



Mr. Timothy R. Gallagher
Director-Standards
North American Electric Reliability Council
116-390 Village Boulevard
Princeton, New Jersey 08540

Re: Comments by the Independent Electricity Market Operator (IMO) to Posted NERC Standards:

Dear Mr. Gallagher,

The Independent Electricity Market Operator (IMO) respectfully submits the following comments, to the following posted Standards.

1. **NERC Standard 200, "Monitor and Assess Short Term Transmission Reliability-Operate Within Limits"**
2. **NERC Standard 300, "Balance Resources and Demand"**
3. **NERC Standard 600, "Determine Facility Ratings, System Operating Limits and Transfer Capabilities"**

General comments to all standards posted to date:

The first concerns the repeated insertion of the monetary "Sanctions Table." Sanctions in whatever form have no direct relevance to the reliability standard being developed. They belong in a stand-alone document, endorsed by NERC and the Regions, that specifically address the enforcement process of the standards. Furthermore monetary sanctions have not been broadly endorsed, and this continues to be an outstanding issue with all posted standards to date. It is the IMO's opinion that these references must be removed

The second deals with the need for supporting documentation, such as provided for the Balancing Resources and Demand standard, that clearly articulates the "principles" and/or "objective" that each drafting team used in developing each specific standard and measure. This would greatly aid, particularly during the standard development stages, in understanding the "intent" of the DRAFT standard, which tends to be written in generic terms.

Other comments to specific language in the Standards follow:

1. NERC Standard 200, "Monitor and Assess Short Term Transmission Reliability-Operate Within Limits"

Definitions:

T_v: The violation time associated with a limit.

This definition seems to reflect the compliance violation time frame, but the usage of the T_v term in the draft standard is the "maximum acceptable response time" as determined by the RA/PA.

BPS (Bulk Power System) - Definition for BPS is required.

Sections 201 IROL Identification, requirements and measures read as follows:

1. Requirements

- 1.1. The reliability authority and planning authority shall identify and document which facilities (or groups of facilities) in the reliability authority's reliability area are subject to interconnection reliability operating limits.
- 1.2. The reliability authority and planning authority shall identify each interconnection reliability operating limit within the reliability authority's reliability area.
 - 1.2.1. The reliability authority or planning authority shall identify a maximum response time (Tv) for any interconnection reliability operating limit that does not already have a Tv.

2. Measures

- 2.1. The entity responsible shall establish a list of interconnection reliability operating limits for the reliability authority's reliability area.
 - 2.1.1. The entity responsible shall establish a maximum response time (Tv) for any interconnection reliability operating limit that does not already have a Tv.
- 2.2. The entity responsible shall establish a list of facilities (or groups of facilities) in the reliability authority's reliability area that are subject to interconnection reliability operating limits

IMO believes that the present definition of Tv, which is "self-defined, as so broad that the re-preparation time of thirty minutes has been lost. It is unclear if this was indeed the intent based on Section 203 requirements 1.1 and 1.2 and measure 2.1.2.

In Section 201 (1.2.1):

- the reliability authority or planning authority identifying Tv must establish and present the process through which Tv is derived, or the re-preparation time of thirty minutes should become the standard default absent such a process.
- the reliability authority or planning authority identifying Tv in one region/area must have a peer review and dispute resolution process with its' neighboring region(s)/area(s) to ensure a mutually acceptable Tv. Additionally, Section 1.1 suggests the need for a demonstrated process to "... identify and document which facilities (or groups of facilities) in the reliability authority's reliability area are subject to interconnection reliability operating limits." The mechanism to determine this critical element of the definition cannot be left open-ended. Without a recognized and accepted process, significant inconsistencies will result throughout the Interconnections.

A further concern with the draft is the continuing difficulty of defining wide area impact versus local impact. As the Standard defines "Cascading Outages":

Cascading Outages: The uncontrolled successive loss of system elements triggered by an incident at any location. Cascading results in widespread service interruption, which cannot be restrained from sequentially spreading beyond an area predetermined by appropriate studies.

