



NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

Princeton Forrestal Village, 116-390 Village Boulevard, Princeton, New Jersey 08540-5731

Operate Within Interconnection Operating Limits Standard Drafting Team Meeting

Wednesday, September 10, 2003, 8 a.m.–5 p.m.

Thursday, September 11, 2003, 8 a.m.–5 p.m.

Doubletree Hotel Jantzen Beach
Portland, OR

Agenda

1. Administrative

- a. Membership and Guests — Chair
- b. Introductions — Chair
- c. Organization, Roster, and Survey Contacts List — Secretary
- d. Arrangements — Secretary
- e. Procedures
 - i. Parliamentary Procedures — Chair
 - ii. Anti-Trust Compliance Guidelines — Chair

2. Operate Within Interconnection Reliability Operating Limits Standard Draft, Version 2

- a. Respond to Standard Draft Version 2 — Comments
- b. Revise Standard Draft Version 2
- c. Revise Implementation Plan (Draft Standard — Operating Manual Policy Cross Reference)
- d. Review latest information on field-testing
- e. Discuss potential processes for developing T_v in an interconnection or region
- f. Update Parking Lot Issues List

3. Future Meetings

- a. Future Meetings and Conference Calls, to be Determined During the Meeting

1. Administrative

Monitor and Assess Short-term Transmission Reliability — Operate Within Transmission System Limits Standard Drafting Team Meeting

Wednesday, September 10, 2003, 8 a.m.–5 p.m.
Thursday, September 11, 2003, 8 a.m.–5 p.m.

Doubletree Hotel Jantzen Beach
Portland, OR

Agenda

- a. Membership and Guests — Chair
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Item 1.a Membership and Guests

On behalf of the “Operate Within Interconnection Reliability Operating Limits” Standard Drafting Team, Chairman Ed Riley welcomes the “Operate Within Limits” SDT members and all guests to Portland, Oregon and to this meeting.

Item 1.b Introductions

The Chair will ask members and guests to introduce themselves.

Item 1.c Roster, Contacts List and Attendance Sheet

The Secretary will review the current Roster and Contacts List. Each member is asked to check the data for accuracy. Each meeting attendee is asked to sign and complete the attendance sheet. Attachment

Roster with Contact Information

Item 1.d Arrangements

Standard Drafting Team Secretary Tom Vandervort will review the meeting arrangements. The Operate Within Limits SDT meetings begin on Wednesday, September 10, 2003, at 8 a.m. and will adjourn by 5 p.m. The SDT will reconvene Thursday, September 11, at 8 a.m. and will adjourn by 5 p.m. Lunch will be served on both days.

Item 1.e Parliamentary Procedures

- i. Parliamentary Procedures:

“Operate Within Limits” Standard Drafting Team Meeting
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A summary of Parliamentary Procedures is attached for reference. The Secretary will answer questions regarding these procedures.

ii. Anti-Trust Compliance Guidelines:

On June 14, 2002 the NERC Board of Trustees adopted antitrust compliance guidelines for NERC. In adopting the guidelines, the Board passed the following resolution:

RESOLVED, that the Board of Trustees (1) adopts the draft Antitrust Compliance Guidelines attached hereto as Exhibit A and (2) instructs that these Antitrust Compliance Guidelines be included in the agenda package for each meeting of every NERC committee, subcommittee, task force, working group, and other NERC-sponsored activity.

The resolution also applies to workshops, training sessions, and any other NERC-sponsored events. A copy of the NERC Anti-Trust Compliance Guidelines will be included in the agenda package for each meeting of each group or event.

Attachment

Parliamentary Procedures
NERC Anti-Trust Guidelines

2. Operate Within Interconnection Reliability Operating Limits Standard Draft, Version 2

- a. Respond to Standard Draft Version 2 — Comments
- b. Revise Standard Draft Version 2
- c. Revise Implementation Plan (Draft Standard — Operating Manual Policy Cross Reference)
- d. Review latest information on field testing
- e. Discuss potential processes for developing T_v in an interconnection or region
- f. Update Parking Lot Issues List

Item 2.a Respond to Standard Draft Version 2 — Comments

Discussion and Action:

The Standard Drafting Team (SDT) will review and respond to all “Operate Within Interconnection Reliability Operating Limits” Draft Standard, Version 2, comments. Maureen Long compiled and categorized the comments by question number. All OWL SDT members are to read all of the public comments prior to the meeting. The SDT will respond to all comments in accordance with the NERC Reliability Standards Process Manual.

Ms. Long will forward the comments to the OWL SDT in separate transmittals. The OWL SDT will:

- Discuss summary considerations for groups of comments
- Develop a schedule for drafting responses to individual comments
- Assign sections to team members

Item 2.b Revise Standard Draft Version 2

The Standard Draft Version 2, comments that are evaluated to be beneficial or appropriate to enhance the standard will be incorporated. Those comments that are evaluated to be insignificant or do not enhance the standard will not be incorporated.

Issues and concerns that cannot be addressed and resolved by the SDT will be added to the list of Parking Lot Issues.

If an additional posting is needed, a Comment form will be developed.

Attachment

a) Operate Within Interconnection Reliability Operating Limits, Draft, Version 2 — Posted for Public Comment from July 1, through August 29, 2003

Item 2.c Revise Implementation Plan (Draft Standard – Operating Manual Policy Cross Reference)

The OWL SDT will review and revise the Implementation Plan from the Operate Within IROLs SAR (the draft standard — operating manual policies cross reference) for accuracy and correct correlation to the current draft standard.

Attachment

- a) Implementation Plan from Operate Within IROLs SAR

Item 2.d Review latest information on field-testing

Ms. Long spoke with the NERC Director of Compliance, and the NERC Director of Standards regarding field-testing of this draft standard. Ms. Long will share the results of the discussion with the OWL SDT.

The OWL SDT will evaluate the draft standard to determine the parameters that need field-testing.

Item 2.e Discuss potential processes for developing T_v in an interconnection or region

The interconnections or regions may need guidance establishing the T_v to comply with this draft standard. The OWL SDT will discuss potential processes for determining and documenting the T_v .

Item 2.f Update Parking Lot Issues List

The “Operate Within Interconnection Reliability Operating Limits” SDT identified a number of parking lot issues. Some of these issues may be resolved. The OWL SDT needs to review, evaluate and determine a course of action to address the remaining open issues.

Attachment

- a) OWL SDT Parking Lot Issues

3. Future Meetings

- a. Future Meetings and Conference Calls, to be Determined During the Meeting

Discussion and Action:

The Standard Drafting Team will determine the next meeting or conference call to continue drafting the “Operate Within Limits” Standard.

