



NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Energy Assurance

BAL-007-1 and TOP-003-7

NERC Project 2022-03

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RELIABILITY | RESILIENCE | SECURITY





- **NERC Antitrust Guidelines**

- It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

- **Notice of Open Meeting**

- Participants are reminded that this webinar is public. The access number was widely distributed. Speakers on the call should keep in mind that the listening audience may include members of the press and representatives of various governmental authorities, in addition to the expected participation by industry stakeholders.



- Background
- Risks, Benefits, Actions of Energy Assurance
- Updated/New Proposed Definitions
- BAL-007-1 Introduction
- BAL-007-1 Requirements R1 through R6
- TOP-003-7
- Implementation Plan
- Future Timeline

- ERATF was formed in March 2021
 - Evaluated existing practices and NERC Standards
 - Convened Energy Analysis Workshop in February 2022
 - SARs for Energy Assessments with Energy-Constrained Resources submitted in June, 2022
- SARs were approved by Standards Committee in January 2023 with requirements for:
 - Performance of energy reliability assessments
 - Coordination between areas
 - Comparison of results to criteria and the implementation of actions
- Initial draft of TOP-0XX was posted for informal comments in September 2023
- Draft 1 of BAL-007-1 was posted for a formal comment and ballot period in January 2024
- Draft 2 of BAL-007-1 and initial draft of BAL-008-1 posted for a formal comment and ballot period in May 2024
- BAL-007-1 (draft 3) and TOP-003-7 (draft 1) underwent significant stakeholder outreach prior to formal comment and ballot

- Risks associated with variable energy resources include
 - Unassured operation when needed
 - Unanticipated fuel constraints
- Interregional energy issues and tie benefits
 - Likely will require some coordination between areas
 - Wider area analyses may be required
- Considerations for mitigating those risks include
 - Communication – Assistance may be available
 - Fuel replenishment – May require logistical preparation in some cases
 - Maintenance rescheduling
- The benefits of performing ERAs include
 - Foresight into future conditions
 - Potential to reduce actions needed in real-time or near real-time

Term(s):

Energy Reliability Assessment (ERA) – ~~Evaluation~~Assessment of the resources necessary to reliably supply the Electrical Energy required to serve Demand and to provide Operating Reserves for the Bulk Power System throughout the associated ~~evaluation~~assessment period.

Near-Term Energy Reliability Assessment – An Energy Reliability Assessment with an assessment period that begins no later than two days after the operating day and has a minimum duration of five days and a maximum duration of six weeks.

A. Introduction

1. **Title:** Near-term Energy Reliability Assessments__
2. **Number:** BAL-007-1
3. **Purpose:** To ~~the risks associated with~~ assess, report, and plan to address forecasted Energy Emergencies in the near-term time horizon.
~~time horizon and take appropriate actions to address identified risk. As the Bulk Power System becomes more reliant upon energy-constrained and variable resources, traditional capacity-based planning methods and strategies might not identify energy-related risks to reliable System operation.~~
4. **Applicability:**
 - 4.1. **Functional Entities:**
 - 4.1.1. Balancing Authority
 - ~~4.1.2. Reliability Coordinator~~
5. **Effective Date:** See Implementation Plan for BAL-007-1.

- R1.** Each Balancing Authority shall, individually or jointly with other Balancing Authorities, document a process for conducting Near-Term Energy Reliability Assessments (ERA).
[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]
- 1.1.** The Near-Term ERA process shall account for:
- 1.1.1.** Forecasted or assumed Demand profiles;
 - 1.1.2.** Resource capabilities and operational limitations, including fuel supply;
 - 1.1.3.** Energy transfers with other Balancing Authorities; and
 - 1.1.4.** Known Bulk Electric System (BES) Transmission constraints that limit the ability of generation to deliver their output to Load.
- 1.2.** The Near-Term ERA process shall specify the duration of the Balancing Authority's Near-Term ERAs.

