

Adequate Level of Reliability Definition and Technical Report

Unofficial Comment Form

Please **DO NOT** use this form for submitting comments. Please use the [electronic form](#) to submit comments on the proposed definition and technical report. The electronic comment form must be completed by 8 p.m. ET September 13, 2012.

If you have questions please contact Mallory Huggins at mallory.huggins@nerc.net or by telephone at 202-644-8062. All project-related documents are available on the [ALRTF project page](#).

Background Information

With this posting, the Adequate Level of Reliability Task Force is soliciting comments on the proposed revision to the definition of Adequate Level of Reliability and on a technical report supporting the definition.

The Adequate Level of Reliability Task Force (ALRTF) was formed in May 2011 under the auspices of the NERC Standing Committees Coordinating Group (SCCG), which comprises the chairs and vice chairs of NERC's standing committees, to address concerns expressed by the NERC Board of Trustees (BOT), the Member Representatives Committee (MRC), and stakeholders that NERC's current definition of Adequate Level of Reliability (ALR) needs reassessment to ensure that the definition supports and helps to define NERC's mission to ensure reliable operation of the bulk power system.

The ALRTF's draft scope document describes the Task Force's purpose as follows:

"Deliver, for use by the ERO enterprise, a document which includes a definition of ALR and associated characteristics with demonstrated ability to measure the relative state of ALR on an ongoing basis. The definition and associated characteristics may be identical to those previously approved or may be enhanced if necessary. Further, these measurable objectives and characteristics should focus on support for the ERO's key activities, including Reliability Standards and Compliance and Certification functions."

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The ALRTF's goal has been to develop a definition of ALR that encompasses NERC's responsibility to ensure reliable planning and operation of the bulk power system and to identify and define reliability objectives and performance characteristics that drive what system planners and operators do on a day-to-day basis to ensure that the bulk power system is reliable.

The ALRTF appreciates all comments submitted by stakeholders during its last posting from April 24 through June 25, 2012. The Task Force reviewed and considered all feedback and proposed language changes, and has updated both the ALR definition and its accompanying technical report to address the most common and compelling concerns. The ALRTF, NERC staff, and most commenters agree that the detailed proposed definition, which now includes performance and assessment objectives, time frames, and associated outcomes, is both useful and superior to the current definition of ALR.

Once it is finalized, the ALR definition will be filed with FERC for information, as the current definition was. The definition will then be used by the NERC Performance Analysis Subcommittee and NERC reliability assessment staff to assess BES reliability, to identify gaps in data, and to begin developing the framework within which the Reliability Issues Steering Committee (RISC) will be able to work.

You do not have to answer all questions. Enter all comments in simple text format. Bullets, numbers, and special formatting will not be retained.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

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Questions:

1. To address concerns about including adequacy within the definition of ALR, the ALRTF moved the former objectives 4 and 5 into a separate section of assessment objectives. Along with that move, the objectives have also been modified as follows:

Assessment Objective 1: Sufficient BES transmission capability is available to meet required BES demands during normal operating conditions and when subject to predefined Disturbances. *(The outcome is that assessment results are available to provide situational awareness for appropriate actions.)*

Assessment Objective 2: Sufficient resource capability is available to the BES to meet required BES demands during normal operating conditions and when subject to predefined Disturbances. *(The outcome is that assessment results are available to provide situational awareness for appropriate actions.)*

The assessment objectives do not imply or suggest that reliability standards mandating the addition of transmission or generation facilities be developed. Reliability objectives as proposed in the definition document are intended to serve as a framework for reliability standards development, but not every objective will require the development of a standard, nor does each reliability objective prescribe how the objective is to be achieved. The ALRTF believes that having an objective to have adequate transmission and resource capability to meet forecast demand is fundamental to achieving BES reliability.

With these changes, do you support the inclusion of the assessment objectives within the definition of ALR?

Yes

No

Comments: This language does not belong in the ALR definition. NESCOE and others commented on the last posting of the definition that including language related to adequate transmission and generation capacity blurs the dividing line between federal and state authority that is captured within the Federal Power Act. As NESCOE stated previously, we recognize that the system cannot be considered reliable without sufficient supply and transmission resources. However, the

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development of the ALR definition must respect the parameters set by Section 215 of the Federal Power Act: NERC's authority to develop reliability standards is expressly limited to operations and planning of the bulk power system, with the provision of transmission and generation capacity outside the scope of its authority. See Sections 215(a)(3), (i)(2). While NERC and the regional authorities have the responsibility to assess and report on the adequacy of the bulk power system, this function is distinct from NERC's role in developing standards. The proposed ALR definition risks conflating these separate areas of responsibility. To the extent NERC wishes to codify these assessment objectives, it should be done elsewhere, outside of a document intended to guide reliability standards development.