Attachment

- a) NERC Approved Cities

“Operate Within Limits” SDT Roster

Edward R. (Ed) Riley (Chairman) Director of Regional Coordination	California ISO 151 Blue Ravine Rd. Folsom CA 95630	916-351-4463 (office) 916-802-9558 (cell) eriley@caiso.com
Paul Cafone	Public Service Electric & Gas Co. 80 Park Plaza Newark NJ 07101	973- 430-5001 (office) 201- 315-0174 (cell) paul.cafone@pseg.com
Albert DiCaprio (Requestor) Corporate Strategist	PJM Interconnection, L.L.C. 955 Jefferson Avenue Valley Forge Corporate Center Norristown, PA 19403-2497	610-666-8854 (office) dicapram@pjm.com
Tony Jankowski Mgr., Electric System Operations	WE-Energies W237 N1500 Busse Rd Waukesha WI 53188-1124	262-544-7117 (office) 414-322-6982 (cell) tony.jankowski@weenergies.com
Wendy Ladd	Duke Energy/VACAR South PO Box 1244 Charlotte, NC 28201-1244	704-382-6940 (office) wtladd@duke-energy.com
John Muir	Consolidated Edison of New York 4 Irving Place, Room 1475-S New York, NY 10003	212-460-3760 (office) 908-403-4922 (cell) muirj@coned.com
Ellis Rankin Mgr. Grid Operations	Oncor 2233B Mt. Creek Parkway Dallas, TX 75211-6716	214-743-6825 (office) 214-549-6179 (cell) erankin@oncorgroup.com
Gerald Rheault	Manitoba Hydro P.O. Box 815 820 Taylor Avenue Winnipeg Manitoba R3C 2P4	204-487-5423 (office) grrheault@hydro.mb.ca
William Thompson	American Electric Power 155 W. Nationwide Blvd. Suite 500 Columbus, OH 43215	614-583-7230 (office) 614-348-8836 (cell) wrthompson@aep.com
James P. Murphy Electrical Engineer	BPA TOT-DITT-2 5411 NE Highway 99 Vancouver, WA 98663	360- 418-2413 (office) jpmurphy@bpa.gov
Thomas J. Vandervort Manager – Resources	NERC 116-390 Village Boulevard Princeton, NJ 08540-5731	609-452-8060 (office) 609-452-9550 (fax) tom.vandervort@nerc.net
Charles V. Waits Vice President - Operations & Transmission Strategy	Michigan Electric Transmission Company, LLC 540 Avis Drive, Suite H Ann Arbor, Michigan 48108	734-929-1227 (office) cwaits@metllc.com
List Server for Standard DT		opwinlimsdt@nerc.com

Parliamentary Procedures

Based on Robert's Rules of Order, Newly Revised, 10th Edition, plus "Organization and Procedures Manual for the NERC Standing Committees"

Motions

Unless noted otherwise, all procedures require a "second" to enable discussion.

When you want to...	Procedure	Debatable	Comments
Raise an issue for discussion	Move	Yes	The main action that begins a debate.
Revise a Motion currently under discussion	Amend	Yes	Takes precedence over discussion of main motion. Motions to amend an amendment are allowed, but not any further. The amendment must be germane to the main motion, and can not reverse the intent of the main motion.
Reconsider a Motion already approved	Reconsider	Yes	Allowed only by member who voted on the prevailing side of the original motion.
End debate	Call for the Question or End Debate	No	If the Chair senses that the committee is ready to vote, he may say "if there are no objections, we will now vote on the Motion." Otherwise, this motion is not debatable and subject to 2/3 majority approval.
Record each member's vote on a Motion	Request a Roll Call Vote	No	Takes precedence over main motion. No debate allowed, but the members must approve by 2/3 majority.
Postpone discussion until later in the meeting	Lay on the Table	Yes	Takes precedence over main motion. Used only to postpone discussion until later in the meeting.
Postpone discussion until a future date	Postpone until	Yes	Takes precedence over main motion. Debatable only regarding the date (and time) at which to bring the Motion back for further discussion.
Remove the motion for any further consideration	Postpone indefinitely	Yes	Takes precedence over main motion. Debate can extend to the discussion of the main motion. If approved, it effectively "kills" the motion. Useful for disposing of a badly chosen motion that can not be adopted or rejected without undesirable consequences.
Request a review of procedure	Point of order	No	Second not required. The Chair or secretary shall review the parliamentary procedure used during the discussion of the Motion.

Notes on Motions

Seconds. A Motion must have a second to ensure that at least two members wish to discuss the issue. The "second" is not recorded in the minutes. Neither are motions that do not receive a second.

Announcement by the Chair. The Chair should announce the Motion before debate begins. This ensures that the wording is understood by the membership. Once the Motion is announced and seconded, the Committee "owns" the motion, and must deal with it according to parliamentary procedure.

Voting

Voting Method	When Used	How Recorded in Minutes
Unanimous Consent	When the Chair senses that the Committee is substantially in agreement, and the Motion needed little or no debate. No actual vote is taken.	The minutes show "by unanimous consent."
Vote by Voice	The standard practice.	The minutes show Approved or Not Approved (or Failed).
Vote by Show of Hands (tally)	To record the number of votes on each side when an issue has engendered substantial debate or appears to be divisive. Also used when a Voice Vote is inconclusive. (The Chair should ask for a Vote by Show of Hands when requested by a member).	The minutes show both vote totals, and then Approved or Not Approved (or Failed).
Vote by Roll Call	To record each member's vote. Each member is called upon by the Secretary,, and the member indicates either "Yes," "No," or "Present" if abstaining.	The minutes will include the list of members, how each voted or abstained, and the vote totals. Those members for which a "Yes," "No," or "Present" is not shown are considered absent for the vote.

Notes on Voting

(Recommendations from DMB, not necessarily Mr. Robert)

Abstentions. When a member abstains, he is not voting on the Motion, and his abstention is not counted in determining the results of the vote. The Chair should not ask for a tally of those who abstained.

Determining the results. The results of the vote (other than Unanimous Consent) are determined by dividing the votes in favor by the total votes cast. Abstentions are not counted in the vote and shall not be assumed to be on either side.

"Unanimous Approval." Can only be determined by a Roll Call vote because the other methods do not determine whether every member attending the meeting was actually present when the vote was taken, or whether there were abstentions.

Majorities. Robert's Rules use a simple majority (one more than half) as the default for most motions. NERC uses 2/3 majority for all motions.



NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

Princeton Forrestal Village, 116-390 Village Boulevard, Princeton, New Jersey 08540-5731

NERC ANTITRUST COMPLIANCE GUIDELINES

I. GENERAL

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 which 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.

It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Antitrust laws are complex and subject to court interpretation that can vary over time and from one court to another. The purpose of these guidelines is to alert NERC participants and employees to potential antitrust problems and to set forth policies to be followed with respect to activities that may involve antitrust considerations. In some instances, the NERC policy contained in these guidelines is stricter than the applicable antitrust laws. Any NERC participant or employee who is uncertain about the legal ramifications of a particular course of conduct or who has doubts or concerns about whether NERC's antitrust compliance policy is implicated in any situation should consult NERC's General Counsel immediately.

II. PROHIBITED ACTIVITIES

Participants in NERC activities (including those of its committees and subgroups) should refrain from the following when acting in their capacity as participants in NERC activities (e.g., at NERC meetings, conference calls and in informal discussions):

- Discussions involving pricing information, especially margin (profit) and internal cost information and participants' expectations as to their future prices or internal costs.
- Discussions of a participant's marketing strategies.
- Discussions regarding how customers and geographical areas are to be divided among competitors.
- Discussions concerning the exclusion of competitors from markets.
- Discussions concerning boycotting or group refusals to deal with competitors, vendors or suppliers.

Approved by NERC Board of Trustees
June 14, 2002

III. ACTIVITIES THAT ARE PERMITTED

From time to time decisions or actions of NERC (including those of its committees and subgroups) may have a negative impact on particular entities and thus in that sense adversely impact competition. Decisions and actions by NERC (including its committees and subgroups) should only be undertaken for the purpose of promoting and maintaining the reliability and adequacy of the bulk power system. If you do not have a legitimate purpose consistent with this objective for discussing a matter, please refrain from discussing the matter during NERC meetings and in other NERC-related communications.

