange schedules from the Interchange Authority
 - (x) Validating the accuracy of Area Control Error components and implement corrective actions
 - (xi) The interchange approval process that includes the determination that the resource ramp capability meets the projected interchange ramp
 - (xii) Implementing interchange
 - (xiii) Providing its Reliability Authority with the Integrated Operational Plan in accordance with the Reliability Authority specifications
 - (xiv) Providing its Reliability Authority with updates to the Integrated Operational Plan in accordance with the Reliability Authority specifications

- (xv) Providing its Reliability Authority with the real-time operational information and data in accordance with the Reliability Authority specifications
 - (xvi) Calculating and reporting in accordance with NERC Standards applicable to the Balancing Authority function
 - (xvii) When the Balancing Authority has been directed by its Reliability Authority to take actions to maintain the reliability of the interconnection
 - (xviii) Its responsibilities, authority, and actions in responding, communicating status, and coordinating with its Reliability Authority, Interchange Authority(ies), Generator Operator(s), Transmission Operator(s), Load Serving Entity(ies) and Adjacent Balancing Authority(ies), following a partial or total system shutdown
- (5) The Applicant shall have procedures or processes and demonstrate its tool(s) to maintain resource-demand balance within its Balancing Area for the Loss of Control Center support functions, i.e. air conditioning, power, water that addresses:
- (i) Determining the requirements and amounts for, and the deployment of, generation and demand balance Interconnected Operation Services
 - (ii) Monitoring resource availabilities and capabilities in real-time
 - (iii) Calculating and monitoring its Balancing Authority Area's Area Control Error
 - (iv) Monitoring its metered boundaries in real-time
 - (v) Monitoring real-time status and output of resources used for Interconnected Operation Services
 - (vi) Directing actions of its resources
 - (vii) Validating the accuracy of Area Control Error components and implement corrective actions
 - (viii) The interchange approval process that includes the determination that the resource ramp capability meets the projected interchange ramp
 - (ix) Implementing interchange
 - (x) Providing its Reliability Authority with the Integrated Operational Plan in accordance with the Reliability Authority specifications
 - (xi) Providing its Reliability Authority with updates to the Integrated Operational Plan in accordance with the Reliability Authority specifications
 - (xii) Providing its Reliability Authority with the real-time operational information and data in accordance with the Reliability Authority specifications
 - (xiii) Providing its Reliability Authority with the interchange schedule interruptions in accordance with the Reliability Authority specifications
 - (xiv) Calculating and reporting in accordance with NERC Standards applicable to the Balancing Authority function
 - (xv) Data retention that supports the reporting requirements of NERC standards

- (xvi) When the Balancing Authority has experienced an actual or suspected act of sabotage that affects a physical or cyber asset
- (xvii) When the Balancing Authority has been directed by its Reliability Authority to take actions to maintain the reliability of the interconnection
- (xviii) Its responsibilities, authority, and actions in responding, communicating status, and coordinating with its Reliability Authority, Interchange Authority(ies), Generator Operator(s), Transmission Operator(s), Load Serving Entity(ies) and Adjacent Balancing Authority(ies), following a partial or total system shutdown

(c) Regional Differences

None identified

(d) Compliance Monitoring Process

- (1) The Applicant shall demonstrate compliance through completion of a Balancing Authority certification questionnaire attesting that it has procedures and tools that demonstrates the ability (one level of redundancy for functionality) to continue operations of facilities associated with reliability. The procedures to continue operations shall consider functions performed at the primary Control Center that maintains resource-demand balance within the Balancing Authority Area.
- (2) The Applicant shall support the questionnaire during the on-site review by providing its procedures, processes, or plans and by demonstrating use of its tools as requested by the Certification Review Team.

(e) Levels of Noncompliance

- (1) The Applicant shall meet all measures of this requirement as a criterion for certification to operate as a Balancing Authority.

(f) Sanctions

- (1) The Applicant shall not be certified until it has met this requirement.