



**NERC Standard 200 –
Operate Within Interconnection Reliability Operating Limits**

Submission made on behalf of the

INDEPENDENT ELECTRICITY MARKET OPERATOR (IMO)

Introduction

The IMO congratulates the Standards Drafting Team for their work in the development of this standard.

Ballot

While recognizing the substantial effort put into the development of this standard and the deficiencies of current reliability policy in this area, we must never the less submit a NEGATIVE ballot for this version of the standard in light of several significant shortcomings. These shortcomings are clearly described in the attached submission of the ISO/RTO Council Standards Review Committee.

In addition, we have a number of secondary, but still important concerns related to; the determination of local or wide area impact, the dynamic nature, and the requirement to document, *Interconnection Reliability Operating Limits*. These concerns are described in the attached recommendations of the NPCC CP9, Reliability Standards Working Group.

Conclusion

Once again, we thank the standards drafting team for their efforts and commend the team for the many improvements this standard incorporates.

The IMO appreciates the opportunity to table these comments and looks forward to participating further in the standards development process.

**NERC Standard 200 –
Operate Within Interconnection Reliability Operating Limits**

Comments of

The ISO/RTO Council's Standards Review Committee

Introduction

The ISO/RTO Council (“IRC”) congratulates the Standards Drafting Team for their work in the development of this standard.

The purpose of this standard is to “prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the bulk transmission system”.

We view this standard as being of critical importance to interconnected system reliability. A review of recent blackouts affecting the various interconnected systems over the last decade clearly indicates the risks and negative consequences imposed on widespread areas of the interconnection when Reliability Operating Limits are not adequately determined or respected in continuous operation.

The IRC recognizes the substantial effort put into the development of this standard and the shortcomings of current reliability policy in this area. We reviewed this version of the standard and for individual reasons the ISO/RTO votes are split. Irrespective of our individual votes, we have consensus on certain key issues and wish to offer the following recommendations.

Rationale

The purpose of this standard is clearly stated to be to “prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the bulk transmission system”. In satisfying this purpose it is appropriately recognized that power system operation is dynamic and hence it is the management of risk of adverse consequences that is being contemplated. This risk increases enormously whenever a system is operated such that Reliability Operating Limits are not adequately determined or respected in continuous operation, in other words the system is operating in a potentially insecure state.

Our main concern with the proposed standard is the manner in which this ‘at risk’ interval is addressed.

1. The Standard 200 does not set a maximum limit to the “at risk” interval (“ T_v ” in Standard 200 - the time a Reliability Operating Limit can be exceeded without compliance sanctions). Current NERC policy effectively establishes a maximum “at risk” interval of 30 minutes, and we believe this must be carried forward in Standard 200 to ensure a timely implementation of the standard and for the standard to meet reliability objectives. Providing future flexibility for the Reliability Authority, or some other authority, to establish an acceptable longer “at risk” interval may be possible, but we recommend an evolutionary approach to this development of the standard.

Recommendation: the parameter T_v , be limited to a maximum value of 30 minutes.

2. The Standard 200 does not carry forward the current NERC Policy obligation to initiate action “as soon as possible” to restore system operation to a secure state. Our concern is that the introduction of compliance to standards must not diminish what has become accepted practice among large and sophisticated system operators to initiate actions as soon as possible to reduce the ‘at risk’ interval. The possible difficulties in implementing such a measure are understood, but we believe this change to the standard is necessary and achievable.

Recommendation: corrective action to be taken as soon as possible once an Interconnection Reliability Operating Limit (IROL) is exceeded

Conclusion

Once again, we thank the standards drafting team for their efforts and commend the team for the many improvements this standard incorporates when compared to

current reliability policy. In the interest of retaining desirable elements of the current standards we recommend that the benefits of current reliability policy with respect to minimizing the extent of the ‘at risk’ interval be extended into Standard 200.

The IRC appreciates NERC’s consideration of these comments and looks forward to participating further in the standards development process.



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December 17,
2003

NPCC Members of NERC Registered Ballot Body,

Re: Recommendation of the NPCC CP9, Reliability Standards Working Group, of the Task Force on Coordination of Planning (TFCP) for a Voting Position on the proposed Standard 200, "Operate Within Interconnection Reliability Limits".

Dear Sir / Madam:

The subject Reliability Standard is being balloted for approval on December 18, 2003 through January 6, 2004. The NPCC CP9, Reliability Standards Working Group, recommends a vote to "**reject**" the proposed Reliability Standard 200, "Operate Within Interconnection Reliability Limits," based on the bullet comments below. Of particular concern, is the lack of a 30 minute maximum threshold for reportable IROL violations. These comments may be used in your "NO-with comments" ballots if you are in agreement with our findings. This recommendation is based on information compiled from NPCC's Task Forces, Compliance Monitoring and Assessment Subcommittee (CMAS), as well as discussions of the Working Group with Mr. Al DiCaprio, PJM, a principle author of the SAR/Standard as well as Mr. Al Miller, a member of the NERC Operating Limit Definition Task Force (OLDTF) and representing the IMO position paper on this Standard.