You should also ensure that NERC procedures, including those set forth in NERC's Certificate of Incorporation and Bylaws are followed in conducting NERC business. Other NERC procedures that may be applicable to a particular NERC activity include the following:

- Organization Standards Process Manual
- Transitional Process for Revising Existing NERC Operating Policies and Planning Standards
- Organization and Procedures Manual for the NERC Standing Committees
- System Operator Certification Program

In addition, all discussions in NERC meetings and other NERC-related communications should be within the scope of mandate for or assignment to the particular NERC committee or subgroup, as well as within the scope of the published agenda for the meeting.

No decisions should be made nor any actions taken in NERC activities for the purpose of giving an industry participant or group of participants a competitive advantage over other participants. In particular, decisions with respect to setting, revising, or assessing compliance with NERC reliability standards should not be influenced by anti-competitive motivations.

Subject to the foregoing restrictions, participants in NERC activities may discuss:

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.
- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.
- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.
- Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meetings.

Any other matters that do not clearly fall within these guidelines should be reviewed with NERC's General Counsel before being discussed.

These definitions will be posted and balloted along with the standard, but will not be restated in the standard. Instead, they will be included in a separate “Definitions” section containing definitions relevant to all standards that NERC develops.

DEFINITIONS

Bulk Electric System: A term commonly applied to the portion of an electric utility system that encompasses the electrical generation resources and bulk transmission system.

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.

Documentable Interconnection Reliability Operating Limit Violation: An instance of exceeding an interconnection reliability operating limit for any length of time.

Generator Owner: The entity that owns the generator.

Instability: The inability of the transmission system to maintain a state of equilibrium during normal and abnormal system conditions or disturbances.

Interconnection Reliability Operating Limit: A system operating limit that, if exceeded, could lead to instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the bulk transmission system. The reliability authority must log each case of exceeding an interconnection reliability operating limit, and must report (to its compliance monitor) each case of exceeding an interconnection reliability operating limit for a time greater than or equal to T_v . Note that T_v may be zero.

Interconnection Reliability Operating Limit Event: An instance of exceeding an interconnection reliability operating limit for any length of time.

Interconnection Reliability Operating Limit Violation: An instance of exceeding an interconnection reliability operating limit for time greater than or equal to T_v .

Real-time Monitoring: To use vision and hearing to scan various real-time data sources and draw conclusions about what the data indicates. Having the ability to scan real time data as conditions dictate.

Occurrence period (Performance-reset Period): The time period in which performance is measured, evaluated, and then reset.

Operational Planning Analysis: An analysis of the expected system conditions, given the peak load forecast(s), known system constraints such as facility outages, and generator outages and limitations, etc. The analysis should ensure that no interconnection reliability operating limits will be exceeded during expected normal operation. An operational planning analysis is done up to seven days ahead of the expected conditions.

Real-time: Immediate time as opposed to future time.

Real-time Assessment: An evaluation conducted by collecting and reviewing immediately available data to determine the status of the electric system. The reliability authority uses real-time data to conduct its real-time assessment.

Real-time Data: Real-time measured values, state estimator values derived from the measured values, or other calculated values derived from the measured values – may include directly monitored data, Inter-

Standard 200 – Operate Within Interconnection Reliability Operating Limits

utility data exchange (e.g., Interconnection Control Area Communication Protocol and or SCADA Data), and manually collected data.

Reliability Authority Area: A defined electrical system bounded by interconnection (tie-line) metering and telemetry under the control of a single reliability authority.

Reportable Interconnection Reliability Operating Limit Violation: An instance of exceeding an interconnection reliability operating limit for time greater than or equal to the interconnection reliability operating limit's T_v .

Self-certification: A process whereby an entity submits a form to its compliance monitor, indicating that the entity is in compliance with a specific requirement or set of requirements for a reliability standard.

Self-certification forms generally require the signature of an officer of the corporation. Most self-certification forms are completed on an annual basis although they may be required more often

T_v : The violation time associated with a limit.

Transmission Operator: The entity that provides transmission services to qualified market participants under applicable transmission service agreements.

Uncontrolled Separation: The unplanned break-up of an interconnection, or portion of an interconnection, that is not the result of automatic action by a special protection system or remedial action scheme operating correctly.

200 – OPERATE WITHIN INTERCONNECTION RELIABILITY OPERATING LIMITS

- 201 Interconnection Reliability Operating Limit Identification
- 202 Monitoring
- 203 Analyses and Assessments
- 204 Actions
- 205 Data Specification & Collection
- 206 Data Provision
- 207 Action Plan
- 208 Reliability Authority Directives

1. **Purpose:** To prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the bulk transmission system.
2. **Effective Period:** This standard will become effective on the first day of the month following the month that the NERC Board of Trustees adopts the standard.
3. **Applicability:** These requirements apply to entities performing various electric system functions, as defined in the functional model approved by the NERC Board of Trustees in June 2001. NERC is now developing standards and procedures for the identification and certification of such entities. Until that identification and certification is complete, these standard apply to the existing entities (such as control areas, transmission owners and operators, and generation owners) that are currently performing the defined functions.

In this standard, the terms, *balancing authority, generator operator, generator owner, interchange authority, planning authority, reliability authority, transmission operator, transmission owner* refer to the entities performing these functions as defined in the functional model.

201 IROL Identification

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 (T_v) for any interconnection reliability operating limit that does not already have a T_v .

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 (T_v) for any interconnection reliability operating limit that does not already have a T_v .
- 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

3. Regional Differences

None identified.

4. Compliance Monitoring Process

- 4.1. The entity responsible shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.
- 4.2. The performance-reset period shall be one calendar year. The entity responsible shall keep data on limits for three calendar years. The compliance monitor shall keep audited data for three calendar years.
- 4.3. The entity responsible shall have the following available upon the request of its compliance monitor:
 - 4.3.1. List of interconnection reliability operating limits for the reliability authority’s reliability area
 - 4.3.2. List of facilities (or groups of facilities) in the reliability authority’s reliability area that are subject to interconnection reliability operating limits

5. Levels of Non-compliance

- 5.1. Level one: Not applicable
- 5.2. Level two: Not applicable
- 5.3. Level three: Not applicable

Standard 200 – Operate Within Interconnection Reliability Operating Limits

- 5.4. Level four: No list of interconnection reliability operating limits or no list of facilities subject to interconnection reliability operating limits for the reliability authority's reliability area.
- 6. Sanctions**
 - 6.1. Apply sanctions consistent with the NERC Compliance and Enforcement Matrix. (Attached at the end of this draft standard for reference and comment.)

202 Monitoring

1. Requirements

- 1.1. The reliability authority shall monitor real-time system operating parameters to 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.

3. Regional Differences

None identified.

4. Compliance Monitoring Process

- 4.1. The reliability authority shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.
- 4.2. The performance-reset period shall be one calendar year. The reliability authority shall keep data on limits for three calendar years. The compliance monitor shall keep audited data for three calendar years.
- 4.3. The reliability authority shall have the following available upon the request of the compliance monitor:
 - 4.3.1. Display(s) with real time data associated with interconnection reliability operating limits

5. Levels of Non-compliance

- 5.1. Level one: Not applicable
- 5.2. Level two: Not applicable
- 5.3. Level three: Not applicable
- 5.4. Level four: A level four non-compliance occurs if any of the following conditions are present:
 - 5.4.1. Interconnection reliability operating limits not available to operations personnel for real time use; or
 - 5.4.2. Real-time data not available in a form that can be compared to the interconnection reliability operating limits; or
 - 5.4.3. System operating parameters not monitored and compared against interconnection reliability operating limits.