There is no guidance on how the parameters are to be defined which would permit the identification of the local area and the widespread area. It also fails to recognize that a local area problem may evolve into a wider area problem depending on the load, time of day, recent contingencies and other factors. A well defined process for determining what is (and what is not) a reportable event is essential.

Section 202 Monitoring read as follows

1. Requirements

- 1.1. The reliability authority shall monitor real-time system operating parameters to
- 1.2. Determine if it is operating its reliability area within its interconnection reliability operating limits.

2. Measures

- 2.1. The reliability authority shall have interconnection reliability operating limits available for its operations personnel's real-time use.
- 2.2. The reliability authority shall have real-time data available in a form that system operators can compare to the interconnection reliability operating limits.
- 2.3. The reliability authority shall monitor system operating parameters and compare these against its interconnection reliability operating limits.

The term "real-time" as used in the above lacks clarity in defining how well the RA monitors data (ie how often - every 2 sec; 10 seconds, etc). As an example a RA may sample data instantly (real time), but only monitor once every 30 minutes. It is IMO's view, such sampling frequency satisfies the above measures, however, its adequacy for maintaining system reliability must be questioned.

Section 203 Analysis and Assessment

1. Requirements

- 1.1. The reliability authority shall perform operational planning analyses to verify that its planned bulk electric system operations will not exceed any of its interconnection reliability operating limits.
- 1.2. The reliability authority shall perform real-time assessments to verify that it is not exceeding any interconnection reliability operating limits.

2. Measures

- 2.1. The reliability authority shall identify operating situations or events that impact its ability to operate its reliability area without exceeding any identified interconnection reliability operating limits.
 - 2.1.1. The reliability authority shall conduct an operational planning analysis at least once each day, evaluating the next day's projected system operating conditions
 - 2.1.2. The reliability authority shall conduct a real-time assessment periodically, but at least once every 30 minutes.

The standard must provide a clear distinction between i) how often IROL's, are assessed, whether in real time or for operational planning analyses and ii) how quickly an IROL violation must be resolved. Requirement 1.2 "..... **to verify** that it is not exceeding any interconnection reliability operating limits" can be, in IMO's opinion, interrupted as to how quickly an IROL violation must be resolved...ie: each time it is detected in real-time, which shall be within 30 minutes or less in accordance with measure 2.1.2. This requirement belongs in section 201.

Section 204 Actions

1. Requirements

- 1.3. The reliability authority shall act1 or direct others to act to:
 - 1.3.1. Prevent instances where interconnection reliability operating limits may be exceeded
 - 1.3.2. 1.1.2. Mitigate the magnitude and duration of instances where interconnection reliability operating limits have been exceeded

- 1.4. The reliability authority shall document instances of exceeding interconnection reliability operating limits and shall document and complete an Interconnection Reliability Operating Limit Violation Report for instances of exceeding interconnection reliability operating limits for time 2 greater than or equal to Tv.

A further concern with the draft is the continuing difficulty of defining wide area impact versus local impact and the actions that are to be taken in such situations. As the Standard defines "Cascading Outages":

Cascading Outages: The uncontrolled successive loss of system elements triggered by an incident at any location. Cascading results in widespread service interruption, which cannot be restrained from sequentially spreading beyond an area predetermined by appropriate studies.

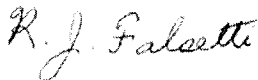
In Section 201 there is no guidance on how the parameters are to be defined which would permit the identification of the local area and the widespread area. Further, fails to recognize that a local area problem or an "out of scope coverage" may evolve into a wider area problem depending on the load, time of day, recent contingencies and other factors. A well-defined process for determining what is (and what is not) a reportable event is essential. While, Section 204 fails to identify what actions are to be taken in such "out of scope coverage" situations.

2. NERC Standard 300, "Balance Resources and Demand"

The IMO fully supports the comments put forth by NPCC - entitled "NPCC Comments On The NERC Balancing Standard," which details numerous concerns with the methodology of the proposed new standard for frequency control.

3. NERC Standard 600, "Determine Facility Ratings, System Operating Limits and Transfer Capabilities"

Refer to the attached STD Comment form for "**Determine Facility Ratings, System Operating Limits and Transfer Capabilities**"



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