Outstanding issues supporting our decision and identified through NPCC's review process are:

- It is NPCC's position that T_v , the time an IROL can be exceeded without compliance sanctions, be limited to a **maximum** of 30 minutes as presently stated in NERC Operating Policy 2. The proposed Standard implies that T_v 's may be greater than 30 minutes and may represent an acceptable risk to the North American bulk power system. There is no method or criteria established for determining acceptable risk or impact on reliability identified in the Standard or the associated Q&A. Therefore, it is difficult to support the statement that a response time greater than 30 minutes is acceptable.
- The Monetary Sanction Matrix - There is an issue with the inclusion of this monetary sanction matrix and what its implications are. The NPCC CMAS has expressed concern over its inclusion and maintains that the use of market mechanisms where possible, as well as, letters of increasing degrees of severity and notifications to regulatory agencies are more effective in ensuring compliance. Failure of

NERC to gain authority through reliability legislation could result in NERC pursuing actions to implement “Plan B,” a “voluntary” approach affording NERC the authority to perform these types of monetary sanctions. CMAS has indicated that any posted Standard, with the included matrix, should not be supported by NPCC. There are, however, proceedings at NERC by the Compliance Certification Committee (CCC) to address alternative sanction proposals and NPCC will continue to work to oppose monetary sanctions.

- Standard 200 should clearly reflect requirements and measures that require all Reliability Authorities to initiate *immediate* corrective actions *as soon as* an Interconnection Reliability Operating Limit (IROL) is exceeded or the system is in an unanalyzed state. It is NPCC’s position that NERC Standards should ensure mitigating actions are implemented when instability, uncontrolled separation, or cascading outages would occur as a result of a change in one or more operating parameter(s) *as soon as the condition exists*.
- The Standard does not include clear definitions or criteria on how “local” and “Wide Area Impact” are determined. Therefore, it is difficult to assess what electrical boundaries an IROL is meant to protect. This definition of Wide Area Impact points out that the electrical area to be included in the limit may be larger than the portion of the transmission system under the authority of a single Reliability Authority (RA). This indicates the need for studies and associated limits that transcend the boundaries of a single RA’s purview, yet there is no formal statement identifying this need in standard, 200, 600 or the Co-ordinate Operations Standard (currently under development).
- It is NPCC’s position that Standard 200 should clearly reflect the fact that IROL’s can be dynamic in nature. While it may be possible that every possible configuration can be identified in advance to deal with this dynamics, the reality is that this list would be extremely large and difficult to maintain. To improve on the situation, this section should require that the RA operators have a base set of limits that include N-1 configurations, along with identifying the following:
 - The boundary conditions for which the published limits are applicable;
 - The critical contingency that drive the applicable limit; and
 - An understanding of what the associated limit is designed to protect the system against (i.e. transient stability, voltage decline, etc.)

The System Operators must have the tools, training and information to deal with unforeseen circumstances and make the proper decisions to secure the system in an expeditious and orderly manner following a contingency or other event.

- Section 207, Action Plan. It is NPCC’s position that requiring an Action Plan and its associated steps and procedures for dealing with instances of IROL violations will prove to be restrictive and disallow operators from taking other positive actions than those as outlined in a “plan.” NPCC feels confining operators to a set of steps for an IROL violation may, at face value appear to be laudable, however may not be in the best interest of correcting the IROL violation for the specific set of system conditions that may exist.
- We further do not support documenting all limit violations, but only those in excess of the time-duration T_v value. This requirement would be a huge effort while providing little or no information, as limits are exceeded for very small amounts of time on a regular basis just by virtue of power system operations.
- There is also an inconsistency throughout the Standard. It is titled differently in different places. The document title is “Operate Within Interconnection Reliability Limits” which is correct, however, all the headers within the document appear as “...Interconnected...” The NERC website incorrectly lists the title using the word Interconnected as well.

The CP9 Working Group will continue to track the development/balloting of this Standard and forward any other pertinent information to you. The CP9 group, while recognizing that opportunity does exist to enhance the standard, has identified that it does also contain some positive attributes and will continue to engage and encourage its development within the appropriate NERC forums and processes to maximize its purpose; to maintain reliability. You may contact me with any questions.

Thank you for your attention to these concerns.

Sincerely,

Guy V. Zito
Chair CP9 (on behalf of CP9)
Manager, Planning
Northeast Power Coordinating
Council

cc: Members, NPCC CP9 Reliability Standards Working Group
Members, TFCP, TFCO, TFSS, TFSP
Mr. Edward A. Schwerdt