6. Sanctions

Standard 200 – Operate Within Interconnection Reliability Operating Limits

- 6.1. Apply sanctions consistent with the NERC Compliance and Enforcement Matrix.
(Attached at the end of this draft standard for reference and comment.)

203 Analyses and Assessments

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.

3. Regional Differences

None identified.

4. Compliance Monitoring Process

- 4.1. The reliability authority shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years and investigations upon complaint, to assess performance.
- 4.2. The performance-reset period shall be one day. The compliance monitor shall keep audited data for three calendar years.
- 4.3. The reliability authority shall demonstrate the following upon the request of the compliance monitor:
 - 4.3.1. Ability to perform an operational planning analysis
 - 4.3.2. Ability to perform a real time assessment

5. Levels of Non-compliance – Penalties Shall be Applied Separately

Operational Planning Analysis

- 5.1. Level one: Not applicable
- 5.2. Level two: Not applicable
- 5.3. Level three: Not applicable
- 5.4. Level four: Operational planning analysis was not conducted at least once each day

Real Time Assessment

- 5.5. Level one: Not applicable
- 5.6. Level two: Not applicable

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- 5.7. Level three: Not applicable
- 5.8. Level four: Real time assessment was not conducted at least once every 30 minutes
- 6. Sanctions**
 - 6.1. Apply sanctions consistent with the NERC Compliance and Enforcement Matrix.
(Attached at the end of this draft standard for reference and comment.)

204 Actions

1. Requirements

- 1.1. The reliability authority shall act¹ or direct others to act to:
 - 1.1.1. Prevent instances where interconnection reliability operating limits may be exceeded
 - 1.1.2. Mitigate the magnitude and duration of instances where interconnection reliability operating limits have been exceeded
- 1.2. 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 time² greater than or equal to T_v .

2. Measures

- 2.1. The reliability authority shall document each instance of exceeding an interconnection reliability operating limit:
 - 2.1.1. The reliability authority shall document, via an operations log or other data source, the actions taken or directives issued, the magnitude of the event, and the duration of the event. (This data may be from an operating log, may be from the entity's energy management system, or may be from some other source.)
- 2.2. The reliability authority shall report each instance of exceeding an interconnection reliability operating limit for time greater than or equal to T_v :
 - 2.2.1. The reliability authority shall complete an Interconnection Reliability Operating Limit Violation Report and shall file the report with its compliance monitor within five business days of the initiation of the event. (The report includes the date and time of the event, identification of which interconnection reliability operating limit was violated and the T_v for that limit, magnitude and duration of exceeding the interconnection reliability operating limit, actions taken or directives issued, and explanation of results of actions or directives.)

3. Regional Differences

None identified.

4. Compliance Monitoring Process

- 4.1. The reliability authority shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use

¹ Note that the reliability authority may choose to take 'no overt action' and this may be an acceptable action. Taking 'no overt action' is not the same as ignoring the problem.

² For calculating the duration of the event, time is measured from the point when the limit is exceeded to the point when the system has returned to a state that is within the interconnection reliability operating limits for a minimum of 30 seconds.

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scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.

- 4.2. The performance-reset period shall be one calendar year. The reliability authority shall keep Interconnection Reliability Operating Limit Violation Reports, operations logs, or other documentation for three calendar years. The compliance monitor shall keep audited data for three calendar years.
- 4.3. The reliability authority shall have the following available upon the request of its compliance monitor:
 - 4.3.1. Operations logs or other documentation indicating the magnitude and duration of each instance of exceeding an interconnection reliability operating limit and the actions or directives issued for each of these instances
 - 4.3.2. Interconnection Reliability Operating Limit Violation Reports

5. Levels of Non-compliance

- 5.1. Level one: Interconnection reliability operating limit exceeded and no documentation to indicate actions taken or directives issued to mitigate the instance.
- 5.2. Level two: Not applicable
- 5.3. Level three: Not applicable
- 5.4. Level four: Interconnection reliability operating limit exceeded for time greater than or equal to T_v minutes

6. Sanctions

- 6.1. Apply sanctions consistent with the NERC Compliance and Enforcement Matrix.
(Attached at the end of this draft standard for reference and comment.)

205 Data Specification & Collection

1. Requirements

- 1.1. The reliability authority shall specify and collect the data it needs to support real-time monitoring, operational planning analyses and real-time assessments conducted relative to operating within its reliability area’s interconnection reliability operating limits. The reliability authority shall collect this data from the entities performing functions that have facilities monitored by the reliability authority, and from entities that provide facility status to the reliability authority. This includes specifying and collecting data from the following:
 - 1.1.1. Generator owners
 - 1.1.2. Generator operators
 - 1.1.3. Reliability authorities
 - 1.1.4. Transmission operators
 - 1.1.5. Transmission owners
- 1.2. The reliability authority shall specify when to supply data (based on its hardware and software requirements, and the time needed to do its operational planning analyses.)
- 1.3. The reliability authority shall notify its compliance monitor when an entity that has facilities monitored by the reliability authority does not provide data as specified.

2. Measures

- 2.1. The reliability authority shall have a documented specification for data needed to build and maintain models needed to support real time monitoring, operational planning analyses and real time assessments relative to interconnection reliability operating limits.
 - 2.1.1. Specification shall include a list of required data, a mutually agreeable format, and timeframe and periodicity for providing data.
 - 2.1.2. Specification shall address the data provision process to use when automated real-time system operating data is unavailable.
- 2.2. The reliability authority shall distribute its data specification to the entities that have facilities monitored by the reliability authority and to entities that provide facility status to the reliability authority.
- 2.3. The reliability authority shall notify its compliance monitor when an entity that has facilities monitored by the reliability authority, or an entity that provides facility status to the reliability authority, does not provide data as specified.
 - 2.3.1. The notification shall take place within five business days of discovering that the data is missing.

3. Regional Differences

None identified.

4. Compliance Monitoring Process

- 4.1. The reliability authority shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use

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scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.

- 4.2. The performance-reset period shall be one calendar year. The reliability authority shall keep its data specification(s) for three calendar years. The compliance monitor shall keep audited data for three calendar years.
- 4.3. The reliability authority shall have the following available upon the request of the compliance monitor:
 - 4.3.1. Data specification(s)
 - 4.3.2. Proof of distribution of the data specification(s)

5. Levels of Non-compliance

- 5.1. Level one: Data specification incomplete (missing either the list of required data, a mutually agreeable format, a timeframe for providing data, or a data provision process to use when automated real-time system operating data is unavailable.)
- 5.2. Level two: No data specification or the specification not distributed to the entities that have facilities monitored by the reliability authority and the entities that provide the reliability authority with facility status
- 5.3. Level three: Not applicable
- 5.4. Level four: Not applicable

6. Sanctions

- 6.1. Apply sanctions consistent with the NERC Compliance and Enforcement Matrix. *(Attached at the end of this draft standard for reference and comment.)*

206 Data Provision

1. Requirements

- 1.1. Each entity performing one of the following functions shall provide data, as specified, to the reliability authority(ies) with which it has a reliability relationship.
 - 1.1.1. Generator owners
 - 1.1.2. Generator operators
 - 1.1.3. Reliability authorities
 - 1.1.4. Transmission operators
 - 1.1.5. Transmission owners

2. Measures

- 2.1. The entity responsible shall provide data, as specified, to the requesting reliability authority, within the time frame specified, in the mutually agreed upon format.