2. Many commenters asked how the definition of ALR will be used. The ALRTF believes that the reliability objectives, together with the Reliability Principles, will provide the basis and scope for standards development. But the ALR definition and its supporting documents will not be submitted as a NERC glossary term nor used in the compliance realm to expand NERC's scope. Once it is finalized, the ALR definition will be filed with FERC for information, as the current definition was. The definition will then be used by the NERC Performance Analysis Subcommittee and NERC reliability assessment staff to assess BES reliability, to identify gaps in data, and to begin developing the framework within which the Reliability Issues Steering Committee (RISC) will be able to work.

Do you support this intended use of the definition and its supporting documents?

Yes

No

Comments: NESCOE does not object in principle to these proposed uses of the ALR definition, but we seek additional clarity in this area. The ALRTF stated in its Consideration of Comments on the last posting of the definition that the definition would be "used in concert with the Reliability Principles as guidance for the ERO enterprise." Consideration of Comments at 10, *available at* http://www.nerc.com/docs/standards/Consideration_of_Comments_ALR_081512.pdf. However, the more detailed description in the Consideration of Comments, and in question two above, states that the definition will be used to "assess" reliability and "identify gaps in data," suggesting that the ALR may play a more active role in NERC's efforts than providing guidance. Additionally, the language above states that the ALR definition will be used to develop a framework for the RISC – a statement

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that potentially leaves much open to this later process. The ALRTF should clarify further the intended use of the ALR definition.

3. Some commenters were concerned about the inclusion of performance objectives 4 and 5 (formerly objectives 6 and 7) and believe that they should be deleted because it is outside the scope of NERC's authority to guard against acts of God, and that there is no way to "minimize" Cascading. The ALRTF holds the position that these impacts need to be managed to avoid or reduce the possibility of such impacts further propagating after the occurrence of the Disturbance. Still, based on stakeholder feedback, the ALRTF did elect to change the wording of these objectives as follows:

Performance Objective 4: Adverse Reliability Impacts on the BES following low probability Disturbances (e.g., multiple contingences, unplanned and uncontrolled outages, cyber security events, malicious acts) are managed. *(The performance outcome is the propagation of frequency, voltage, or angular instability, uncontrolled separation, or Cascading is managed.)*

Performance Objective 5: The integrity of the BES is restored in a controlled manner after major system Disturbances, such as blackouts and widespread outages. *(The performance outcome is to recover the BES, and restore available resources and load to a stable interconnected operating state expeditiously after a major system Disturbance.)*

With these changes, do you support the inclusion of performance objectives 4 and 5?

Yes

No

Comments: NESCOE supports inclusion of these performance objectives. However, regarding Performance Objective 4, the new qualification of Disturbances as "low probability" may require the revisiting of those events considered to be "predefined Disturbances." For example, a "stuck breaker" or a "bus fault" may only occur once in ten years, but these events are included in the set of predefined Disturbances.

Additionally, NESCOE asks the ALRTF to consider changes to the language in Performance Objective 5. The new language fails to include a goal of restoring the system as expeditiously as possible, a concept

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that is captured in the “performance outcome” accompanying Objective 5. NESCOE suggests the following language to match more precisely the objective and outcome:

Performance Objective 5: Restoration of the BES, after major system disturbances such as blackouts or widespread outages, is performed in an orderly manner so as to minimize the time required to regain full functionality of the BES.

To the extent that the ALRTF keeps the current language largely intact, NESCOE further suggests replacing the term “integrity” with “full functionality,” which attaches greater definition to the performance objective.

4. After a final round of changes based on the feedback received during this posting period, the ALRTF intends to submit the ALR definition and the technical report to the MRC and the BOT for approval. Do you support this submission?

Yes

No

Comments: For the reasons detailed above, NESCOE does not support the proposed ALR definition in its current form. NESCOE would support the subsequent version of the ALR definition provided that changes are made to address fully the comments and concerns NESCOE provided here and in the last round of comments.