- 1.3.** The Near-Term ERA process shall specify the frequency at which the Balancing Authority will conduct Near-Term ERAs, subject to the following:
- 1.3.1.** Each Balancing Authority will conduct Near-Term ERAs for all time periods unless the Balancing Authority demonstrates, via a documented methodology, that a Near-Term ERA is not necessary for a specified time period(s) because there is a low risk of an Energy Emergency occurring during that specified time period(s).
 - 1.3.2.** The documented methodology for identifying time periods for which the Balancing Authority will not conduct a Near-Term ERA must (i) define the criteria used to determine when there is a low risk of an Energy Emergency occurring, and (ii) account for the items listed in 1.1.1 – 1.1.4 and other conditions associated with Energy Emergencies.

- R2.** Each Balancing Authority shall, individually or jointly with other Balancing Authorities, document a set of Scenarios, or a method for developing Scenarios, for use in performing Near-Term ERAs. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*
- 2.1.** The set of Scenarios must include (i) a base Scenario with expected system conditions, and (ii) other Scenarios that stress the system due to the following conditions, as applicable to the Balancing Authority's system:
- 2.1.1.** Higher than forecasted or assumed Demand profiles;
 - 2.1.2.** The effects of an energy supply contingency;
 - 2.1.3.** The effects of a fuel supply contingency; and
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- 2.1.4.** Other stressed conditions that have a historical precedent of occurring, as defined by the Balancing Authority, based on the best information available at the time of Scenario development.

- R3.** Each Balancing Authority shall, individually or jointly with other Balancing Authorities, document one or more Operating Plan(s) to implement in response to forecasted Energy Emergencies, including provisions for notification to their Reliability Coordinator of the forecasted Energy Emergency and the Operating Plan(s). *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*
- R4.** Each Balancing Authority shall, individually or jointly with other Balancing Authorities, perform Near-Term ERAs according to the process documented in Requirement R1 using the Scenarios or methods documented in Requirement R2. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*

- R5.** Each Balancing Authority shall, individually or jointly with other Balancing Authorities, implement its Operating Plan(s), as documented in Requirement R3, when Near-Term ERAs identify any of the following forecasted Energy Emergencies: *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*
- Forecasted EEA2 circumstances as defined in EOP-011 Attachment 1 Section B; or
 - Forecasted EEA3 circumstances as defined in EOP-011 Attachment 1 Section B.
- R6.** Each Balancing Authority shall, individually or jointly with other Balancing Authorities, review, update, as necessary, and provide to the applicable Reliability Coordinator its Near-term ERA process, Scenarios or methods, and Operating Plan(s), documented under Requirements R1 through R3, at least once every 24 calendar months. *[Violation Risk Factor: Low] [Time Horizon: Operations Planning]*



- Updated R2 and R4 to include Near-Term Energy Reliability Assessments definition.

R2. Each Balancing Authority shall maintain documented specification(s) for the data and information necessary for it to perform its analysis functions, ~~and~~ Real-time monitoring, and Near-Term Energy Reliability Assessments. The data specification shall include, but not be limited to: *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

2.1. A list of data and information needed by the Balancing Authority to support its analysis functions and Real-time monitoring, and Near-Term Energy Reliability Assessments, including non-Bulk Electric System data and information, and external network data and information, as deemed necessary by the Balancing Authority, and identification of the entity responsible for responding to the specification.

R4. Each Balancing Authority shall distribute its data and information specification(s) to entities that have data and information required by the Balancing Authority's analysis functions, ~~and~~ Real-time monitoring, and Near-Term Energy Reliability Assessments. *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

- **BAL-007-1 and Definitions**
 - Effective on the first day of the first calendar quarter that is 24 months after the effective date of the applicable governmental authority's order approving the standard, or as otherwise provided for by the applicable governmental authority.
- **TOP-003-7**
 - Effective on the first day of the first calendar quarter that is 18 months after the effective date of the applicable governmental authority's order approving the standard, or as otherwise provided for by the applicable governmental authority.

- BAL-007-1 (draft 3) and TOP-003-7 (draft 1)
 - September 19 – November 4, 2024
- Final Ballot
 - November 25 – December 4, 2024
- NERC Board Adoption
 - December 11, 2024



Questions and Answers