3. Regional Differences

None identified.

4. Compliance Monitoring Process

- 4.1. The entity responsible shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor shall seek confirmation of the data transmission by checking with the receiving reliability authority. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.
- 4.2. The performance-reset period is 12 months without a violation from the time of the last violation. The responsible entity shall keep data transmittal documentation for three calendar years. The compliance monitor shall keep audited data for three calendar years.
- 4.3. The entity responsible shall have the following available upon the request of the compliance monitor:
 - 4.3.1. Copies of transmittal cover letters indicating data was sent to the reliability authority

5. Levels of Non-compliance

- 5.1. Level one: Not applicable
- 5.2. Level two: Not applicable
- 5.3. Level three: Not applicable
- 5.4. Level four: Data not provided to the reliability authority as specified.

6. Sanctions

- 6.1. Apply sanctions consistent with the NERC Compliance and Enforcement Matrix. *(Attached at the end of this draft standard for reference and comment.)*

207 Action Plan

1. Requirements

- 1.1. The reliability authority shall have an action plan that identifies actions it shall take or actions it shall direct others to take, to prevent or mitigate instances of exceeding its interconnection reliability operating limits.

2. Measures

- 2.1. The reliability authority shall have a documented action plan that addresses preventing and mitigating instances of exceeding interconnection reliability operating limits. The plan shall be coordinated with those entities responsible for acting and with those entities impacted by such actions.
 - 2.1.1. The action plan may be a process or procedure for preventing or mitigating instances of exceeding interconnected reliability operating limits. (Note: an emergency operations plan may be used to satisfy this requirement if the emergency operations plan addresses actions to prevent and mitigate instances of exceeding interconnected reliability operating limits.)

3. Regional Differences

None identified.

4. Compliance Monitoring Process

- 4.1. The reliability authority shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.
- 4.2. The performance-reset period is 12 months. The reliability authority shall keep its action plan for three calendar years. The compliance monitor shall keep audit records for three calendar years.
- 4.3. The reliability authority shall make the following available for inspection by the compliance monitor upon request:
 - 4.3.1. Action plan

5. Levels of Non-compliance

- 5.1. Level one: Action plan exists but wasn't coordinated with all involved and impacted entities
- 5.2. Level two: Action plan exists but wasn't coordinated with any involved or any impacted entities
- 5.3. Level three: Not applicable.
- 5.4. Level four: No action plan

6. Sanctions

- 6.1. Apply sanctions consistent with the NERC Compliance and Enforcement Matrix. *(Attached at the end of this draft standard for reference and comment.)*

208 Reliability Authority Directives

1. Requirements

- 1.1. The transmission operator, balancing authority and interchange authority shall follow the reliability authority's directives to:
 - 1.1.1.1. Prevent instances where interconnection reliability operating limits may be exceeded
 - 1.1.1.2. Mitigate the magnitude and duration of instances where interconnection reliability operating limits have been exceeded
- 1.2. The entity responsible shall document the reliability authority's directives and the actions taken

2. Measures

- 2.1. The entity responsible shall follow the reliability authority's directives and shall document the directives and actions taken to meet the directives
- 2.2. The entity responsible shall document via an operations log or other data source, the following for each directive it receives relative to an interconnection reliability operating limit:
 - 2.2.1. Date and time of directive received
 - 2.2.2. Directive issued
 - 2.2.3. Actions taken in response to directive

3. Regional Differences

None identified.

4. Compliance Monitoring Process

- 4.1. The entity responsible shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint to assess performance.
- 4.2. The performance-reset period is 12 months. The entity responsible shall keep its documentation for three calendar years. The compliance monitor shall keep audit records for three calendar years.
- 4.3. The entity responsible shall make the following available for inspection by the compliance monitor upon request:
 - 4.3.1. Operations log or other data source(s) to show the following for each instance of being issued a reliability authority directive relative to an interconnection reliability operating limit:
 - 4.3.1.1. Date and time of each of directive received
 - 4.3.1.2. Directive issued
 - 4.3.1.3. Actions taken in response to directive

5. Levels of Non-compliance

Standard 200 – Operate Within Interconnection Reliability Operating Limits

- 5.1. Level one: Not applicable.
 - 5.2. Level two: Not applicable.
 - 5.3. Level three: Not applicable.
 - 5.4. Level four: Did not follow directives.
- 6. Sanctions**
- 6.1. Apply sanctions consistent with the NERC Compliance and Enforcement Matrix.
(Attached at the end of this draft standard for reference and comment.)

Standard 200 – Operate Within Interconnection Reliability Operating Limits

Sanctions Table

The matrix of compliance sanctions that follows was developed by the NERC Compliance Subcommittee as part of the NERC Compliance Enforcement Program and was approved by the NERC Board of Trustees.

Levels of noncompliance are tied to this matrix. The matrix is divided into four levels of increasing noncompliance vertically and the number of violations in a defined period at a given level horizontally.

Note that there are three sanctions that can be used: a letter, a fixed fine, and a \$/MW fine.

Letter

This sanction is used to notify company executives, Regional officers, and regulators that an entity is non-compliant. The distribution of the letter varies depending on the severity of the noncompliance. The intent of a letter sanction is to bring noncompliance to the attention of those who can influence the actions of an organization so as to become compliant.

- Letter (A) — Letter to the entity’s vice president level or equivalent informing the entity of noncompliance, with copies to the data reporting contact, and the entity’s highest ranking Regional Council representative.
- Letter (B) — Letter to the entity’s chief executive officer or equivalent, with copies to the data reporting contact, the entity’s highest ranking Regional Council representative, and the vice president over the area in which noncompliance occurred.
- Letter (C) — Letter to the entity’s chief executive officer and chairman of the board, with copies to the NERC president, regulatory authorities having jurisdiction over the non-compliant entity (if requested by such regulatory authorities), the data reporting contact, the entity’s highest ranking Regional Council representative, and the vice president over the area in which non-compliance occurred.

Fixed Dollars

This sanction is to be used when a letter sanction is not sufficient and a stronger message is desired. Fixed dollars are typically assigned as a one-time fine that is ideal for measures involving planning-related standards. Many planning actions use forward-looking assumptions. If those assumptions prove wrong in the future, yet they are made in good faith using good practices, entities should not be harshly penalized for the outcome.

Dollar per MW

Dollar/MW sanctions are intended to be used primarily for operationally based standards. The ‘MW’ can be load, generation, or flow on a line. The reasonableness of the sanction must be considered when assessing \$/MW penalties. Assessing large financial penalties is not the goal, but rather achieving compliance.

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Occurrence Period Category	Number of Violations in Occurrence Period at a Given Level			
1 st Period of Violations (Fully Compliant Last Period)	1	2	3	4 or more
2 nd Consecutive Period of Violations		1	2	3 or more
	\$ Sanction from Table; Letter (C) only if Letter (B) previously sent			
3 rd Consecutive Period of Violations			1	2 or more
	\$ Sanction from Table; Letter (C) only if Letter (B) previously sent			
4 th or greater Consecutive Period of Violations				1
	\$ Sanction from Table; Letter (C)			

Level of Non-Compliance	Sanctions Associated with Non-compliance			
Level 1	Letter (A)	Letter (A)	Letter (B) and \$1,000 or \$1 Per MW	Letter (B) and \$2,000 or \$2 Per MW
Level 2	Letter (A)	Letter (B) and \$1,000 or \$1 Per MW	Letter (B) and \$2,000 or \$2 Per MW	Letter (B) and \$4,000 or \$4 Per MW
Level 3	Letter (B) and \$1,000 or \$1 Per MW	Letter (B) and \$2,000 or \$2 Per MW	Letter (B) and \$4,000 or \$4 Per MW	Letter (B) and \$6,000 or \$6 Per MW
Level 4	Letter (B) and \$2,000 or \$2 Per MW	Letter (B) and \$4,000 or \$4 Per MW	Letter (B) and \$6,000 or \$6 Per MW	Letter (B) and \$10,000 or \$10 Per MW

Interpreting the Tables:

- These tables address penalties for violations of the same measure occurring in consecutive compliance reporting periods.
- If a participant has non-compliant performance in consecutive compliance reporting periods, the sanctions applied are more punitive.

Implementation Plan from Operate Within IROLs SAR:

Policy 2 – Transmission Language in Policy	Disposition
<p>Standard A.1. Basic reliability requirement regarding single contingencies. All CONTROL AREAS shall operate so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single contingency.</p>	
<p>Standard A.1.1. Multiple outages. Multiple outages of a credible nature, as specified by Regional policy, shall also be examined and, when practical, the CONTROL AREAS shall operate to protect against instability, uncontrolled separation, or cascading outages resulting from these multiple outages</p>	
<p>Standard A.1.2. Operating Security Limits. Operating Security Limits define the acceptable operating boundaries.</p>	
<p>Standard A.2. Return from OPERATING SECURITY LIMIT Violation. Following a contingency or other event that results in an OPERATING SECURITY LIMIT violation, the CONTROL AREA shall return its transmission system to within OPERATING SECURITY LIMITS soon as possible, but no longer than 30 minutes.</p>	
<p>Standard A.2.1. Reporting Non-compliance. Each violation of this Standard shall be reported to the Regional Council and NERC Compliance Subcommittee within 72 hours.</p>	
<p>Standard A.2.2. Reporting format. The report will be submitted on the NERC Preliminary Disturbance Report Form as found in Appendix 5F, “Reporting Requirements for Major Electric System Emergencies.</p>	
<p>Requirement A.1. Policies for dealing with transmission security. CONTROL AREAS, individually and jointly, shall develop, maintain, and implement formal policies and procedures to provide for transmission security. These policies and procedures shall address the execution and coordination of activities that impact inter- and intra-Regional security, including:</p> <ul style="list-style-type: none"> - Equipment ratings - Monitoring and controlling voltage levels and real and reactive power flows - Switching transmission elements - Planned outages of transmission elements - Development of Operating Security Limits - Responding to OPERATING SECURITY LIMIT violations. 	
<p>Requirement A.1.1. Responsibility for transmission security. When OPERATING SECURITY LIMIT violations occur, or are expected to occur, the CONTROL AREAS affected by and the CONTROL AREAS contributing to these violations shall implement established joint actions to restore transmission security.</p>	
<p>Requirement A.1.2. Action to keep transmission within limits. CONTROL AREAS shall take all appropriate action up to and including shedding of firm load in order to comply with Standard 2.A.2.</p>	
<p>Requirement B.1. Monitoring and controlling voltage and MVAR flows. Each CONTROL AREA, individually and jointly, shall ensure that formal policies and procedures are developed, maintained, and implemented for monitoring and controlling voltage levels and MVAR flows within its boundaries and with neighboring CONTROL AREAS.</p>	
<p>Requirement B.5. Preventing Voltage Collapse. The SYSTEM OPERATOR shall take corrective action, including load reduction, necessary to prevent voltage collapse when reactive resources are insufficient.</p>	

Note – highlighted areas should be reviewed

Policy 9 – Security Coordinator Language in Policy	Disposition
<p>Introductory paragraph and second and third bullets <i>Introduction</i> This document contains the process and procedures that the NERC RELIABILITY COORDINATORS are expected to follow to ensure the operational reliability of the INTERCONNECTIONS. These include:</p> <ul style="list-style-type: none"> - Planning for next-day operations, including reliability analyses and identifying special operating procedures that might be needed, - Analyzing current day operating conditions, and - Implementing the INTERCONNECTION-wide transmission loading relief procedure or local procedures to mitigate overloads on the transmission system. 	
<p>Requirement A.1. Perform security analysis. The RELIABILITY COORDINATORS shall ensure that next-day reliability analyses are performed simultaneously for all CONTROL AREAS and TRANSMISSION PROVIDERS in its RELIABILITY AREA to ensure that the bulk power system can be operated in anticipated normal and contingency conditions.</p>	
<p>Requirement A.1.2. System Studies. The RELIABILITY COORDINATORS shall conduct studies to identify potential interface and other OPERATING RELIABILITY LIMIT violations, including overloaded transmission lines and transformers, voltage and stability limits, etc.</p>	
<p>Requirement A. 2. Study Results. The RELIABILITY COORDINATORS shall share the results of their system studies, when conditions warrant, or upon request, with other RELIABILITY COORDINATORS, TRANSMISSION PROVIDERS, and CONTROL AREAS within their RELIABILITY AREA. Study results shall be available no later than 1500 Central Standard Time for the Eastern INTERCONNECTION, and 1500 Pacific Standard Time for the Western INTERCONNECTION, unless circumstances warrant otherwise. If the results of these studies indicate potential reliability problems, the RELIABILITY COORDINATORS shall issue the appropriate alerts via the Reliability Coordinator Information System (RCIS.)</p>	
<p>Requirement C.3.1. Implementing relief procedures. If transmission loading progresses or is projected to progress beyond the OPERATING RELIABILITY LIMIT, the RELIABILITY COORDINATOR will perform the following procedures as necessary:</p>	
<p>Requirement C.3.2. Selecting transmission loading relief procedure. The RELIABILITY COORDINATOR experiencing a constraint on a transmission system within his RELIABILITY AREA shall, at his discretion, select from either a “local” (Regional, Interregional, or subregional) transmission loading relief procedure or an INTERCONNECTION-wide procedure, such as those listed in Appendix C1, C2, or C3.</p>	
<p>Requirement C.3.2.1. Local transmission loading relief procedure. The RELIABILITY COORDINATOR may use local transmission loading relief or congestion management procedures, provided the transmission system experiencing the constraint is a party to those procedures.</p>	
<p>Requirement C.3.2.1.1. Use with an INTERCONNECTION-wide Procedure. A RELIABILITY COORDINATOR may implement a local transmission loading relief or congestion management procedure simultaneously with an INTERCONNECTION-wide procedure. However, he is obligated to follow the curtailments as directed by the INTERCONNECTION-wide procedure. If the RELIABILITY COORDINATOR desires to use a local procedure as a substitute for curtailments as directed by the INTERCONNECTION-wide procedure, he may do so only if such use is approved by the NERC Operating Reliability Subcommittee and Operating Committee.¹</p>	

¹ Examples would be 1) a local procedure that curtails INTERCHANGE TRANSACTIONS in a different order or ratio than the INTERCONNECTION-wide procedure, or 2) a local redispatch procedure.

Policy 4 – System Coordination Language in Policy	Disposition
<p>Section A – Various Sections . . .</p> <p>Resources. The system operator shall be kept informed of all generation and transmission resources available for use.</p> <p>Transmission status and data. System operators shall monitor transmission line status, MW and MVAR flows, voltage, LTC settings and status of rotating and static reactive resources.</p> <p>Protective relays. Appropriate technical information concerning protective relays shall be available in each system control center.</p> <p>Other information. The system operator shall have information, including weather forecasts and past load patterns, available to predict the system’s near-term load pattern.</p> <p>Monitoring. Monitoring equipment shall be used to bring to the system operator’s attention important deviations in operating conditions and to indicate, if appropriate, the need for corrective action.</p> <ul style="list-style-type: none"> - Metering. Each control area shall use sufficient metering of suitable range, accuracy and sampling rate (if applicable) to ensure accurate and timely monitoring of operating conditions under both normal and emergency situations. <p>System frequency. System operators shall monitor system frequency.</p>	

Policy 5 – Emergency Operations Language in Policy	Disposition
<p>Section C This policy:</p> <ul style="list-style-type: none"> - Summarizes the authority, information and tools required by SYSTEM OPERATORS responsible for the reliability of the INTERCONNECTIONS. - Identifies the accountability for developing and implementing procedures to alleviate OPERATING SECURITY LIMIT violations. - Describes the requirement to develop procedures for the curtailment and restoration of transmission service. 	
<p>Relieving security limit violations. Each CONTROL AREA experiencing or materially contributing to an OPERATING SECURITY LIMIT violation shall take immediate steps to relieve the condition.</p> <p>Operator authority and responsibility. SYSTEM OPERATORS having responsibility for the reliability of the transmission system within a CONTROL AREA, pool, etc. shall be given and shall exercise specific authority to alleviate OPERATING SECURITY LIMIT violations. The authority shall enable the SYSTEM OPERATOR to take timely and appropriate actions including curtailing transmission service or energy schedules, operating equipment (e.g., generators, phase shifters, breakers), shedding load, etc.</p> <ul style="list-style-type: none"> - Action shall not reduce reliability. Action to correct an OPERATING SECURITY LIMIT violation shall not impose unacceptable stress on internal generation or transmission equipment, reduce system reliability beyond acceptable limits, or unduly impose voltage or reactive burdens on neighboring systems. If all other means fail, corrective action may require load reduction. - Disconnection of overloaded equipment. If the overload on a transmission facility or abnormal voltage/reactive condition persists and equipment is endangered, the affected system or pool may disconnect the affected facility. Neighboring systems impacted by the disconnection shall be notified prior to switching, if practicable, otherwise, promptly thereafter. <p>Security violation assessment. Sufficient information and analysis tools shall be provided to the SYSTEM OPERATOR to determine the cause(s) of OPERATING SECURITY LIMIT violations. This information shall be provided in both real time and predictive formats so that the appropriate corrective actions may be taken.</p> <p>Transmission service and energy schedule prioritization. Each CONTROL AREA shall develop prioritization procedures for the curtailment of transmission service and energy schedules.</p> <ul style="list-style-type: none"> - Effectiveness. These procedures shall provide for the curtailment of only those energy and transmission service schedules that effectively alleviate the OPERATING SECURITY VIOLATION will be interrupted. - Coordination. These procedures shall be coordinated with adjacent CONTROL AREAS in accordance with the REGIONAL RELIABILITY PLAN. - Curtailment and restoration sequence. The curtailment and restoration sequence shall be consistent with the approved tariffs and regulatory requirements of the transmission service provider(s). <ul style="list-style-type: none"> - IDC Update. The RELIABILITY COORDINATOR must enter, or have entered on his behalf, into the IDC all INTERCHANGE TRANSACTION changes that result from the implementation of the local procedure. <i>[Eastern Interconnection Requirement]</i> - INTERCONNECTION-wide loading relief procedure. The RELIABILITY COORDINATOR may implement an INTERCONNECTION-wide procedure as detailed in Appendixes 9C1, 9C2, or 9C3. - Obligations. When implemented, all RELIABILITY COORDINATORS shall comply with the provisions of the INTERCONNECTION-wide procedure. This may include action by RELIABILITY COORDINATORS in other INTERCONNECTIONS to, for example, curtail an INTERCHANGE TRANSACTION that crosses an INTERCONNECTION boundary. 	

<p>- Compliance with Interchange Policies. During the implementation of relief procedures, and up to the point that emergency action is necessary, RELIABILITY COORDINATORS and CONTROL AREAS shall comply with the Requirements of Policy 3, "Interchange."</p> <p>Implementing emergency procedures. If the transmission loading condition is deemed critical to bulk system reliability by a RELIABILITY COORDINATOR, the RELIABILITY COORDINATOR has the authority to immediately direct the CONTROL AREAS in his RELIABILITY AREA to redispatch generation, reconfigure transmission, or reduce load to mitigate the critical condition until INTERCHANGE TRANSACTIONS can be reduced utilizing a transmission loading relief procedure, or other procedures, to return the system to a reliable state. The RELIABILITY COORDINATOR shall coordinate these emergency procedures with other RELIABILITY COORDINATORS as appropriate. All CONTROL AREAS shall comply with all requests from their RELIABILITY COORDINATOR as authorized by the Regional Reliability Plan.</p> <p>Reestablishing INTERCHANGE TRANSACTIONS. The RELIABILITY COORDINATOR shall coordinate with the CONTROL AREAS in his RELIABILITY AREA, and with other RELIABILITY COORDINATORS as appropriate, the reestablishment of the INTERCHANGE TRANSACTIONS that were curtailed. The reestablishment of these INTERCHANGE TRANSACTIONS and the resulting INTERCHANGE SCHEDULES shall be in compliance with Policy 3, "Interchange."</p>	
<p>Section D Criteria</p> <p>Because the facilities of each system may be vital to the secure operation of the INTERCONNECTION, systems and CONTROL AREAS shall make every effort to remain connected to the INTERCONNECTION. However, if a system or CONTROL AREA determines that it is endangered by remaining interconnected, it may take such action as it deems necessary to protect its system. If a portion of the interconnection becomes separated from the remainder of the INTERCONNECTION, abnormal frequency and voltage deviations may occur. To permit resynchronizing, relief measures shall be applied by those separated systems contributing to the frequency and voltage deviations.</p>	

Operate Within Interconnection Reliability Operating Limits September 10, 2003 SDT Meeting in Portland, OR

Parking Lot Issues

The “Monitor and Assess Short-term Reliability — Operate Within Transmission System Limits” Standard Drafting Team (OWL Standard DT) identified a number of issues and concerns, relative to the standard, that could not be answered by the team. The “Parking Lot Issues” will be forwarded to the NERC, Director – Standards for evaluation and disposition. The list can possibly be given to a subcommittee, group, task force or individual to address. The OWL Standard DT will address or collaborate with others to address concerns (e.g. standard definitions) if requested by the NERC Director–Standards.

The following issues are perceived to go beyond the scope of the OWL Standard DT.

Parking Lot Issues

1. “Transmission Operator” vs. “Transmission Owner” Functional Language

The Functional Model (previously identified as the Reliability Model) definitions and responsibilities of “Transmission Operator” and “Transmission Owner” conflict with actual functional operations. As a specific example PJM was identified as a “transmission operator” but does not perform Reliability Model defined responsibilities. PJM, as the “Transmission Operator,” does not perform switching, maintenance, etc. The respective “Transmission Owners” performs these tasks.

2. “Standing Committee” vs. “Appropriate Body” language

The NERC Reliability Standards Process Manual identifies most Supporting Reference Documents as being approved and authorized by “Standing Committees.” With the future of the NERC Standing Committees in question, the language does not appear to be correct to the OWL Standard DT. A possible solution is to remove the language referring to who develops the associated reference documentation from “Standing Committees” and replace with “Appropriate Entity”

3. Proposed “Operate Within Limits” Standard Definitions

The OWL Standard DT identified the following terms that will be used in the standard. However, most are generic industry terms that may be addressed and defined by other entities such as other SAR/Standard Drafting Teams, Functional Model Review Task Group, Data Exchange Working Group, Operating Reliability Subcommittee, Operating Committee, Planning Committee, Market Interface Committee, the Standard Process Manager, Operating Limits Definition Task Force, etc.

Definitions to support the “Operate Within Limits” Standard that are needed:

Data Quality

Industry Accepted Format

System Operating Limit * Defined by another standard

Reliability Analysis (Reliability analyses includes both real time and operational planning analyses)

4. NERC Authority Over “Non-Reliability Model” Entities

“Operate Within Limits” Standard DT

What authority does NERC have over “Non-Functional Model” entities to supply data to RA or other functions in the Functional Model? Identification of which bulk power system(s) NERC has authority over is necessary.

5. OSL / SOL / ORL Definitions by Various Groups

Many entities are developing and defining Operating Security Limits (OSL) / Security Operating Limits (SOL) / Reliability Operating Limits (ROL) definitions and limits (e.g. Dave Hilt’s Operating Limits Definition Task Force, “Facility’s Rating” SAR, RCWG, FMTG, etc.). A lot of players are contributing their input into defining various “operating limits.” A consensus on the various definitions is necessary.

6. Functional Model Function Equivalent to the Current RRO

How do we designate a supervisory or administrative function equivalent to the current RRO, which is not found in the Functional Model? In WECC individual “operating security limits” will not be reported to NERC since any “OSL” violations fall under the RRO - WECC Reliability Management System contract which has a confidentiality clause. Only a WECC aggregate number will be reported to NERC, is that sufficient? The OWL Standard DT believes a supervisory function such as to “The Entity Responsible for Regional Responsibilities” may be needed.

The NERC Reliability Standards Process Manual identifies “NERC and Regional Reliability Council Members,” “Regional Differences,” “Regional Standards,” “Criteria for Regional Standards and Regional Differences,” and yet the Reliability Model does not identify the Regions, the RROs, or “Entities Responsible for Regional Responsibilities” in the model. At times the Standard Drafting Team identified RROs in developing Standard Requirements, Expected Performance / Outcome and Measures. To address the lack of RRO or equivalent in the Functional Model, “Compliance Monitor” was used.

7. Compliance of Non-Regional Entities

Compliance-wise, what happens to those entities that are not currently part of a region? How are they picked up within the Reliability Model?

8. * Separation of Standard Reliability Elements and Compliance Aspects *****

The OWL Standard DT questions the appropriateness of the Standard DT designating the respective compliance criteria, including levels of non-compliance and sanctions. The Standard DT believes a separate compliance group such as the Compliance Subcommittee should do this task. The Standard Drafting Team strongly believes the compliance of the standards including the level of non-compliance and sanctions should be done by an independent entity and not by the body that is writing the standard.

9. Data Quality

The “Operate Within Limits” Standards do not address the “quality” of the data that is being monitored and assessed. The specification of data quality needs to be addressed, local area differences, sign notation, multipliers (format, timeframe, quality). Example: From a Compliance perspective that RAs and BAs may have sign conventions that are opposite and there will be challenges to who is right and who is wrong. Who is king — who determines the quality of the data? Note: In “Operate Within Limits” Draft Standard the following language is used: “Industry accepted format, timeframe, quality” — who defines these criteria?

10. Timelines for Standards Parameters

The timelines for all of the standards requirements, expected performance / outcomes, measures, compliance factors, etc., need to be defined. Factors that play into this issue are data retention requirements, reporting criteria, auditing criteria, etc. — who defines these criteria?

11. Quality of Tool Accuracy

“Operate Within Limits” Standard DT

The state estimator or tool used to perform monitoring and analysis in order to meet this standard and future standards needs to have an “accuracy” criteria. This standard does not address this issue. Does it need to be captured somewhere? If so, then where is the “accuracy” criteria captured? – Who defines “consistent” and “accuracy” criteria?

12. Contingency Criteria

When evaluating the need for requirements concerns arose regarding contingency analysis, N-1, levels of non-conformance, etc. — specifically tests of severity for each parameter. This concern was raised from a Compliance point of view. Who defines these criteria?

13. Compliance Monitor

In cases where a RA (e.g. RTO) has geographical boundaries in more than one RRO, what criteria is used to identify which Compliance Monitor (i.e. regional perspective) the respective RA (e.g. RTO) will comply with. It is not clear if the most restrictive or least restrictive Compliance Monitor (RRO) requirements will be followed. How are RAs in multi-RROs to develop standards that are consistent with each RRO directives?

14. Link to other SAR and SDT efforts.

Several comments made by the OWL Standard DT require further definition and possible modifications to the “Determine Facility Ratings System Operating Limits and Transfer Capability” SAR effort and may require a subset of each group to collaborate via conference call or meeting. There will be future instances where one group’s progress is impacted and inhibited by another SDT. How does the SDT address such instances? What does the Standards Process Manual instruct the SDTs to do? Is a revision needed?

15. DOE Form 417

The fourth issue was a concern for clarification of the DOE Form 417 needs to be reviewed and determined if the form will satisfy OWL standard requirement 216 “RA Shall Document Instances for Exceeding Identified IROLs.” If the form contains the information necessary for reporting an IROL, then a new form does not need to be developed. If the form is not satisfactory for the OWL SDT purposes, a new form will be developed. This parking lot issue will be short lived and should be closed by the next meeting.

NERC Approved Cities
For 2-4 day Meetings

Atlanta, Georgia	SERC
Baltimore, Maryland	MAAC
Calgary, Alberta	WECC
Chicago, Illinois	MAIN
Cleveland, Ohio	ECAR
Dallas, Texas	ERCOT
Denver, Colorado	WECC
Detroit, Michigan (?)	MAPP
Ft. Lauderdale, Florida	FRCC
Houston, Texas	ERCOT
Kansas City, Missouri	SPP
Memphis, Tennessee	SERC
Miami, Florida	FRCC
Minneapolis/St. Paul, Minnesota (Expensive to fly)	MAPP
Montreal, Quebec	NPCC
Nashville, Tennessee	SERC
New Orleans, Louisiana	SPP
Newark, New Jersey/New York City	MAAC/NPCC
Omaha, Nebraska (?)	MAPP
Orlando, Florida	FRCC
Philadelphia, Pennsylvania	MAAC
Phoenix, Arizona (Expensive to fly to)	WECC
Salt Lake City, Utah	WECC
San Antonio, Texas	ERCOT
San Diego, California	WECC
San Francisco, California	WECC
St. Louis, Missouri	MAIN
Tampa, Florida	FRCC
Toronto, Ontario	NPCC
Tulsa, Oklahoma	SPP
Vancouver, British Columbia	WECC
Washington, DC	MAAC

Easy Access Cities
for NERC 1-2 day Meetings at Airport

Atlanta, Georgia	SERC
Chicago, Illinois	MAIN
Dallas, Texas	ERCOT
Denver, Colorado	WECC
Houston, Texas	ERCOT
Kansas City, Missouri	SPP
Philadelphia, Pennsylvania	MAAC
Pittsburgh, Pennsylvania	ECAR
Tampa, Florida	FRCC
Washington, DC	MAAC